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SACRAMENTO VALLEY EDITION—THIRTY-TWO PAGES.

Vol. XXXII.—No. 1.]

SAN FRANCISCO, SATURDAY, JULY 3, 1886.

{ \$3 a Year, in Advance  
SINGLE COPIES, 10 CTS.

### An Important Northern Town.

We give on this page an engraving of one of the representative towns of the Sacramento valley, Red Bluff, the county seat, and largest town of Tehama county. Upon another page may be found an article written by a resident of the county, giving some interesting statements about the area, resource and development of the county. In connection with the

substantial business blocks, a number of factories and mills, including several carriage and wagon factories, harness shops, marble works, gas works and water works; in fact, all the trades and professions are well represented. The water supply is a credit to the town, the main supply being taken from Antelope creek, on the east side of the river, across which it is carried in iron pipes, having a distributing capacity of 1,000,000 gallons in 24

annual dividends, of from 10 to 12 per cent each.

The yards, factory and planing mill of the Sierra Flume and Lumber Company, which has added so much to the prosperity of Red Bluff, are situated, as shown in the engraving, on the east side of the river, being connected with the town by a long wagon bridge, across which a side-track extends from the railroad right into the yards, enabling the company to ship lum-

municipal development. Many of them are no doubt destined to be cities of high rank, for the development of the vast and rich area of California will call for a number of centers of trade and manufacture. We rejoice in the growth of sturdy young towns; they are exponents of the progress of the country surrounding them. A grand metropolis like San Francisco is a credit to a commonwealth, but a metropolis is not the only need. We need plenty of interior towns.



VIEW OF RED BLUFF—A REPRESENTATIVE SACRAMENTO VALLEY TOWN.

engraving we present a description of the town, written for the RURAL PRESS, by Mr. Chas. E. Heaton:

Red Bluff is situated on the California & Oregon railroad about 15 miles from the northern boundary, and is distant about 250 miles from San Francisco. It contains about 4000 inhabitants, and lays claim, along with several other towns, of being the coming metropolis of Northern California. The town, which is incorporated, has a fine location, being built upon a high plateau overlooking the Sacramento on the west side. It is tastefully laid off, contains a great many handsome residences and fine public buildings.

Red Bluff is the great wool market of Northern California, the total shipments from there for the past year having amounted to 2,500,000 pounds. It is a very prosperous young city, though it has suffered greatly from several destructive fires, the greatest occurring in 1882, when the property destroyed amounted to half a million dollars. The town contains many

hours. This can be largely increased by the well-equipped pumping works located on the river on the north side of town. There is a glove factory (established in 1864) that gives employment to about 40 persons, mostly women and girls, and manufactures between 3000 and 4000 gloves each season, requiring nearly 2000 dressed hides. The employees receive \$1.50 per cent for closing up the gloves, and the pay amounts to about \$4000 a month. There are several weekly and daily newspapers published, the place also boasts seven churches and 12 fraternal societies. The educational institutions consist of a fine public school, the Red Bluff Academy—a school of high grade, and the Academy of our Lady of Mercy. All the schools are rank high and are open to both sexes. The Bank of Tehama, incorporated in 1874, is located in a fine building on the main street. It has a paid-up capital of \$300,000, represented by 3000 shares, at \$100 each. It has a surplus of \$640, and an undivided profit of \$12,500. During its existence it has paid out 21 semi-

ber without handling it more than once after it is taken from the flume. About 3,000,000 feet of lumber per annum is used in the manufacture of doors, sash and blinds. A sample of the work in this line may be seen in the doors and windows of the well-known Phelan block, in San Francisco, which were manufactured at this place. The trade of the company in lumber and other products extends to all parts of the world. The pay-roll at this place amounts to over \$4000 per month, and more than 100 men find employment the year round in the different departments. The citizens of Red Bluff build high hopes on having a woolen mill established at this place; and, considering the excellent water facilities and other inducements for such an enterprise, their expectations will no doubt some day be realized.

The growth attained by Red Bluff and the progressive spirit which has ministered to it, as described by our contributor, can also be observed in the recent history of many California towns. They are models of health and vigor in

We shall always be glad to minister to their growth by making them and their advantages better known, as we have done in this case with Red Bluff.

**BET SUGAR WINS US FAME IN NEW ZEALAND.**—The Auckland *Weekly News* contains an illustrated article describing the Beet Sugar Works at Alvarado and asks why a similar enterprise cannot be started in New Zealand. It is satisfactory to see that the enterprise which has been carried to success with such zeal and patience by Mr. Dyer and his associates is attracting such wide attention. It seems to us that the lesson to be drawn is that it ought to receive more attention from California capitalists, now that the pioneer work has been done and success has been reached.

**STATE HORTICULTURAL SOCIETY.**—The meeting of this society on June 25th was well attended, and the discussion on apple growing was interesting. We are obliged to defer the publication of our report until next week.



## CORRESPONDENCE.

Correspondents are alone responsible for their opinions.

## Solano County Notes.

EDITORS PRESS:—The weather is very pleasant, the thermometer ranging from 80° to 90°; nights cool and pleasant. The hay crop is about gathered in and not a drop of rain on it, something unusual. What little grain there was in this neighborhood is thrashed, and turned out 45 to 50 bushels per acre.

The prospect for shipping fruit East is not so bright as it was some time ago. Fifteen carloads have been sent from Winters and about the same amount from Vacaville, and the market is broke. Some have quit shipping and gone to drying apricots. The amount sent East is not more than three men could send from Pleasant valley, and if three little orchards will break the market it is certainly not very strong. Some say that Porter put the price of fruit down so as to break up Earl, who is shipping from Vacaville now; others, that the fruit was put up in poor condition and a little of it went a long ways. Be that as it may, the prospect is not bright at present.

I saw some peaches and apricots to-day which were put up 10 days ago to ship East, but were not sent. They looked very well, but tasted as though they had been picked from a tree that was half dead and could not mature the fruit. They also tasted strong of the paper in which they were wrapped.

There is another thing which makes a vast difference in the sale of fruit, and that is the manner in which it is packed. At a recent meeting of the Fruit-growers' Association at Winters it was proposed to have a man appointed as fruit inspector. He said that one man could not go all through the district and oversee the packing. Then it was proposed to open some of the boxes at the cars and see what shape the fruit was in, but one man objected and said no one should open his fruit, and so the proposition was dropped. But something of that kind must be done, or shipping fruit East will never be a success. Some fruit that was brought to Winters was full of bird-pecked holes, some too ripe and some so small that it rolled out of the baskets at the corners. This kind of fruit should not be sent, as it will not only be a loss to the owner but is liable to damage other fruit.

Some apricots have been sold the past week for 1½ cents per pound, and I think plenty could be bought at 1½ and two cents per pound. A canner was here from Los Gatos two weeks ago, but could not get any then at two cents per pound.

## Drying Apricots.

In answer to "Subscriber" in regard to drying apricots and prunes, I would say the apricots should be thoroughly ripe but not soft. As for sulphuring apparatus, it depends upon the amount that one has to sulphur. I sulphured some yesterday by putting the sieves on some fruit boxes, covering them with a wagon sheet, set the sulphur on fire in a pan and put it under the fruit. A cheap way, and a good one, would be to get some wire cloth, coarse enough to be stout, make some frames three inches wide on the sides, and 30 by 36 inches wide and long. Then make a box about six feet high to fit the sieves. Nail some cleats 18 inches from the bottom, to set the first sieve on. There should be about 12 sieves for what four men could cut. Put in the first sieve, spread the fruit on it, about two inches deep; then another, and so on until you have all in that you want in.

Then take an old iron vessel (a frying-pan is good), put in some pieces of burlap sack, and about a teacupful of sulphur on it and light it. Set it under the fruit and shut it up tight from 25 to 35 minutes.

The amount of sulphur put on does not matter, as what is not burnt one time can be used at another. There should be a hole in the top of the box to give draft. If the top trays do not sulphur enough, leave it open a little while.

After using the sieves awhile the fruit will stick to the wire. Take a rag swab, dip it in melted lard and rub it over the wire.

When the fruit has been in long enough turn it on to trays or boards and set it up edgewise. The length of time required to dry in the sun depends on how hot are the days, and how damp the nights. It should be taken up before it gets too hard to wash with the fingers.

If the fruit is to be boxed when dried it should be put into baskets and dipped two or three times into boiling water, and then be poured into a pile, covered with some canvas or sacks and left to sweat 12 hours, then packed in a box and pressed, which can be easily done with a long scantling. About 25 pounds are put into the boxes.

## Drying Prunes.

The French prune, or, as it is called here, "petty prune," should be left upon the tree until very ripe, the longer the better, only if left too long the nights get so cool that they will not dry. It is said that in France they leave the prune on the tree until it drops off of its own accord; but Mr. J. M. Pleasants, who has had considerable experience with prunes, says that he left one tree to see how long before they would drop off, but the longer they were left the more they did not drop. The dipping

solution that Mr. Pleasants uses is one pound of lye to 15 gallons of water; dip while the water is scalding hot. The hotter the weather the better after they are put out to dry; sometimes they have to be dipped a second time; it depends on the fruit. In some localities and some years the skin is much harder to cut than others. A man has to judge of that when the fruit is drying. When dried they should be treated the same as apricots. G.

Vacaville, June 20, 1886.

## SHEEP AND WOOL.

## Kids With Neck Swellings.

EDITORS PRESS:—We are having some trouble with kids born with swellings on their necks. We had 12 kids thus affected last year and are having a few cases this year. It is not proving as serious as feared, but might become so. Some of those having the neck swellings last year died, others got well. I am told that lambs are also similarly affected, but in a long experience in goat breeding I never saw anything of the kind until last year.—GOAT BREEDER.

Our correspondent is fortunate in not having suffered from the trouble before, because it has long bothered the sheep and goat-breeder, and for a long time was thought to be beyond treatment because it was congenital. There will be, of course, cases in which there can be no help for the lamb or kid, because of its being still-born, or so low in vitality that it will not take up the burden of life. On the other hand there will be many cases which will readily yield to treatment, as we shall show below.

Although the disease has existed for a long time, its nature was not discovered nor effective remedies hit upon until about 25 years ago. So far as we know the late H. S. Randall, the well-known sheep-grower and writer upon sheep husbandry, is entitled to the credit of pointing out the nature of the disease, and making its cure known to the public. We shall quote from "Randall's Practical Shepherd" on this point presently. First, as to the

## Nature of the Disease.

Our correspondent states that he is told by a doctor that it is not "goitre," as that disease is known in the human subject. That is true, yet it also possesses resemblances to that disease which justify the use of the same term with a modification, and Randall calls it "congenital goitre or bronchocele," and he gives the following characteristics which distinguish it from goitre:

1. That it was so often congenital; 2. That it so frequently affected the progeny of parents that were not themselves subjects of the disease or known ever to have been subjects of it; and 3. That it should so often affect young animals, and so comparatively rarely affect grown ones. The additional anomalies disclosed by the facts stated in the text (if they are facts) are the following:—4. The very sudden and spontaneous disappearance of the supposed goitrous enlargement; 5. Its sudden disappearance on the application of camphor, and the apparent equal power possessed by camphor and iodine to cause its absorption.

We will give now Mr. Randall's description of the seat of the disease, and the steps by which a satisfactory treatment was arrived at:

## Congenital Goitre or Swelled Neck.

The thyroid glands are small, soft, spongy bodies on each side of the upper portion of the trachea (windpipe). Lambs are sometimes born with them enlarged to once or twice the size of an almond, and they then have the feeling of a firm, separate body, lying between the cellular tissue and the muscles of the neck. The lamb thus affected is generally small and lean, or if it is large and plump it has a soft, jelly-like feeling, as if its muscular tissues were imperfectly developed. In either case the bones are unnaturally small. It is excessively weak—the plump, soft ones being often unable to stand, and usually dying soon after birth. The others perhaps linger a little longer—sometimes several days—but they perish on the least exposure. So far as my observations have extended this condition always, to a greater or lesser extent, accompanies the glandular enlargement under consideration; but it also appears without it, and, as I shall presently show, sometimes to a highly destructive extent.

Having early adopted the view that the preservation of the life of a lamb, which is incapable of attaining that full structural development on which the vigor of the constitution depends, is a loss instead of a gain—and being specially averse to tolerating in a breeding flock any animal even suspected of being capable of carrying along and transmitting a hereditary disease—I never have applied any remedy whatever for "swelled neck." I have seen very little of it for the last few years; but events in 1862, presently to be mentioned, have surrounded the subject with new interest, and now I regret that I have not experimented more fully in order to ascertain the precise nature of the malady.

I have learned some new facts in relation to it. Two or three lambs which I saw, in 1862, decidedly affected by it, but not as weak or as attenuated in the bony structures as usual, very rapidly threw off all appearance of the goitrous enlargement of the glands; and they

thenceforth grew about as rapidly and appeared about as strong as ordinary lambs. I saw another such case in 1863. I made no memorandum of the facts at the time, but my impression is that in all these instances the enlargement of the thyroid glands disappeared within the space of as short a period as a fortnight. An intelligent friend informed me that having some goitrous lambs in his flock last spring, he placed a bandage round the neck of each over the thyroid glands, and wet it a few times a day with camphor (dissolved in alcohol). The swelling, he thinks, disappeared in less time than a fortnight. Mr. Daniel Kelly, Jr., of Wheaton, Illinois, who is represented to be a highly successful flock-master, states, in an article in the *Rural New Yorker*, that the disease is frequent among his lambs; that he binds a woolen cloth about their necks and keeps it wet "with spirits of camphor or the tincture of iodine;" that "there is little, if any, difference in the effectiveness of these tinctures;" that either "is sure to cure them."

These facts would seem to add to the number of anomalous features of the malady, when they are compared with those which appear in the human subject of goitre, if, indeed, it is the same malady; and they suggest some doubts of the latter fact. But fortunately no question affecting the practical treatment of the disease is to be settled by the determination of that identity. It would now seem that mere evaporants and external stimulants rapidly control it. Should the fact be found otherwise, in the case of a lamb worth saving, the application of iodine would undoubtedly remove the glandular enlargement. It might be applied to the parts with a little less trouble in the form of an ointment, composed of one part by weight of hydriodate of potash to seven parts of lard.

## Dr. Law's Opinion.

In his "Farmers' Veterinary Adviser" Prof. James Law draws a closer resemblance to goitre, and gives this paragraph:

Goitre, a diseased enlargement of the thyroid body, situated beneath the throat, is common in animals and in man, wherever the water is charged with the products of magnesian limestone. Hence its frequency on the limestone formations of New York and Pennsylvania. Weakness from disease, poor feeding, abuse, overwork, etc., aggravate the affection. In solipeds there are two distinct swellings, one on each side, but in other animals, and above all in swine, the swelling is single and in the median line. At first it is soft and even doughy, but afterward it becomes firm, tense and resistant, and if cut into may be even gritty. In lambs it may form a great engorgement from the jaw to the breast-bone, and the whole produce of the year may be still born or die soon after birth.

Treatment.—Give rainwater and iodine freely, both internally, on an empty stomach, and over the swelling. Persist in this for months. Weak solutions of iodine may be thrown into the tumor by a hypodermic syringe, or the nutritive bloodvessels may be tied.

The destruction of lambs by goitre may be obviated by giving the ewes rainwater, good feeding and plenty of exercise in the open air during the winter.

## Swellings an Impediment in Parturition.

In his excellent work on "Veterinary Obstetrics," George Fleming mentions a case described by Pfug who was called to attend a goat in difficult labor and on manual exploration discovered that the first fetus was in normal position, but that on each side of the head in the parotid regions and toward the larynx were two large swellings (congenital serofula) which prevented the passage of the young creature. By manipulation, pressure on the tumors—which were as large as a small fist—first on one side and then the other, with gentle traction, the kid was released. Two other kids which were in proximity to the first were also artificially delivered.

This last described case is evidently from a different cause than the foregoing, and where the trouble comes from serofula it is of course serious, as it argues dangerous impurity in the blood of the flock and it should be most carefully weeded out. The swellings which our correspondent describes as noticed in his flock are less serious and will no doubt yield readily to the treatment described by Mr. Randall, except when the animal is too far gone to be worth saving. We should like to have experience and observation on this point.

## THE DAIRY.

## A California Jersey Ranch.

A correspondent who signs himself "Veri" writes for the *Country Gentleman* the following account of his visit to Henry Pierce's "Yuba Buena Ranch":

The ranch is situated about 10 miles from the town of San Jose, at the foothills, and comprises about 3000 acres of field and pure land. It is stocked with horses and cattle. These run out of doors each day of year, and have green feed daily. There are barns for the storage of feed and for shelter in exceptionally bad weather. The principal herd is Jersey cattle, the foundation of which is laid in the sixties, when the first import was made directly from the Island of Jersey ship

around Cape Horn; subsequently fresh blood was obtained in the same way by other importations. It was not until lately that any animals were brought here from the East. Hence it is interesting to notice the characteristics of this herd for comparison with our Eastern herds, the blood elements in both being in many instances the same. Senseless requirements of fashion, or favorites created by auction prices, have had no influence upon this herd, which is the sole outcome of grand cows crossed on the best bulls, with constant, long-continued weeding out of poor ones as judged by a better basis.

We find the blood that made Coomassie, Jersey Belle of Scituate, Mary Anne of St. Lambert, and the Signal family of our Atlantic coast; and the Bloomer family here—a family unknown at the East, yet leading here. Looking over the breeder's certificates, we notice that Duke 76, Victor, Vertumnus and Welcome have contributed their blood.

The bull Jack Low, whose sire Forget-me-not was a son of Farmer's Glory, is out of Beulah de Gruchy, with a record of 22 lbs. two oz. in seven days, as reported by Mr. Cornelius Wellington of Massachusetts. This bull is long-bodied, medium high, well ribbed, with great capacity, combined with fine neck and cow-like head; in color a silver gray shading to black, and altogether a very striking picture of a Jersey bull. One cannot well help thinking that from the lineage of Farmer's Glory there will come daughters whose better qualities will enhance their good looks. They certainly have the requisites of form, size and vigor.

Victor of Yerb Buena, imported before registration was required on the island, is the sire of several daughters with tests of over 16 lbs. in seven days. It is a pity that his pedigree is not known, for he could but add laurels to some family. I fancy it would be found that he is of the Coomassie family, for his get resemble it most strikingly. Coomassie of Y. B., his daughter, out of a Vertumnus cow, is one of the finest young cows we ever saw, and Fairy of Y. B. is a good second.

Mon Plaisir is one of the show cows of the herd, having already earned distinction in the show-ring, and would, in my estimation, stand high in an Eastern show-ring; but beyond good looks she has quality, for she has a test of 18 lbs. 12 oz. in seven days on grass. She has been bred to William of Scituate, whose sire, Black Defiance, was a double grandson of Jersey Belle officiate, famous as the first Jersey to make 25 lbs. of butter in seven days, and still held by all breeders to be the ideal type of a Jersey cow.

Princes of Yerb Buena strikes the eye as we pass, and is hard to decide her place in the herd. She is of the desired type, and her record of 14 pounds in seven days makes her standard. She is bred to a son of Romeo de Bonair, the Stee Pogis 31-Victor Hugo bull, well known to your readers. Her daughter, Alta of Y. B., is fair to be a chief attraction.

On the fields, as we pass to the pasture, the men are plowing, seeding and harrowing in the grain. They say they have been doing since Dec. 1, and will continue so long as the soil is moist.

Wind the pastures green, the grass growing with considerable strength, for the animals, with exception, are fat and sleek. The milchcows have large udders, that milk out; and cannot doubt that for milk-flow the winter feed of California is unsurpassed. Young heifers show great development of udder. We saw large number of attractions, of which we recall Sylvia of Y. B., a yearling heifer by Silverloud's Son (he by Forget-me-not, dam Silverloud, the famous Jonathan Smith cow), these should like to own ourselves.

Atti of Y. B., Yesso of Y. B. and Millbrook strike us as larger than animals of the same age East; they have size, vigor and capacity, but preserve the symmetrical figure and graceful lines of this breed.

This herd won 12 prizes at the California State Fair, 1885, beside herd-prizes in each class (izes being given to herds over two years and der); also sweepstakes and special prizes.

## Warts on Cows' Teats.

A reader asks about removing warts from cows' teats. A writer in *Howard's Dairyman* gives the following, which seems quite practicable: "Warts are quite common on cows' udders; also the large, rough, bleeding ones that appear on various parts, and have been known to grow to a large size. They are often very troublesome when the cow is in milk, as these cause pain from being pulled out of the root by the hand of the milker. Take a pair of sharp scissors and clip them off near the skin, then dress with chromic acid, one part, and pure water four parts—it should be kept in the dark—take a stick as large as a pencil and tie a small fine rag on one end; dip in the acid and apply to the cut surface once a day or once every two days until the wart is level with the skin. This must be washed off before milking. If properly done there will be no mark. It is equally as good on the human subject. In treating the large warts it is not best to cut them much, if at all, as it makes them very painful. Apply the acid carefully so that all the surface is wet, and when a black scab is formed remove it carefully and renew the application until it is near the skin, then stop and the space will heal nicely without leaving a mark."



## THE GARDEN.

## Testing Seeds, Etc.

EDITORS PRESS:—I left Pennsylvania last October and came here to settle. Besides farming I am trying to garden some in the valley of Ballard where I can irrigate. On December 10th I sowed radish, onions, lettuce and celery seed; all grew but the celery. I have sowed twice since, but cannot see any of it growing.

I planted potatoes on February 15th, but they were frozen down twice. The last time, on April 4th, when the thermometer was at 30° just before sunrise. I would like to get a little information through the PRESS, how to test seed for its power to germinate. Second, which would be the best way to start celery and cauliflower seeds? I believe my first two sowings were covered too deep. The last sowing I only sprinkled a little wood ashes over.

I also put sweet potatoes into the ground to start plants, but I cannot see any of them coming up. Maybe they need a different treatment here than in the East. Hoping to find answer in the PACIFIC RURAL PRESS.

CHRISTIAN ERNST SCHNEIDER.

Ballard, Cal.

We hope some of our correspondents will give their experience with the plants named. As for testing seeds, the following from an Eastern exchange may be of service:

The plan of testing seeds by seedmen before sending them out is more and more appreciated. In fact, before ordering the year's supply, seedmen now generally test samples—at least the better class of them do. It is no less essential that buyers test seeds before planting. This is fairly accomplished by placing the seeds between folds of flannel or blotting-paper, and keeping them moist and at a temperature of 65 to 70° Fahrenheit.

For testing seeds in a large and critical way, however, many different plans have been devised. Perhaps the most complete, insuring proper warmth and at the same time constant moisture, is that of a prominent seed firm of England. It may easily be applied to the testing of seeds on the farm, where a considerable number of samples is required to be tested. The arrangement consists of a wooden frame with sloping glass cover, inside of which is fixed a shallow tank of water. In this tank are placed bricks of the ordinary size and of a porous nature, the surface of which stands well above the water, but in a position to absorb sufficient moisture to cause germination; and on these bricks the seeds being tested are laid.

The surfaces of the bricks are divided into spaces sufficient to contain one test of from 200 to 300 seeds, and numbered for the sake of accuracy in registration. The temperature is kept at about 70° Fahrenheit, and at this point tests of clovers and some of the grass seeds can be completed in from two to three days. Its advantages are that seeds can be watched in the actual process of germination, and non-germinating seeds examined for the cause. The ease with which a humid atmosphere and even temperature can be obtained and preserved when the bricks are once heated is apparent. The regular supply of the exact amount of moisture without its having to be applied by hand at almost haphazard, as in the case of tests in soil, and speed, accuracy and simplicity in working, are also apparent.

## Vegetables for Shipment.

The shipment of vegetables overland during the period of cheap freights was immense and at other times the amount shipped is quite an item. We believe it may be greatly increased and we hope the gentlemen named to present the subject at the next Horticultural Convention in Sacramento are preparing their essays. The overland fruit train from Sacramento carried a car and a half of "garden sass." We find the following in the Los Angeles Herald:

There is much said about the money-making in oranges, lemons and grapes, in Los Angeles, but the Chinamen are supposed to be making more money out of common plebeian cabbages than any orange-grower or vigneron in the country. There is an enormous demand for cabbage for shipment to the East. This flood runs at the full from January to April inclusive, but there is more or less of this demand at all seasons of the year. The supply is at all times less than the demand, and the only way of regulating the price is the San Francisco market. Commission men and shippers here have to send to that city to fill their Eastern orders, but they pay a little more for the home product than for that supplied at San Francisco. The Los Angeles cabbage is greatly preferred by the Eastern dealers, hence our merchants would rather fill their orders at home, even if it cost them a little more.

The price at present is \$1.50 per hundred or \$30 a ton. In this climate there is no trouble to grow two crops of cabbage per year. Big Drummond heads will weigh 15 to 20 pounds each, and the smaller, more compact sorts preferred for shipping, will certainly average all of five pounds each. They are planted about

two feet apart, which will give 10,000 to the acre. This is 25 tons to the crop, or 50 tons a year, off an acre of good ground. The gross results of such a crop are \$1500 an acre. It is not probable that, even with white labor, the care of the two crops would come to more than \$500, leaving a net profit of \$1000 an acre. It is said that some of the Chinese make that much.

Cauliflower will pay as well if not better than cabbage. It is not shipped in quantity for the simple reason that it is not to be had. In small lots it has been sent as far as Omaha, and it has gone there in perfect condition. It is said that Vick of Rochester, New York, had an immense patch of cauliflower caught in the freeze-up in Florida last winter, where he has grown it for some years past for the New York market. He is supposed to have a representative in this city now studying up Southern California as a field for a similar enterprise.

## METEOROLOGICAL.

## The Climate of the Sacramento Valley.

Sergeant Barwick, Observer of the U. S. Signal Corps at Sacramento and Meteorologist to the State Board of Agriculture, has prepared for the latter body a very valuable special report on the "Meteorology and Climatology of the Great Valleys and Foothills of California," including records of observation covering from 15 to 36 years. From Sergeant Barwick's report we compile certain statistics and descriptive matter as our space will admit.

## Yearly and Seasonal Rainfall, Etc.

The instructive tabulated information below gives the rainfall at Sacramento annually—that is, from January to December of each year—for 33 years. Also, the rainfall by seasons, beginning with September 1st of one year and ending with August 31st of the next year, the wettest season being 1861-2—35.56 inches; the driest that of 1863-4—7.87 inches; the wettest calendar year being 1880—31.99 inches; the driest being 1877—8.44 inches; the mean average seasonal rainfall for 32 years being 19.076 inches; the mean average for the year, or the mean annual average, being 19.529 inches. The difference between the mean average rainfall, calculating from January 1st to December 31st of each year, and from September 1st of one year to August 31st of next year, is .453 of an inch in favor of the calendar year:

YEAR OF	Yearly Rainfall.	Total No. of Days Rain Fell.	Season of—	Rainfall—Inches.	Total No. of Days.
1853....	19.99	51	1853-54	20.06	51
1854....	19.83	62	1854-55	18.62	69
1855....	18.56	70	1855-56	13.76	63
1856....	14.26	70	1856-57	10.46	78
1857....	12.91	74	1857-58	15.00	87
1858....	16.80	99	1858-59	16.03	100
1859....	16.86	97	1859-60	22.09	101
1860....	19.19	72	1860-61	16.10	76
1861....	21.38	75	1861-62	35.56	100
1862....	27.44	85	1862-63	11.58	64
1863....	12.20	60	1863-64	7.87	57
1864....	19.27	67	1864-65	22.51	62
1865....	11.15	61	1865-66	17.93	83
1866....	26.52	86	1866-67	25.30	72
1867....	30.03	63	1867-68	32.79	78
1868....	19.50	68	1868-69	16.64	58
1869....	18.19	52	1869-70	13.57	52
1870....	10.21	51	1870-71	8.47	53
1871....	19.32	71	1871-72	24.05	83
1872....	19.17	70	1872-73	14.21	60
1873....	18.20	69	1873-74	22.90	82
1874....	17.92	87	1874-75	17.70	71
1875....	23.31	59	1875-76	26.53	75
1876....	18.12	62	1876-77	8.96	54
1877....	8.44	60	1877-78	24.86	72
1878....	23.45	65	1878-79	17.85	64
1879....	22.37	78	1879-80	26.47	67
1880....	31.99	66	1880-81	26.57	61
1881....	20.71	60	1881-82	16.51	57
1882....	18.06	58	1882-83	18.11	52
1883....	13.48	46	1883-84	24.78	68
1884....	34.92	70	1884-85	16.58	58
1885....	20.72	57	1885-86	28.12	53
1886....					
Totals...	644.47	2,241		610.42	2,228
Averages	19.529	*67.9		†19.076	69.6

\*Mean for thirty-three years.

†Mean for thirty-two seasons.

‡Up to April 1, 1886.

## Average Annual and Seasonal Temperatures.

The statement below shows the average temperature at Sacramento for each year for 33 years; for the spring, summer and autumn for 33 years, and the average winter temperature for 32 years. The coldest year, inferring from the average temperature, was that of 1880—57.5°; the warmest was 1864—62.8°—the mean average for the past 33 years being 60.2°, showing the coldest to have been 2.7° below the mean average, while the warmest year being that of 1864, when it was 2.6° above the mean average for 33 years. By careful study of the following table, one is struck by the slight difference between the coldest and warmest year, as compared with a 33 years average, generally not more than 3°. That is, we might safely say that the average temperature of any year is not likely to vary more than 3° from 60°, either way, between the hottest and coldest

est year, as compared with the mean average temperature for the past 33 years:

YEAR.	Mean Annual Temperature.	Mean Spring Temperature.	Mean Summer Temperature.	Mean Autumn Temperature.	Mean Winter Temperature.
1853.....	62.6	62.9	74.3	69.0	47.3
1854.....	59.5	58.3	72.4	60.5	48.0
1855.....	59.5	57.7	72.2	60.4	48.9
1856.....	60.1	59.9	71.9	60.9	47.5
1857.....	60.7	61.7	71.5	60.9	48.2
1858.....	59.5	59.6	70.3	61.1	46.6
1859.....	58.7	57.2	70.4	60.3	46.5
1860.....	59.0	56.5	70.8	60.4	49.5
1861.....	60.1	59.8	69.8	63.7	48.3
1862.....	62.2	57.6	72.5	61.5	47.1
1863.....	60.3	61.4	71.8	62.6	49.8
1864.....	62.8	62.2	73.5	62.9	48.9
1865.....	61.0	61.0	73.1	63.7	51.4
1866.....	62.1	59.7	74.8	62.1	48.7
1867.....	59.9	58.3	71.9	61.4	48.1
1868.....	60.1	59.8	71.5	62.3	48.2
1869.....	60.4	58.9	72.1	61.7	47.7
1870.....	59.6	57.0	70.2	59.9	47.7
1871.....	59.6	58.9	71.6	62.9	50.0
1872.....	60.4	60.5	71.6	62.1	47.6
1873.....	60.7	61.0	70.4	60.8	48.2
1874.....	59.8	59.0	71.3	62.3	49.0
1875.....	62.5	63.3	72.1	63.4	49.9
1876.....	61.7	59.9	74.6	62.5	49.2
1877.....	61.2	61.2	73.5	60.9	44.5
1878.....	61.3	60.5	72.9	58.5	51.0
1879.....	60.3	59.3	72.9	58.8	45.9
1880.....	57.5	55.0	69.1	60.1	45.4
1881.....	59.2	60.4	68.5	60.0	45.9
1882.....	58.5	57.6	71.1	62.8	50.0
1883.....	58.8	58.5	72.4	61.2	49.4
1884.....	58.8	57.9	69.8	61.2	49.4
1885.....	61.2	61.8	70.1	61.2	49.4
1886.....					
Totals.....	1987.6	1964.9	2365.7	2029.9	1595.5
Averages.....	†60.2	59.5	71.7	61.5	†48.3

\*The Winter tables are for the Winters from 1852 to 1885-6, both inclusive.

†Mean for thirty-three years.

‡Mean for thirty-three years.

## General Remarks.

The climate of the Sacramento valley and foothills being of great interest just at present and since the holding of the citrus fair, January 11, 1886, I thought it a very appropriate time to reprint a portion of an article by the late lamented the Honorable B. B. Redding, published in the State Agricultural Society's Report for 1878. The subject spoken of above is on the general climatic condition of the Sacramento valley and foothills, from Redding on the north to Sumner on the south, and is as follows:

From Redding, in the northern end, to Sumner, at its southern extremity, is a distance of 350 miles. The mean annual average temperature of Redding is 64°. The lowest point to which the thermometer has fallen since a record has been kept was 27°, in December, 1876. [In all probability it fell lower than that since the above article was written, for in 1883 it fell to 19° at Red Bluff.—SERGEANT BARWICK.] Sumner, at the southern end of the valley, has an annual average temperature of 68°, and an average rainfall of four inches. The lowest point to which the thermometer has fallen at this place was also 27°, on the same day, in December, 1876. [In December, 1883 (since the above was written), the temperature fell to 25°, according to the railroad weather reports.—SERGEANT BARWICK.] There is a remarkable uniformity in the climate throughout the Sacramento valley. In it, a difference of 5° of latitude, between 35° 30' and 40° 30', only lowers the annual average temperature 4.15°. The difference of the annual average temperature between corresponding degrees of latitude in the Atlantic States, at an equal distance from the ocean, is more than 8°.

It has been found that the foothills of the Sierra, up to a height of about 2500 feet, have apparently the same temperature as places in the valley having the same latitude. It has also been found that with increased elevation there is an increase of rainfall over those places in the valley having the same latitude, as, for illustration, Sacramento, with an elevation above the sea of 30 feet, has an annual average temperature of 60.48°, and an average fall of rain of between 18 and 19 inches, while Colfax, with an elevation 2421 feet, has an annual average temperature of 60.50°, and an average annual rainfall of from 42 to 43 inches. This uniformity of temperature and increase of rainfall appears to be the law throughout the whole extent of the foothills of the Sierra, with this variation as relates to temperature, viz.: as latitude is decreased the temperature of the valley is continued to a proportionally greater elevation. To illustrate, approximately: if the temperature of Redding, at the northern end of the valley, is continued up the foothills to a height of 2000 feet, then the temperature of Sacramento, in the center of the valley, would be continued up to 2500 feet, and that of Sumner, in the extreme southern end of the valley, up to 3000 feet. The increase of rainfall on the foothills in the latitude of Sacramento, due to elevation, is about one inch to each 100 feet. South from Sacramento the proportion decreases until, at Sumner, the increase due to elevation is but half an inch to each 100 feet. This is shown by the record kept at Fort Tejon, in the Tehachapi mountains near Sumner, at an elevation of 3240 feet, where the annual rainfall is between 19 and 20 inches. There is no record kept at any point in the hills above Redding, but prob-

ably in this latitude the increase due to elevation is about 1½ inches to each hundred feet. The increase of precipitation on the hills at the northern end of the valley gives greater density to the forests, and permits them to grow at lower elevations than in the southern end of the valley. At the same time the difference in temperature is so small that the character of the vegetation of the hills at each end of the valley is not dissimilar. The trees found in the vicinity of Redding, at the northern end of the valley, below an elevation of 500 feet, are not found at the southern end until we pass Caliente, at an elevation of 1300 feet. It would seem that the temperature of the valley prevails up the Sierra to an elevation that equals the height of the Coast Range of mountains. If a line were drawn parallel to the surface of the ocean from the top of the Coast Range, east, until it met the flanks of the Sierra, it would mark a level on the Sierra below which the temperature would not materially differ from that in the

## Sacramento Valley.

This fact is probably to be ascribed to the prevailing southwest return trade winds which blow over the State from the ocean for more than 300 days in the year. Passing the summits of the Coast Range, but small portions descend into the valley; the remainder reach the sides of the Sierra at about the level of the summits they have passed.

## Arboreal Vegetation.

At the northern end of the valley, at an elevation of 500 feet above the sea, the most of the California oaks are found; of pines, only the nut or digger pine; the buckeye and chemical. This is the characteristic arboreal vegetation throughout all these 350 miles. Its presence everywhere shows increased rainfall over the valley, and similarity of temperature to that of the valley. Our pasture oak is found at lower elevations in the valley, but always on moist land or near river courses, proving that it demands, in addition to temperature, the increased moisture. In the southern end of the valley this vegetation prevails at higher elevations, because it there finds the proper temperature and moisture. Wherever, on the foothills, any of the trees named constitute the preponderant arboreal vegetation, it is an evidence that the temperature is the same as that of the valley, and plants that can be successfully grown in the valley can be grown to as high an elevation on the hills as these trees abound. If one tree were to be taken as the evidence of this uniformity of temperature, it would be the Sabin's (the nut or Digger) pine. It is never seen in the valley or on the hills below an elevation of about 400 feet. It is not found at a higher elevation than that in which the temperature is the same as that of the valley. It is never found in groves, but singly among other trees, yet it prevails throughout these 350 miles of foothills. While the vegetation is more dense on the hills at the northern end of the valley, due to increased precipitation, there are also local differences—where there is similarity of soil—due to exposure. Throughout all the lower hills the greatest number of trees is found on gently sloping eastern, northeastern and northern hillsides, which necessarily are more moist and cool. The southern aspects contain less trees, because exposed to the direct rays of the sun and to the full force of the prevailing winds.

## Crops Suitable for Cultivation.

Every agricultural product that can be grown in the valleys, including the semi tropical fruits, can be grown with equal facility in these foothills. Ordinarily the land has to be cleared of the trees found upon it, and cultivation must be continuous, for on the whole western face of the Sierra the native trees, when cut or burned, are rapidly replaced by a new growth of the same kind. These lands are found to have all of the requisites for the successful growth of orchards. Fruit trees thrive better upon them than on the lands of the valley. None of the many theories advanced as to the cause of the treeless condition of many plains and prairies having ample rainfall, seem to be entirely satisfactory, but experience has demonstrated that orchards grow best and thrive with less artificial aid on lands that in a natural condition are covered with trees. The increasing exports of small fruits, such as strawberries, blackberries and raspberries, from the vicinity of Newcastle and Auburn, and their superior size and quality, prove that this region is better adapted to their culture than any place yet found on the level lands of the valley. The peaches of Coloma have a State reputation for flavor and size. The apples of Nevada and Georgetown are equal in size, taste and keeping qualities to the best imported from Oregon. The Oroville oranges have been pronounced equal to the best from Los Angeles. The vine grows with luxuriance, and bears abundantly wherever it has been planted throughout all this region. "The wines of Coloma have more than a local reputation. Persons competent to judge assert that wine from grapes grown on the foothills is free from the earthy taste that characterizes much of the wine of the flat land of the valleys. They also express the belief that if ever wine is to be made in California as light as that from the Rhine, and as free from alcohol, the grapes will be grown in the higher elevation of the foothills, where snow falls and remains on the ground a few weeks each season. It is said that the long summers and great heat of the valleys develop the saccharine matter in the grape, which by fermentation is converted into alcohol."



## PATRONS OF HUSBANDRY.

Correspondence on Grange principles and work and reports of transactions of subordinate Granges are respectfully solicited for this department.

## The Fraternal Plan of Life Insurance.

Some members of the Order Patrons of Husbandry have favored the idea of establishing a "life beneficiary branch" as a promising means of adding to Grange benefits and increasing the interest and membership of the Order among our rural population. The subject is well worthy of consideration, and the growth of fraternal organizations based upon mutual insurance as a central idea furnishes valuable data to calculate the advantage of extending Grange work in this direction. We are glad to minister to the interest in this subject by quoting a large part of a report made to the Supreme Lodge of the A. O. U. W. by William H. Barnes, of San Francisco, who is chairman of the Statistical Committee of the Supreme Lodge. Readers will notice what strong points are made in favor of economy in insurance on the fraternal plan, also the low death rate among rural dwellers and the superior longevity of women, both of which should go to lead farmers and farmers' wives to consider how much cheaper they could insure themselves than by joining in with other occupations where life is less certain and rates consequently higher. Another reason why Californians should consider the matter is the fact that our climate favors longevity by freedom from epidemic diseases and freedom from severe cold weather, of which a leading Scotch authority in life statistics says: "The descent of temperature below the freezing point in Scotland causes a greater increase in deaths than the most deadly epidemics to which the inhabitants are liable."

We quote as follows from

## Mr. Barnes' Report.

The business of this committee, as we understand it, is to collect and present facts especially relating to death rate, with the view of applying said facts to the system of the A. O. U. W., to see if it is feasible, upon the payment of a reasonable sum of money monthly—say one-half, or less, than is charged by strictly business corporations—to guarantee upon the death of a member in good standing the sum of \$2000. It would not be difficult to array here scores of what are called mortality tables, expectancy figures, tables of graduation, etc., and confuse the mind by legions of numbers in serried columns; but we desire to say emphatically that, correct and reliable as such tables may be to a certain number of lives followed from beginning to close, they are not of the slightest information when applied to associations of such character which have, as all fraternal Orders do have, a constantly changing membership. Nor ought they to be applied to even business corporations which have, as will be shown, only the smallest percentage to be paid out of the vast number that originally apply.

## Death Rate.

We hold that the only true and correct method of presenting the subject is to give facts and the actual results, and when statistics and figures are employed to see that such figures and statistics come from unbiased and unprejudiced sources, and in the following there is no doubt as to the truth. They are the work of Surgeon J. S. Billings, to be found in the United States census for 1880, and far exceed in value (in our judgment) any figurings from any other sources:

Population, United States, 1880.....	50,155,783
Males.....	25,618,820
Females.....	24,536,963
Of which there were, colored.....	6,580,793
Chinese.....	105,465
Japanese.....	145
Indians.....	66,407
Total.....	6,752,813

The total deaths for the year were.....	756,893
Males.....	391,980
Females.....	364,913

The percentage of death per thousand was:	
Males.....	15.35
Females.....	14.81
General average.....	15.01

One thousand and seventy-four males died to every thousand females. The percentage on deaths under one year of age was:

Males.....	248.08 to thousand
Females.....	215.38 " "

Under five years of age:	
Males.....	415.51 " "
Females.....	381.85 " "
Both sexes, 5 to 15 years of age.....	87.57 " "

Taking percentage of death to be 15 to each thousand of population annually, they would be composed as follows:

Under 5 years of age.....	6,855.5
Five to 15 years of age.....	1,3135.5
Over 60 years of age.....	2,5890

15,0000

Of the population of the United States, including colored, Chinese, Japanese and Indians, there are 12,830,349 males over 21 years of age—about one-fourth of the population. But giving a liberal estimate, and taking from the age of 15 up, it will be seen that of the total deaths of 1880 on the general average of 15 per thousand, eight of said deaths were under the age of 15 years, and only 7 deaths per thousand above it; and, consequently, that the death rate of the male population above voting age could not have been over 7 in proportion to the entire population per thousand.

But the question immediately arises, How does the male death rate above the voting age compare with its own numbers?

Total deaths per year.....	756,893
Under 15 years of age.....	403,605
Seventeen to 80 years of age.....	237,531
Over 60 years of age.....	115,797

It will be considered that the population between 15 and 21 are equivalent in number to those over 60, and that when we include from 15 to 60 in this estimate, a most liberal concession is made. The deaths from 15 to 60 in 1880 were 237,531, half of which were females, leaving the male deaths above voting age to be 118,765 for said year.

What would it have cost each of the male population of the United States in 1880 to have paid \$2000 at death of every man over 21 years of age who died in said year? One hundred and eighteen thousand, seven hundred and sixty-five deaths at \$2000 call for \$237,530,000; and 12,830,349 paying \$18.51 each, or \$1.50 per month during the year, would have equaled the indebtedness. Going still further, How much would it have required of each member of the population of 1880 in the United States to have paid \$2000 at every death—old, young, infants, all nationalities combined, etc.—of said year? Take the death rate, 15 to the thousand, and the answer appears \$30; or, to be exact, 756,893 at \$2000 each would be \$1,513,786,000, which would require of each of the 50,155,783, population of 1880, the sum of \$13.17 to pay \$2000 for every death that occurred. Half of the entire population is over 21 years, and, as is stated, this half is 7 out of each 15 deaths. Again, half of this population over 21 years of age are females, whose death rate is a trifle better than males, even as 14.81 per thousand is better than 15.35, making the male death rate  $7\frac{1}{2}$  per thousand, female  $6\frac{1}{4}$  to the total number.

Dividing the population into classes, viz., up to 15 years, from 15 to 60, over 60 years of age, and compare the death rate of each class with the number in said class, also aggregate population, and all over 15 years of age, gives the following results:

AGE.	Number in said class.	Deaths in said class.	Percentage of deaths.	Amount paid to pay \$1000 each death.	And pay to pay \$1000 each death.
Under 15 years.....	20,043,659	403,605	2.01	\$40.27	17.16
Fifteen to 60 yrs.....	27,622,742	237,531	85.5	17.16	17.16
Over 60 years.....	2,399,731	115,797	4.82.5	96.50	96.50
Total population.....	50,155,783	756,893	1.50.1	\$30.17	
All over 15 years.....	29,922,473	353,328	1.18.1	\$23.61	

## Foreign.

In the death rate, attention is called to the following fact in the census of 1880, viz: that the number of deaths among the colored population is  $2\frac{1}{2}$  per cent higher than among the white. The number of the white population in 1880 was 43,402,970, in which 750,191 deaths occur, or 14.74 per cent. The colored population numbers 6,752,813, in which the deaths were 116,702, or 17.28 per cent. It is also a remarkable fact that the death rate of the United States is much lower than that of other civilized countries. In the rural population of England, the death rate is 18.05 per thousand, and in all England is 20.05 per thousand. In rural Scotland the death rate is 17.03, while all Scotland shows the high rate of 21.03 per thousand. In commenting upon these facts Surgeon Billings remarks: "The low death rate in the United States is considered to be due to the absence of overcrowding and to the more general and equitable distribution of the means of supporting life, including especially the bountiful food supply of good quality for all classes of people."

## The Results of Fifty Years.

The following facts taken from the records will, I think, carry with them much more satisfaction than any tables of expectancy or so called "Results" published by business corporations. They are those of an Order with which I have been closely identified for much more than half the time specified, and at least three-quarters of the transactions have occurred under my own observations,

and its membership, progress and financial ability, more than trebled during said time.

I allude to the 50 years of American Odd Fellowship from 1838 to 1883, and I unhesitatingly assert, the A. O. U. W., or any other legitimate, progressive Order, will have a similar experience. In the 50 years the I. O. O. F. received by initiation 1,318,225 persons; during the same time the reinstatements and admissions by card were 439,408, making a grand total, 1,757,633. At the end of 50 years, in round numbers, 500,000 were in membership, and 106,900 had died in good standing in the Order, equivalent to about one in 16 of the admissions from all sources. The admissions of the half century average 35,000 per year; but the loss from suspensions, withdrawals, etc., including an average of 2138 annually by death, average 25,000 annually, leaving the average net gain but 10,000. Giving the 500,000 membership at the close of the 50 years at 10,000 net gain for one year, or an average membership for the half century of 255,000 members per year, the average annual death rate as stated for the same period was 2138 annually, or 106,900 for 50 years. The relation of 2138 to 255,000 gives the annual percentage of the death rate a trifle less than one per cent, and this, it must be remembered, is not for a few exceptional years, but for a long period, and covers the time of the civil war and terrible epidemics of the South in days gone by.

Another fact must be taken into consideration. Save in a few localities, no medical examinations were required of persons joining the Odd Fellows, nor is there any age limit as in the A. O. U. W.; and if medical examinations are of the value that some claim for them the record for the A. O. U. W., so far as death rate is concerned, should be much better than that of the I. O. O. F. Now for a moment let us look at what would have been the result if American Odd Fellowship had collected \$20 yearly of its 255,000 members for 50 years for a death benefit fund. It would have amounted to 255,000,000 of dollars. To have paid \$2000 at the death of its 106,900 members would have required \$213,800,000, and left a balance in said fund of \$41,200,000; and in this estimate no calculation is made for receipts from those who have been in the Order for more or less years and then dropped out. The figures show the admissions and reinstatements to be 1,757,633; the deaths, 116,900; the membership, 500,000, leaving 1,250,733 unaccounted for; all of whom in this half century have been members for a greater or less period. It is generally considered that the average duration in fraternal life of all who join is similar to that of those who have taken out insurance policies, namely, about 7 years, and consequently 1,750,733 were in the Order each that length of time, and would have contributed their \$140 each to this benefit fund ere they dropped out, swelling the surplus to over \$200,000,000.

## Lapses.

An interesting diagram published by *Our Society Journal* in November, 1884, shows a few life policies taken out in the American companies and what became of them. The number in force at the end of the second year were as follows: Second year, 875; sixth year, 500; seventh, 396; ninth, 201; twelfth, 107; fifteenth, 80; twenty-first, 30. Allow 1 per cent annually for deaths for all said policies in force in the 21 years, there would have only been 60, making a total of 90, leaving 900 to be accounted for. The answer is simply: These 900 paid in an average of over \$60 each and then dropped out, relieving the company of all expenses so far as they were concerned. In these 21 years 6197 annual premiums were paid, which, at the rate of \$10, would have been sufficient to pay \$1000 at death on the A. O. U. W. plan. But when it is realized that the lowest premium per thousand in a company for the age of 40 years, which is the average in societies, is \$26.61 annually, it is not difficult to perceive the line of profit or to account for the mighty reserves accumulating in the vaults of the corporations.

## Actual Cost of Insuring \$1000.

Allowing that the actual cost of carrying a money guarantee of a specified amount (like the \$2000 of our Order, which we promise to pay our membership) is properly within the province of this Committee, from the official tables we give the average cost annually to the companies named, of carrying each \$1000, or, to put it definitely, how much parties would have had to pay annually per thousand of the amount of their policies to settle the policies of those who died during the term. The period of time embraced below is 25 years in the history of each company ending in 1883:

Company.	Actual cost of insuring \$1000.
Mutual Life of New York.....	\$11.09
Equitable.....	11.02
New York Life.....	11.70

In an order like the A. O. U. W., where every dollar collected for assessments is appropriated for death claims and for no other purpose, it needs no figuring to show that the highest amount here would have been only \$23.54 annually to have carried \$2000, as no expense of any nature or any amount can be deducted from the moneys paid for this purpose. In companies of an exclusive business character, it is necessary and essential to collect for other purposes; salaries, commissions, advertising, rent, medical examinations and other expenditures are imperative. There are also what are known as dividends and reserve, also unknown and not required by our Order; and for these purposes amounts largely in excess of actual cost must be and are collected by the business corporations, and add to their income, as also the item of interest which in one company now is annually nearly sufficient to pay the actual death claims, less dividends. In this connection it will be interesting to see what was the actual annual income of these companies from 1859 to 1863 inclusive for each thousand insurance.

Mutual Life.....	\$63.20
New York Life.....	60.80
Equitable.....	61.62

Or for each dollar actually necessary to pay for death loss alone the incomes were:

Equitable.....	\$4.06
New York Life.....	5.17
Mutual Life.....	5.70

This, of course, gives a great surplus, large amounts of which are returned as dividends, and millions piled away as reserve, year by year constantly increasing. Should no more money be received, as President Winston said in his report of 1884, speaking of the Mutual Life, "Its assets are \$101,148,248.25, which by the laws of this State will enable the company to pay all its obligations as they may mature and leave a surplus of over \$12,000,000." We have no war to make upon insurance companies in our day. Nor do we believe the education of the people to the necessity and value of insurance by our fraternal Orders is of any disadvantage to them. They have a right to prosecute that business as they and their customers agree. The fraternal co-operatives claim, and propose to exercise, the same right, and believe that they are able to carry a guarantee of a specified amount upon their members at the same figure that it would cost a company for a similar risk.

## Average Age.

"Will not the death rate increase as an Order grows older?" is often inquired. Up to a certain maximum, yes. And that maximum is the average age of 40 years for its members, which is the average age of the members of all fraternities a half century old. But beyond this it can never go in any standard, progressive association, that by the addition of what is termed "new blood" each year fills up the gaps caused by loss and presents even a slight increase at the end of each year. In such a one the average age will be 40 and the death rate one person "ad infinitum;" and here let us say that by *new blood* is not meant *young blood* as many suppose, but that of any eligible age who, fresh from any medical examination, give promise of long and useful lives. The moment this accession of new blood ceases to be added to the body prolific, or when losses are larger than gains, then the average age and death rate advances. Orders, business enterprises, etc., are like velocipedes; keep moving steadily forward, there is progress and safety, but with laziness, failure to work, neglect, lethargy, carelessness or ignorance, they fall. This Order, nor any other Order, or business, is exempt from the law of such work, and the most vital truth we can utter is that "He who by the plow would thrive, himself must either hold or drive."

## What Enterprise Grange Proposes.

EDITORS PRESS:—The farmers are becoming more and more determined to stand together, no longer affiliating with the old parties. Silence may at times be golden, and a still tongue indicate wisdom. But conformity to the old maxim, "The less said the sooner mended," does not always meet the urgent demands, and silence at this critical moment may be considered both cowardly and criminal. The time has arrived in our political history when the truth must be spoken, even in meeting. The life of the politician depends on his ability to procure office, and the first and most important step for him is to succeed at the primaries and secure the nomination; this done, the battle is half won. He naturally looks to the monopolists who furnish money to conduct the campaign. This wealthy and powerful class usually need some legislation in their own interest. They enlist the candidate in their behalf and reward him by securing his election, furnishing money to be lavishly spent for votes;



and, as a rule, the farmers and producers supply the votes, when even before the election their rights have been bartered away. When Congress meets the monopolists seem to have everything their own way and then the people declare that no man can be trusted.

Now the farmers and toilers propose to nominate their own candidates; and they do not need much money, as they have the votes. And when they are selected let them understand that they are to work in the interest of those who elect them, and that their political future depends upon their honesty and good works. This, with united action, may restore to the toilers their rights. The politicians, however, advise the farmers to wait till after the two old parties have made their nominations and see what bid will be made for the farmers' support. But the farmers have been slaughtered so often that, like Banquo's ghost, they will not down; and at Enterprise hall, June 8th, they elected 10 delegates to be in readiness for the State Convention when it may be called. We desire all the Granges in the State to do likewise, show a united front, abolish the rule of bossism, and thus establish justice, promote domestic tranquillity, and secure the blessings of liberty to ourselves and our posterity. But we would not consolidate the Government and the means in the promotion of injustice, causing domestic discord and depriving the people of the blessings of liberty forever. If the farmers of the State fail to hold a convention and put a State and Congressional ticket in the field, the farmers of Sacramento county will organize, make a county ticket, and vote for their own interests.

GEORGE WILSON,

Enterprise Grange, Sacramento county.

**EXHIBIT DURING THE ENCAMPMENT.**—Sonoma Pomona Grange decided, awhile since, to make a showing of the county's agricultural products at San Francisco during the G. A. R. Encampment week. Their committee, consisting of G. N. Whitaker, E. A. Rogers and J. Hawkins, is stirring energetically to secure contributions of material, and insure a creditable display. They are seconded by Messrs. McDonald and De Turk, on the part of the Fruit and Grape Growers' Association, who have petitioned the Board of Supervisors to assist the Grange in bearing the expense of the proposed exhibit at the Lick House.

**THE NEW BUILDING AT MARYSVILLE.**—Of the new building in which a part at least of the sessions of the next State Grange meeting will be held, the Marysville *Appeal* says: The new pavilion has the finest floor that can be made of lumber. It is Oregon pine, vertical grain, three inches wide by one and one-quarter thick, and has been planed smooth and oiled since it was laid. There is ample room for all who wish to dance and plenty of gallery room for those who do not, and no doubt on such an occasion, and in the interest of a good cause, the pavilion will be filled.

**WATSONVILLE GRANGE** purposes giving a popular entertainment on the afternoon of Saturday, the 17th inst. The program includes musical selections, recitations, a comedietta representing the seasons and a harvest feast. Farmers are requested to contribute for exhibition specimens of remarkable farm products, such as high or heavy grain, fine fruits and large vegetables. All patrons and their families are specially invited.

**NO FARMERS' CONVENTION.**—There was no farmers' convention in Sacramento on June 24th. The attendance did not warrant action.

**COST OF GROWING HOPS ABROAD.**—American hops come into competition with those from the Continent of Europe, and it may be of interest to our readers to see a statement of the cost of producing hops abroad. Ch. Fruwirth, of Vienna, Austria, writes to the *Country Gentleman* that "the cost of producing 100 lbs. of hops in Alsatia in 1869 was \$16 to \$17; in Bohemia in 1870, \$15, and in 1876, \$18." When some people think hops can be profitable at the prices which ruled here during the last year, it will be well for them to know what it costs to produce them in the cheap labor countries of Europe.

**A HYDRAULIC DECISION CLINCHED.**—Supreme Judge Keyser of Yuba county enjoined the Eureka Lake and Yuba Canal Company, consolidated, prohibiting hydraulic mine working, and imposed a fine of \$500. The company took an appeal from this order to the Supreme Court of this State in July, 1883, and the lower court was sustained. The case was carried on a writ of review to the Supreme Court of the United States, which Court has affirmed the decision of the State Supreme Court.

**THE MARSH FAMILY.**—We receive notice that the Marsh Family Association, including all persons by the name of Marsh, or who have descended from any by that name, and their families, are invited to attend the third family gathering and basket picnic at Lake Pleasant, Montague, Mass., July 20, 21 and 22, 1886, and to bring or send all they know or can learn of the genealogy of the family.—DWIGHT W. MARSH, President, Amherst, Mass.

**LARGE** quantities of tomatoes, cabbages and potatoes are being shipped East from Los Angeles by express.

## AGRICULTURAL NOTES.

### CALIFORNIA.

#### Alameda.

**SUGAR FACTORY.**—Haywards *Journal*, June 26: While at Alvarado Sunday we learned that the sugar mill will commence operations in August. The beets are now well advanced, and it takes about 1500 acres to meet the requirements of the mill. The extensive additions contemplated, if carried out, will make it the largest sugar mill in the country.

**FRUIT NOTES.**—Orchardists report that apricots are beginning to drop from the trees, caused no doubt by the excessive rains some months ago. Rod Thomas informs us that on the Carr place this is particularly the case, and it is hard to figure on what amount will remain. The price of cherries naturally ascends as the fruit disappears. Royal Anns are now being shipped, and bring top prices. Currants are paying much better this year than last, and the prospects are that the price will touch \$4 a chest before long. The continued cool weather for weeks past has allowed currants to fully mature, and the berries are unusually large, fine ones. Picking will continue for three or four weeks longer in many orchards, and the price appears to be getting better each week. L. B. Anway has a large crop and will have the latest currants in this section.

#### Contra Costa.

**BUYING PEARS.**—Martinez *Gazette*: Mr. W. Treat of Ygnacio valley, one of the trustees of the California Fruit Union, is engaged in buying up the pear crop of the present season in Contra Costa, which he will ship to Porter Brothers, formerly the largest fruit-shippers on this coast, and now engaged as agents for the Union, with headquarters at Chicago, which is the central distributing point of the Union at the East. Mr. Treat will also ship fruit from Davisville and Marysville as well as from this county. Of course, the pears handled will be principally Bartlett and the late fall varieties. No county in the State is capable of raising finer pears than those raised in Contra Costa. The soil and climate in the San Ramon valley are especially adapted to pear raising, and it is to be hoped that next spring will witness a large increase in the acreage of pear orchards, not only in that valley but also in other portions of the county.

#### Fresno.

**PLASTER FOR ALFALFA.**—Fresno *Republican*, June 25: Sowing gypsum or land plaster, on the alfalfa patches is no longer an experiment in our colony. Wherever it has been tried it has quadrupled the crop, and it is evident that it will pay to use it at least three times a year as a top dressing, after cutting the alfalfa and before irrigating. Quite a number will try it in their vineyards the coming winter.

**BLACKBERRIES.**—W. A. Cowan, of Fresno Colony, has a patch of blackberries of a little over half an acre in extent, from which he is now marketing a good yield of first-class berries. For his early berries he got 10 cents per pound, for a considerable amount five cents per pound, and the balance of the crop he expects to dispose of at four cents per pound. The crop is now far enough advanced that he can count with certainty on a yield of a ton and a half, and not less than \$120 return from his small patch of berries. For little more than half an acre of land, cultivated at a nominal expense, this is certainly a profitable crop as can be counted on with certainty from any source. Mr. C. also has a fine prospect for apples, grapes and other fruit, and altogether is well satisfied with the result of farming a 20-acre tract.

#### Humboldt.

**THOROUGHBRED SPANISH MERINOS.**—Eureka *Standard*: More fine stock arrived yesterday by the ocean route. It was a consignment of 50 head of thoroughbred Spanish merino rams. Fifteen will be taken to the Fort Baker ranch, for Porter & Hanson, and the rest disposed of to various parties. They are all from the stock farm of E. W. Woolsey & Son of Fulton, Sonoma county. Having a just pride in the quality of mutton and wool Humboldt county produces, ranchers here spare neither pains nor cost to improve the breed of their sheep. If both Humboldt mutton and wool are already superior to any other, there is no telling how much they may be improved by judicious breeding.

#### Los Angeles.

**A BIG DAIRY.**—Times: At the big dairy of Sessions & Bigelow, near Florence, machinery of the latest improved pattern has been received, and yesterday machinists from Los Angeles went down to put it up. Messrs. Sessions & Bigelow are expending \$25,000 for the improvement of their large dairy. No less than 250 cows will be milked on it from and after the 1st of September.

#### Placer.

**DANGER IN DOSING.**—Republican: A curious accident happened to William Barry, of Doty's Flat, last week. He was doctoring a cow which had been poisoned, and had one hand in the animal's mouth when its jaws closed on his thumb and cut that member almost off. The wound is very severe and painful, and it may yet be necessary to have the thumb amputated. The cow was poisoned by eating wilted peach leaves from limbs that had been cut off in pruning. It

may not generally be known that such leaves will kill animals that eat them, but such is the case, as will also wilted leaves from the wild cherry. The leaves contain a large amount of hydrocyanic acid, which is very poisonous to stock.

#### Napa.

**A VINE DISEASE.**—Rutherford Cor. Star, June 25: A strange disease has appeared among the vines in some localities, and is rapidly killing them off. Some say it is the work of insects; others, of gophers and squirrels preying upon the roots. Whatever it may be, the cause should be investigated. No large tracts have yet been affected.

#### San Benito.

**APRICOT SALE.**—Hollister *Advance*, June 25. Chas. Stranbe has sold his crop of apricots to parties from San Jose. He will have about 15 tons of apricots, for which he is to receive 15 cents per pound, delivered at the Hollister depot, the buyers to furnish the boxes.

**TRUCKS.**—Vol. Garner sold the first new barley of the season in this county on Friday, at 90 cents. It was threshed out by Ryason and purchased by Griffith & Dabzell. From San Benito we learn that the farmers have commenced harvesting in earnest. The grain was not injured to any great extent by the late hot weather, and but very little rust has made its appearance. A full and bountiful crop will be harvested. John Sherman, the bee-keeper of Erie, has been in town this week shipping his season's honey product to market. The honey is unusually clear and of good flavor this season, and has been sold as high as 15 cents a pound. Mr. Sherman will have several tons for sale. Joe Grubb has invented a new way of exterminating rats. Putting a pan of flour in the chicken-house, he mixes it heavily with yeast powder. The rats partake freely of the mixture, and, as a natural consequence, swell up and burst. The remnants of what were once live and active rodents are then greedily devoured by the chickens. The invention is known as Grubb & Ingels patent rodent exploder.

#### San Joaquin.

**WHEAT GRAIN THRESHERS' EXHIBIT.**—Lodi *Sentinel*, June 26: Col. L. O. Gillispie started up his combined harvester this week. He claims that new wheat threshes easier and cleaner when cut in the "stiff dough" than to wait till it is dead ripe. His reasons are that the kernel is largest when in the dough, and that the hulls of the grain are opened by the increased size; that as the grain ripens and shrinks away the hulls close and hold the grain more firmly in the head. This idea prevails to a great extent among our farmers, and many of our combined harvesters will be in the field by the first of the coming week. Wheat in the Live Oaks is turning out well both in quantity and quality.

**WATERMELONS.**—The late warm weather during the last two weeks has been "bricks" for our melon-raisers. The vines are growing wonderfully and show indications of a good crop. Over 1500 acres are planted in the vicinity of Lodi. It is reasonable to calculate the shipment of melons from this point during the season at 2000 carloads of 100 dozen each. They will be ready for market from the 10th to the middle of July.

#### San Mateo.

**HAY AND FEED.**—Times and Gazette, June 26: The amount of hay cut in this county this year probably exceeds the amount cut here in any previous year. It is good hay, too, for the most part, though mustard, wild turnips and thistles fouled many fields badly. On the mountain pastures the native grasses have not been so fine for many a year. Many fields that would not support 100 head of cattle last year will easily carry 150 head this year. The abundant late rains brought out the wild oats, the alfalfa and other favorite grasses with stock. If dairy products were what they were last year, or if beef cattle were not so cheap, the outlook for dairymen and cattlemen in this county would be exceptionally bright. Unfortunately, though hay was never more abundant or more cheap, pasture never more luxuriant and young stock never more easily obtainable, the dairymen and cattlemen of the county are not doing so well as they ought to be doing. "Best butter"—and San Mateo county makes as good butter as does Marin or Mendocino—is now wholesaling at from 14 to 16 cents a pound. "Good butter" wholesales at from 10 to 13 cents; "ordinary," at from 8 to 11 cents. Circumstances prevent many excellent butter-makers from producing "best" butter; and even at 15 cents a pound it is hard to make ends meet on a dairy ranch. Only close economy, careful management, unflagging industry and favorable natural conditions may enable dairy farmers who own their own farms and are out of debt to pay fair wages and keep out of debt. But a large number of dairymen in this county are not out of debt. Some of them have purchased land on part payment and are under heavy interest expense. Many of them are running behind at a rate that must mean ruin to them unless they can retrench in some way at present not clear to them or known to the writer.

#### Santa Cruz.

**PARIS GREEN.**—Sentinel: A. A. Green, from Vine Hill, informs us that the Chinese who raise strawberries near that place are in the habit of sprinkling Paris green on their strawberry plants to kill the insects. The result of

eating strawberries purchased from them came near proving fatal to several members of Mr. Green's family, some of them being taken quite ill, while those who did not eat of the berries suffered no illness whatever. Any person, Chinese or white man, who uses such deadly poison for killing insects, and then sells the fruit, should be prosecuted.

#### Santa Barbara.

**FLAX.**—Independent, June 26: Hiram Pierce has returned from a trip to Santa Ynez. He reports that George Culbertson has in 100 acres of flax that promises to yield an abundant crop. This crop is something new for the Santa Ynez farmers. Mr. Culbertson introduced the same but last year.

#### Tenama.

**WHEAT.**—Red Bluff *Courier*: The new wheat crop is coming in slowly. Harvest is progressing with reasonable rapidity. There is some inquiry for hands, but most of the farmers and harvesters find men as needed. The average scale of wages paid is about the same as last year, from \$1.50 to \$4 per day for threshing hands, header crews getting from \$1 to \$3, according to class of work and facilities furnished by employers for performing it.

**THE STRIKING BOYS.**—Yesterday we reported a strike among the boys employed as drivers on the Ashurst ranch. As soon as Mr. Ashurst learned the condition of affairs he went down with another crew of boys and paid off the ten who had struck, telling them to take up their blankets and walk. One of the boys who had not joined the strikers said, as they left the ranch: "You fellows have struck yourselves into traps; I am earning a dollar a day." The second crew, or a number of them, struck in about an hour after going on duty, but all but one thought better of it and resumed work. This is about all there is about the strike. But it should be added that the work of a driver now, as compared with that of 15 or even 10 years ago, is as play. Then the wages were \$2 per day, and the driver pitched his own load from the wagon to the stack; now the load is taken from the wagon in netting, by horse-power. Then the price of wheat was from \$1 per bushel upward; now it is scarcely more than that per cental. Everything was running smoothly at Ashurst's last visit, and we presume when the boys reflect that they are saving more money at \$1 per day and board than many of their elders, who, not entirely without reason perhaps, have struck in the cities, they will conclude that they are doing well enough after all.

#### Tulare.

**A THREE TEAM HARVESTER.**—Tulare *Times*, June 24: The combined reaper, header and locomotive of G. S. Berry started work on Tuesday, and gave perfect satisfaction to all who saw it. It continued in operation yesterday and will probably work in the grain fields the rest of the season. Mr. Berry, its inventor, has applied for patents. He estimates that it will harvest 3000 acres of grain between now and the close of the summer. This novel machine is geared to run a mile and a half an hour, and cuts a swath 22 feet in width. It is worked by seven men. The locomotive power is furnished by one engine, and the power which operates the reaper and header is furnished by another. Thus the speed of the traction part can be increased or diminished without affecting that of the harvesting machinery, and vice versa. The engine is connected with the same boiler. Fuel is furnished by the straw, which runs through a funnel into a tender. Mr. Berry claims that his machine will harvest 30 acres of grain per day.

**FRUIT SHIPMENTS.**—I. H. Thomas is making daily shipments of peaches, plums and figs to Los Angeles, El Paso, Albuquerque and Tombstone. He is also making considerable shipments of figs to San Francisco. Last Monday he shipped a general assortment of fruit, consisting of peaches, apricots, plums and figs, to Kansas City. The shipment was made as an experiment. Since his return from the East he has been making a number of trials relative to the removal of insect pests from his old orchard. The chief enemy with which he has had to contend in this respect is the scale bug. He has given bunches a thorough test, but finds it to be a failure so far as the scale is concerned. He applied a new compound to the trees a few days ago, and will be prepared to announce the result in a short time. Mr. Thomas has received a letter from a correspondent in Texas, stating that the fruit crop of that State will be almost an entire failure.

#### Yuba.

**THE DISTRICT FAIR.**—Appeal: The managers of our District Fair offer premiums for livestock to the amount of \$2000. This includes horses, cattle, sheep, swine and poultry, and we are informed that the premiums are as large as are offered by any other district in the State. They offer \$2000 in premiums for farming, mechanical, mercantile and manufacturing exhibits, and \$3500 for speed and walking contests. This makes a total of \$7500 and is some \$1500 more than was offered two years ago. The principal part of this amount is distributed among the people in this immediate vicinity, as Sutter and Yuba counties furnish fully three-fourths of all the exhibits, or have heretofore. The expenses being greater this year, owing principally to the increased premium list, it becomes necessary that each of us should take an active interest in making it a success financially and otherwise.





## Northern California.

(Written for RURAL PRESS by MALLIE STAFFORD.)

I sing of a land that is washed on the west  
By the waves of Pacific's proud sea;  
And circling the plains on the eastward the crests  
Of Sierra rise proudly and free.  
Snow-crowned in their pride,  
Green-plumed are their side;  
Like an army of heroes, embattled they stand  
To guard in their grandeur the vales of our land.

'Neath their deep-bosomed summits below the green  
Lies treasures like India of old.  
Brave hearts and strong hands have wrenched from  
The mines  
Their burden of silver and gold;  
And cities rose up from the dust of the plain—  
Like a flower they arose from the wave-washing  
main;  
Still ceaseless, and ever like the song of the pine  
Flows out to the seaboard the wealth of the mine.

There are leagues of green plains that lie bathed in  
the sun,  
Abloom with rich fruitage and grain;  
And the gems from the mines, and the wealth that  
is won

From the soil is borne to the far-reaching main—  
To the ships that are bound for the ports of the world,  
Full-laden they speed with their sails all unfurled.  
They bear on the bosom of Neptune's deep breast  
The measureless wealth of this clime of the West.

There are plains and fair valleys that bloom like the  
rose,

With the orange, the fig and the vine;  
When the golden fruit bends and the purple wine  
flows

Thro' the vales of this beautiful clime.

There are streams that flow onward thro' regions of  
flowers,

And bright homes that nestle in forest and bower,  
Like a dream of the Orient—a mythical tale—  
Is this wondrous empire of mountain and vale.

Arcadian Heights, Napa Co.

## Magnolia.

## A Fourth of July Story.

(Written for RURAL PRESS by M. B. D.)

The July dust lay deep upon the pines and  
oaks that fringed either side of Reed's turn-  
pike. This road wound along Mead's bill,  
forming a semi-circle, beginning where the  
great water tank overflowed with pure spring  
water that rippled down a green bank into the  
creek, which ran under a bridge across the  
road and then was lost in the precipitous walls  
of a dusky ravine. Upon the crown of the hill  
was an old ranch-house, with broad verandas  
extending the whole length of its long front;  
and its white walls and mossy roof were sheltered  
beneath gigantic oaks that held their  
boughs aloft in umbrageous arches over them.

Vines and flowers twined the pillars of the  
veranda, and among these stood Evelyn Mead,  
the rancher's daughter, idly culling the withered  
leaves from among their fresh companions.  
She heard a horseman ride up the hill, and,  
stopping at the gate, dismount; yet she neither  
turned nor gave him a single glance, for she  
knew who he was and felt no interest in his  
arrival.

The visitor—a tall, brawny young man—did  
not appear surprised or displeased. He gave  
her his hand frankly, at the same time smiling  
and saying a few pleasant words; then he took  
the easy chair which she offered him, and,  
leaning back, seemed content to watch her in  
silence.

Evelyn looked down the dusty turnpike, to-  
ward the west, which was in an opposite direc-  
tion from that leading to the great water tank.  
The declining sun cast a golden light, and long,  
cool shadows from the hills, that formed the  
horizon, miles away across the bluish wood-  
lands between.

"I wish I could live beyond those mountains,"  
she said, as much to herself as to her compan-  
ion. "It seems to me the whole world lies on  
the other side of the rough ridges that hem us  
in."

"You would very soon tire of the valleys and  
the noisy, crowded cities," answered her compan-  
ion, whose name was Henry Manning.

"I have traveled over nearly the whole  
coast, and am of the opinion that these foot-  
hills are more desirable than any other place  
for a home. Next spring I shall set out an  
orange grove, and dig a trout pond upon my  
land. Then a cozy little house, fixed up with  
greenery like this; and then, Evelyn—" he  
lowered his voice and extended his hand as if  
to take hers while he said this, but was inter-  
rupted by a merry peal of childish laughter.

Evelyn's sister, Grace, a roguish girl of ten  
years, came bounding toward them, and seating  
herself upon the arm of a chair, inquired: "Will  
you let me fish in your pond, Mr. Manning?  
I can catch almost a dozen minnows at a time  
in my net, and it would be such fun to get fish

we could eat. I am going to tell mamma what  
you said—all about the house, too;" and away  
she ran again.

Shortly after, Mr. Mead joined them, and  
Evelyn soon found an excuse for entering the  
house. Her mother was bustling about the hot  
kitchen preparing dinner, and half a dozen flat-  
irons were heating upon the stove behind the  
bubbling kettles. Evelyn knew what this  
meant, and hastened to get the ironing board  
and clothes basket.

"There are only a few pieces, Eva, my dear,"  
said her mother. "The fine napkins and table  
cover for dinner tomorrow, and a white dress  
for Grace, are all that have been sprinkled.  
When the dress is dry, you had better fasten  
her blue ribbons upon it too, for we will have  
to hurry off early in the morning."

Evelyn proceeded to rub a hot iron in some  
salt, and to try it with her finger to see whether  
it was of a proper temperature before she be-  
gan. She ironed until her cheeks were flushed,  
and her forehead, and the little curls that clus-  
tered above it, were damp. In the meantime  
her thoughts were far from pleasant.

The people of Bell's Camp had announced a  
picnic through the columns of the *Citizen*, one  
of the county papers; and every one was invited  
to celebrate the Fourth of July at Oak grove.  
She knew exactly what they would all do, for  
she had attended half a dozen such gatherings.  
Judge Manning, standing upon a platform, fea-  
tioned with cedars and roses, would read the  
Declaration of Independence, the minister  
would say a prayer; then would follow some  
patriotic songs and recitations by the school  
children. Afterward the old people would as-  
semble in congenial groups, and chat over their  
lunch, the young people stroll about in couples,  
or play croquet, and the children amuse them-  
selves with frolicsome games.

Evelyn thought of the dress prepared for her-  
self; then of her kid shoes, and here she pouted.  
One of them had been worn through at the toe,  
and though she had mended it neatly and care-  
fully polished it the stitches were still provoking-  
ly plain. "Oh, if we only had enough so that we  
could live in some style I should be quite con-  
tented, but to always endure these petty trials  
is too much for any one." Here she suddenly  
recalled the orange grove and fish pond that  
Mr. Manning had just mentioned to her.  
"How perfectly absurd such an idea is," she  
mentally commented, "as if I cared about  
those things. Of course, he will drive his little  
white nag, Magnolia, up here and invite me to  
go with him tomorrow. Well, let him come.  
He certainly will not see me again this even-  
ing."

Her fretful musings were interrupted by her  
mother's voice, addressing in her usual cheerful  
tones old Lem, a colored farm hand in her  
father's employ. He had cut his arm quite  
severely while disengaging the steel teeth of  
the mowing machine from the rod to which  
they were fastened. On hearing of this, Mrs.  
Mead sent for the old man in order that she  
might dress his wound. She had just com-  
pleted this task herself and was saying: "That  
will soon be all right, Lem; just take a few  
days' rest and you will scarcely know that you  
have been hurt."

"You are the blessedest lady I ever come  
across, Missus," said the old negro, gratefully;  
and continued, "in fact I only saw one who  
was anyways like you for goodness and for  
taking an interest in a poor fellow like me.  
Dat were more dan 20 years ago, away along  
in dem orful wartimes."

Then he proceeded to tell her how he, with  
many other slaves, was taken from the planta-  
tions of Alabama and put to work on the rebel  
fortifications along the Chattahoochee river in  
Georgia. These were to obstruct the march  
of Sherman's armies, which were then sweep-  
ing through the State like a whirlwind to the  
sea.

"Is that so, Lem? Well! I declare you are  
quite a hero to have been there at that time.  
Tell me about it," interrupted Mrs. Mead,  
and taking a lapful of peas she seated herself  
upon the porch and began to shell them for dinner  
while she listened.

"A hero!" thought Evelyn, with a scornful  
glance at the negro. "Mamma is so eccentric."  
As she had finished ironing, she hurried away  
with the pretty white dress, all covered with  
lace and ruffles, to add the ribbon bows. Still,  
when seated in her airy chamber, and bent upon  
knotting the glossy strips of satin into  
proper form, she wondered what old Lem had  
seen and done in those famous days of the Re-  
bellion; yet she was in such a dissatisfied mood  
that she would not join her mother and listen  
to him. The sound of carriage wheels ascend-  
ing the hill soon came to her ears.

"Those aristocratic Goldwaites are coming,  
I suppose," she thought. Every summer these  
people spent a few weeks in the lovely foothill  
town of Bell's Camp, and they often drove out  
to Mead's ranch for a walk through their or-  
chard, and a glass of fresh milk to drink, while  
they ate the tempting fruit which was gathered  
for them freely. Knowing that her mother was  
engaged, Evelyn cast her work aside and hur-  
ried down to entertain them. She was agree-  
ably surprised to see, instead of the fastidious  
Goldwaite ladies, with their bevy of children  
and governesses, a gentleman with whom she  
was acquainted, Colonel Allen. Though past  
middle-age, this man dressed very stylishly, and  
beside, wore much jewelry. A large diamond  
sparkled in his ring, another in his scarf-pin,  
and his gold watch and chain were simply mas-  
sive. He was the superintendent of some new  
mines in the vicinity, and it was reported that

he had made splendid investments in the mines  
of Arizona. So with his dashing team and fine  
dress, he was quite dazzling to many of the  
people of Bell's Camp.

Colonel Allen returned the greeting of Mr.  
Mead and Mr. Manning in a polished yet con-  
fident manner that Evelyn imagined must be  
quite distinguished. The attentions he imme-  
diately began to show her were somewhat over-  
whelming, but she supposed this was because  
she was not used to such society as that in  
which he was accustomed to move. He in-  
vited her to accompany him to the picnic upon  
the morrow, at the same time remarking that  
he knew that she would enjoy riding behind his  
horses.

"They are different from the animals one  
usually finds in these parts, you see, and I am  
very fond of them."

When he drove away he had the promise of  
Evelyn's company for the next day. Mr. Man-  
ning soon took his leave. He held her hand an  
instant longer than was necessary when he said  
good-bye, and in his eyes was an expression of  
pity which puzzled her. If he had shown the  
least resentment she would have thought him  
presumptuous, but a look like that she failed to  
understand. Before the echo of his horses'  
hoofs had ceased she was half smiling to her-  
self with gratification at the prospect of the  
morrow. At last she was to attend the picnic  
in a style that would do credit to her taste.

With the first streaks of rosy light that her-  
alded the summer dawn, the roar of cannon re-  
verberated among the hills and through the  
wooded gorges and ravines. The sound awak-  
ened Evelyn, and she lifted as blooming a face  
from the pillow as were those of the fresh and  
dewy morning-glories that peeped in at her  
window.

Some hours later she came down the garden  
walk in her broad straw hat and fine lawn,  
which fell about her as gracefully as might a  
summer cloud. Colonel Allen said he could not  
refrain from remarking that he had not seen so  
lovely a sight since he last visited Saratoga.  
As they drove along in the glorious morning  
sunshine he voluntarily favored her with a de-  
scription of that fashionable watering-place.  
Somewhat in this way he entertained her, yet  
he managed to inquire about her father's busi-  
ness affairs in an indirect way; still Evelyn  
shrewdly imagined that he would scarcely  
have said what he did if she had been Miss  
Goldwaite. A brighter tinge mantled her cheek  
as she thought of it. They were gliding  
smoothly along the road under stately oaks at  
the entrance of the picnic grounds, and as they  
entered them she was proudly conscious that  
the attention of the large assembly of people al-  
ready in the grove was fixed upon them and  
their spirited team.

Later, she was conversing with a group of  
young friends, and keenly enjoying the fragrant  
wood scents, the music of wild birds and the  
sight of happy throngs, when a surprising pic-  
ture broke upon her sight. Down the road,  
over which she had so lately passed in the joy  
of pride, came a gentleman and lady superbly  
mounted.

"Can it be possible!" was her mental ex-  
clamation. "Mr. Manning and Miss Goldwaite  
coming here together. How elegant she looks,  
too, even if she is so thin and delicate."

Miss Goldwaite certainly did look well in her  
blue habit, upon the handsome cream-white  
horse, which seemed scarcely able to restrain  
the fiery animation that beautified every mo-  
tion. Evelyn wondered also at Mr. Manning's  
appearance. He looked so different from what  
he did yesterday. Was it the green and sun-  
dappled vistas of the background, the bright  
morning air, and the confusing glory of flags  
and banners fluttering all about them that made  
the difference? She frowned unconsciously  
and turned her eyes upon the creek which a  
few minutes before was brilliant with the rip-  
ples that seemed to change the sunbeams into  
a net of gold, and cast it upon their pebbly bed.  
Now even that was transformed. She  
could see that the banks were muddy and  
treacherous, and that all sorts of unpleasant  
insects and water-snails clustered about the  
half-submerged stones. A tiny pale green  
worm had dropped from the boughs overhead  
upon her sleeve, and was vainly trying to wrig-  
gle out of the meshes of lace that imprisoned it  
there. She gave a nervous little scream, and  
tried to brush it away with her fan. Several  
young men idly chatting near by came to her  
assistance, and soon the helpless creature was  
lost among the wild flowers at their feet.

Some dire magic had cast a spell to spoil the  
charming scene for Evelyn. Even now she  
could hear Miss Goldwaite's thin, yet artfully  
modulated voice, saying to one of her city  
friends:

"You have no idea what a delightful com-  
panion he makes—so original, too. He would  
be a perfect lion in our set at home. Of course,  
he is not rich, but then Judge Manning is cer-  
tainly well off. I am going to coax papa to in-  
vite Mr. Manning to our house the next time  
he happens to be in town."

While she was talking she leaned languidly  
back in her chair, and watched with an indif-  
ferent air the young man who formed the sub-  
ject of her thoughts. He was swinging little  
Grace Mead, whose yellow curls and blue rib-  
bons fluttered in the breeze, caused by her rapid  
motion back and forth as she swung, and she  
laughed and shouted in childish glee.

"It was thoughtful and kind of him to notice  
Grace," thought Evelyn, "for she loves to swing  
like that, and so few are willing to spend a few  
minutes of such a time as this in amusing a

child." She did not admit, even to herself, that  
if his kindness had been shown to another than  
Grace, it would not have struck her so pleasant-  
ly. Though she looked for him to join her as  
the hours slipped by, he had not found an op-  
portunity to exchange even a dozen words with  
her, when the Colonel's spirited bays came dash-  
ing up to take her home. True, he could scarce-  
ly have done so, for Colonel Allen had been very  
attentive, and besides, other friends had claimed  
a share of her time; yet she could not help feel-  
ing disappointed.

On stepping from the carriage at the garden  
gate, she realized how different her feelings  
were from those which had made her heart leap  
in the morning. Colonel Allen now appeared  
to typify all that was vain and ostentatious, in-  
stead of what was admirable and elegant. His  
ideals were entirely erroneous, according to her  
simple standards of perfection. They had been  
formed from the deceitful objects of ignoble  
ambition and hollow pride; while hers sprung  
from the free haunts of nature in her pristine  
beauty, and were reflected upon a mind unpre-  
judiced by contact with the artful and false.

As he drove away, after having made an un-  
necessarily ardent promise to call upon her soon,  
the sunset salute was fired. Its boom rolled out  
among the hills, startling countless echoes, that  
made the woodlands ring for miles. The sound  
seemed solemn and gloomy to Evelyn, present-  
ing to her imagination the picture of deserted  
battlefields, instead of the exultation of triumph-  
ant liberty. After all, the gratification of  
pride and vanity gave no real satisfaction. As  
she entered the house, she caught a glimpse of  
her mother, whose cheerful face and light step  
seemed inspired by the tranquil happiness which  
is given as the reward of faithfully performed  
duties. In her daughter's eyes, she suddenly  
became a heroine—one worthy to be followed  
as a model; and Evelyn resolved to profit in  
future more by her example.

Though she succeeded in appearing lively and  
pleasant at dinner time, her unhappy mood  
still held sway in her mind, and after the meal  
was over she concluded to walk a little way  
down the turnpike, in hopes that the quiet  
evening scenes would tranquillize her thoughts.  
Grace joined her and together they sauntered  
past the orchard where they saw Lem, who was  
lingering to weed a bed of lettuce. He re-  
minded Evelyn of last evening, and revived  
her curiosity to hear the story which he had  
probably told her mother; so she rested her  
elbows upon the rail fence, and requested him  
to tell them his experience in the Rebellion.

"You should not work upon such a holiday  
as this, so come along and talk to us about the  
plantations and the Yankee soldiers," she said;  
and in obedience to her wishes the hale old  
man accompanied them on their walk.

The crimson glow of sunset shone around  
them, and the water in the creek beside the  
road rippled along almost at their feet, while  
crickets and other insects chirruped in the wild  
grasses and snapdragons upon the banks. Ere  
long Evelyn's thoughts were entirely absorbed in  
Lem's story.

During those terrible June days of 1864 he  
had toiled upon the mighty abatis and re-  
doubs, which were built by the Confederate  
General Johnston's orders, to protect his strong  
army and prevent Gen. Sherman's soldiers from  
crossing the Chattahoochee river.

The boys in blue, nearly 100,000 strong,  
were advancing upon Atlanta, the citadel of  
Georgia. They reached the banks of this wind-  
ing river upon the third of July, and celebrated  
the Fourth by a battle to gain the crossing.  
For more than five miles up and down the  
broad, crystal stream the mighty forces con-  
tended, pouring upon each other the leaden  
hail of musketry and the fearful missiles of  
artillery. These filled the air with booming  
and shrieking sounds which were more hideous  
than those ever awakened by the rolling of  
thunder; while the woods were gleaming with  
flames and the heavens were lurid with powder-  
smoke.

One of the slaves, who had been at work  
upon the frowning defenses, resolved to escape  
from bondage; so, in the confusion of battle, he  
managed to hide between some logs that formed  
an abatis, and there for hours a regular storm  
of lead passed over him or pelted his frail re-  
treat, while he lay trembling with mortal ter-  
ror. At last the firing ceased for a short time  
and he crept out of his hiding-place and fled as  
fast as his trembling limbs would permit to the  
Union skirmishers. They sent him to the great  
Commander-in-Chief, Gen. Sherman, who talked  
to him and to whom he explained all about the  
formidable field fortifications that he had helped  
to build. Before nightfall Sherman's army had  
won the battle. Then what shouting and music  
rang out upon the sultry air as the triumphant  
soldiers gathered in groups about their bivouacs.  
The sweet strains of the "Star Spangled Ban-  
ner" and the "Red, White and Blue" swelled  
gladly upon the southern winds, which had not  
been freighted with such patriotic sounds for  
many months; and so they celebrated, with due  
honor, the anniversary of independence, even  
there in the heart of the Rebellion.

The grateful negro followed the wounded  
men, who were borne to hospital tents, and  
helped to take care of them there. He was  
about to describe those pitiful scenes, and to  
extol the gentle and self-sacrificing women who  
nursed the soldiers night and day, declaring  
that he had never seen any one half as good as  
they were, except Evelyn's mother, when he  
was interrupted by the clatter of a horse's hoofs  
approaching with unusual speed.

On came the flying beast, like a phantom,



## YOUNG FOLKS' COLUMN.

## Joey's Fourth of July.

(Written for RURAL PRESS by REIS SAMPSON.)

down the turnpike. The twilight had deepened almost into starlight, which was relieved by the silvery sickle of the new moon. They all fled from the road, seeing that the horse was not under the control of its rider, a slender girl, who clung desperately to the saddle. While Evelyn and Grace were scrambling up a dusty bank, Lem, with unusual presence of mind, held himself safely against the trunk of a tree that leaned over the road, and caught the dangling bridle of the runaway as it was passing. The horse suddenly jerked back, reared and plunged a few minutes, but was finally stopped, and the trembling girl, who had been in such imminent peril, was assisted to dismount.

Evelyn was startled to perceive that Lem had rescued Miss Goldwaite, and that the white horse, all foamy and panting before them, was Magnolia. She was left in Lem's care, while every attention possible was shown to Miss Goldwaite by the sisters. Grace wet her handkerchief in the creek and bound it around her throbbing temples, while Evelyn held her head until she was so far recovered from the shock as to be able to walk. Then they supported her as well as they could, while they all proceeded toward the house, where she was immediately placed in Mrs. Mead's skillful hands and made comfortable. She was soon able to explain how Magnolia had been frightened.

"I forgot that she was not to be touched with the riding whip," she said, "and so gave her a smart cut which made her gallop off at full speed. She could be managed until the little flag that had been stuck in her bridle fell down so that it fluttered in her eyes; then she became thoroughly frightened, and I could not hold her."

Evelyn, after doing all that she could to assist her mother, went out into the garden for a few minutes' rest in the cool air. She saw poor Magnolia fastened to a hitching-post. Her head drooped until her long, flowing mane nearly touched the ground; and as Evelyn approached to caress her she perceived that the animal was still trembling excitedly and was wet with foam.

The intelligent animal seemed grateful for her attention, and whinnied softly as her white nose was petted. Thinking herself alone, Evelyn said, in tones that were unconsciously low and plaintive, "Poor Magnolia! like me, you are unhappy for having been vain and willful;" and leaning her forehead a moment upon the horse's silken mane, she bedewed it with tears.

Mr. Manning had arrived at the house immediately after Miss Goldwaite, and now, having come to attend to his horse, he chanced to overhear Evelyn's remark. It was an agreeable revelation to him, and rekindled the feelings of hope and admiration which had been so chilled by her conduct of the preceding day. With manly confidence he took her hand and gently said—well, what he said ought not to be repeated, because his words were intended for Evelyn alone.

After this, the evening seemed supremely beautiful; and at nine o'clock, when the cannons in Bell's Camp were fired again, their loud peals awoke ten thousand echoes, that thrilled like exultant notes of joy upon Evelyn's listening ears.

That starlit summer night has long since vanished into the past, but it dwells in memory among the brightest gems that are treasured there. At present she feels a deep interest in Mr. Manning's orange grove, which is so promising; and she has smiled down upon her own image, reflected in his newly-made trout pond.

Magnolia is frequently surprised by the lavish caresses which she receives at Evelyn's hands; but if she could understand what that young lady has whispered against her velvet-like neck, once or twice, she would know why she is such a favorite. Evelyn thinks that if it had not been for Magnolia's madcap race last Fourth of July evening, she would have missed her greatest happiness.

**MARKINGS OF ANIMALS.**—Eimer advances the view that the markings on animals were primitively longitudinal stripes that have subsequently broken up to form dots, and these fusing to form transverse rings. This view is supported by the ontogeny of many animals. Dr. Haacke controverts this view from the study of an Australian fish *Helotes Scotus*. In this species the adult is marked with eight longitudinal black bands. Young specimens have, in addition, a row of clear, transverse bands, which disappear when the fish attains maturity.

**THUNDER, LIGHTNING AND RAIN.**—Meteorologists have found that there can be no thunder and lightning without rain. When thunder is heard beneath a clear sky, the reports must either come from distant clouds or be the result of some other cause than a discharge of electricity. Harvest or heat lightning is produced by a distant storm. Thunder seldom ever accompanies heat lightning, the sound reaches only 12 miles, while lightning is often seen by reflection upon nearer clouds, at a much greater distance.

**VEGETABLE LIFE AND TEMPERATURE.**—It appears from observations made in France that the development of vegetable life is retarded by an average of nearly four days for each additional 100 yards of altitude. The arrival of the chimney swallow is delayed about two days for each increase of 100 yards in height.

## YOUNG FOLKS' COLUMN.

## Joey's Fourth of July.

(Written for RURAL PRESS by REIS SAMPSON.)

Dinner was just over, mamma had gone upstairs to the nursery with the baby, papa was seated in the big armchair reading the evening paper, while Master Harry lay stretched upon the floor, counting the contents of a tin bank.

"Let me see," he mused, "two fives make a ten, and four tens make forty, and a quarter makes sixty-five cents. Too little for my Fourth of July. Papa, I say, papa," he continued, "please put down your paper; I want to speak to you."

"Yes," replied papa, without raising his eyes. "Now, papa, that's not fair; I want you to pay attention," and Harry jumped up from the floor, ran to his father, pulled the paper away, and seated himself on his knee.

"Well, what is it?" asked papa with a sigh. "I suppose I'll have no peace until I listen to you."

"There, that's a good papa," said Harry, stroking his face.

"What do you want, you little monkey?" asked papa, returning the caress.

"Say, papa, do you know that to-morrow will be Fourth of July?"

"Of course I do," answered papa, "but what about it?"

"Nothing, only all the boys of my class are going to buy soldier caps and swords."

"Well," said papa, "that's real nice."

"Don't tease, papa, please; I only have sixty-five cents, and firecrackers are so dear."

Papa laughed, and putting his hand into his pocket drew out a handful of small change, which he gave Harry, saying:

"Now run off, you rogue, and let me read my paper."

Harry jumped off his father's knee, went over to the table, and commenced to count his money.

"Two dollars and a half!" he exclaimed, when he had finished; "won't I have lots of firecrackers, though?"

"Harry," said his mamma, coming into the room, "I want you to run down to the drug store and bring me a bottle of cough syrup; baby seems croupy. If the boy is there you can let him bring it, and you may remain out until bedtime."

"All right, mamma; I'll see you get the medicine."

Harry put on his cap and started down the street, bought the medicine, and then went off to the common to find his friends. He had bought a toy pistol, and was amusing himself by shooting it at all the trees. As he passed one of the small houses near the outskirts of the village, he saw a little boy sitting at the window. Thinking to frighten him, he put a cap on the pistol and shot it off. Instead of frightening him, the little boy gave a cry of delight and said in a weak, tremulous voice:

"Please let me shoot it once."

"Come out here and I'll let you shoot it off as much as you want."

"I would, only I can't leave my chair. I'm a cripple, you know. I fell downstairs when I was a tiny baby, and the doctor says I will never walk, not even with crutches. It's awful lonesome. Won't you come in and sit by me for a little while?"

Harry went up the few broken steps that led to the house, opened the door and went in. It was only on entering the room that he saw the little boy was strapped in a large chair, looking very thin and pale.

"What is your name?" he asked, as he seated himself on a low stool near the chair.

"Joey Daniels," replied the child; "and I know your name, too—it's Harry Drummond. I've seen you pass here lots of times."

"Why didn't you ever speak to me before?"

"I didn't like to; but to-night, when I saw you firing off that pistol, I couldn't help asking you to let me try. I love anything like that."

"Here," said Harry, handing him the pistol, "I'll give it to you."

"For my very own, to keep and shoot off as much as I like?" asked Joey, eagerly.

"Yes, and when you've used up this box of caps I'll get you some more. I always have plenty of money."

"You're so good," said Joey, taking Harry's plump brown hand in his thin white one.

At the sound of a strange voice, Mrs. Daniels came in from the other room, and seeing Harry said: "I am glad you have come to see my little boy. He has no playmates and but few things to amuse himself with when I am not here."

"See, mamma," said Joey, holding up the pistol. "Harry has given me this for my very own. I am going to put it away until to-morrow and then you needn't feel bad because you can't get me any firecrackers."

"Why, won't you have any firecrackers?" asked Harry, in amazement.

"No," replied Joey, shaking his head sadly.

"I never do. We're too poor, and all the money mamma earns she has to spend for medicine."

"And won't you go to the procession, either?"

"No; but you tell me all about it. That will be almost as good as going."

"Well," commenced Harry, "first is a band, then all the policemen on horseback, and my

papa follows dressed in uniform with gilt buttons and a sword; then another band comes, playing 'Yankee Doodle' and 'Hail Columbia.' It makes you feel like dancing to hear them. Then comes the Goddess of Liberty, and that is beautiful. I can't describe it very well, but there is a great big wagon all covered with red, white and blue and lots of little girls dressed in white waving flags, and far up above them stands the Goddess of Liberty with her hair hanging; she holds a shield in one hand and a flag in the other. Everybody cheers when they see her."

"Oh, dear! oh, dear!" exclaimed Joey, excitedly, "please go on; what comes next?"

"Next, let me see; oh, yes, the firemen with their engines all fixed up; then the butchers. I think their wagons look the prettiest of all."

"Is that all, then?"

"Gracious, no. There are loads of soldiers and cannons, lots more music, and all the school children; but they have a wagon to themselves drawn by six horses. They have crowns on their heads, and sing 'The Star Spangled Banner.' They are called 'the rising generation.' Now, I'll tell you what the boys of our class are going to do. There are 12 of us, and we are nearly all 10 years old. We are going to buy soldier-caps and guns, and swords and knapsacks, and we are going to march in the procession."

"Won't that be lovely?" cried Joey, clapping his hands. "Don't I wish I could see you? but you'll come up after it's all over and tell me about it, won't you?"

"Yes, I will; but don't you think your mamma could manage to bring you?"

"No. It's too far for her to carry me, and she couldn't hold me up so long. But never mind, I have my pistol, and I can think about what you have told me."

Just then the clock struck eight, and Harry said good-night to Joey, promising to come back and see him the next day. Harry ran home as fast as he could and rushed breathlessly into the house, knocking over the baby's carriage which stood in the hall.

"Why, Harry, what a noisy boy you are," said mamma, coming out of the sitting-room. "Where have you been? I was getting quite worried about you."

Then Harry told his tale, and when he had finished mamma said:

"I will go down with you to see Joey some day, and you can take him some of your books and toys, if you wish."

Suddenly an idea seemed to strike Harry, and he said:

"Mamma, is baby going out in her buggy to-morrow?"

"No, dear; it is hardly safe to take a baby in the street on the Fourth of July."

"Then, mamma, will you lend me the buggy? I'll take good care of it."

"I must know what you want it for, Harry; of course I will not allow you to take it in the procession."

"I've decided if you let me have the buggy I won't take part in the procession."

"Not take part in the procession! What do you mean, Harry?"

"I thought, mamma, I would like to take Joey down to the procession; he's never seen one in his life. You could fix up the buggy with cushions, and I'll take splendid care of it. Please, mamma, let me; it will make him so happy."

"And you, Harry, are you willing to sacrifice your whole day's amusement to take Joey around?"

"Yes, yes, mamma; it won't be a sacrifice, but a pleasure."

"Then, dear, you may have the buggy, but now you had better go to bed or you will be too tired to enjoy yourself to-morrow."

The next morning at eight o'clock Mrs. Daniels was startled by hearing a loud rap at the door. Upon opening it she saw Harry there, so excited he could scarcely keep still.

"Please, Mrs. Daniels, won't you get Joey ready? I am going to take him to the procession. See, mamma has fixed the baby's carriage for him."

Mrs. Daniels looked and saw a pretty wicker buggy filled with soft rugs and cushions, the outside decorated with dozens of flags. Her heart was too full to speak; she stooped and kissed Harry and went into the house for Joey. She wrapped him up carefully and fixed him in the buggy, while Harry gave him a sword and cap. "There, Joey," he said, "these are for you. I've got lots of firecrackers and things. Now, old boy, I'll start if you are feeling comfortable."

Very carefully Harry wheeled the buggy until he reached the street through which the procession was to pass; then, choosing a place where Joey could see everything, he gave him a flag and told him to wave it whenever he saw any one he knew.

Words fail to express the delight with which Joey viewed every item of the procession. When Harry's class passed, the boys with one accord stood still and gave a loud cheer. Every cap flew up into the air as they shouted, "Three cheers for Harry Drummond and lame Joey! hip, hip, hurrah!" The people even joined in.

As Harry looked at Joey's happy face he felt that he would not change places with a king. When he brought Joey home the little fellow put his arms around Harry's neck, saying: "I love you, Harry; this has been the happiest day I ever spent. I'll never, never, forget it, and I'll think of you every Fourth of July." And Harry felt, too, that it was the happiest day he had ever known.

Alameda, Cal.

## DOMESTIC ECONOMY.

**MARMALADE PUDDING.**—One quart of milk, four eggs, one cup of sugar, slices of stale bread buttered; fruit marmalade, peach is best if you have it, but apple, quince or raspberry will do if you have not. Scald the milk and pour it on the eggs, which should have been beaten light with the sugar. Return to the farina kettle and cook five minutes, but not until it thickens. Cut the bread an inch thick, pare off the crust, butter on both sides, and cover the bottom of a pudding dish with slices fitted in neatly. Spread the marmalade thick on this layer and wet with the boiling custard, waiting to see it absorbed before putting another layer above it. Proceed in this order until all the materials are used up. Fit a plate or other lid on the bake dish and let the whole stand for half an hour to absorb the custard before it goes into the oven. Bake, covered until the pudding is heated through, then brown nicely. Eat cold with cream. This excellent pudding may be made more elegant by whipping the whites of three eggs to a meringue with a tablespoonful of powdered sugar and spreading it over the top after it begins to brown. Shut the oven door until the meringue is faintly covered.

**LEMON PICKLE.**—Choose a dozen fine, middle sized lemons, fresh and perfectly sound, scrape the outside of them with a piece of broken quart bottle, and then cut them lengthwise down into four quarters, but not quite asunder; they must be left so as to just hang together. Rub these over with salt on the rough outside, and fill the cuts with salt in the same manner; put them into a china or earthenware bowl that will just hold them, sprinkle some more salt over them, and turn them once a day; let them lie thus four days. Parboil 12 cloves of garlic or small onions cut into thin slices; add to these an ounce of white sugar, a handful of white mustard seed, and as much cayenne pepper as will lie upon a dime. Sprinkle some salt among these, and let them stand all the time the lemons are in the bowl. Then have a clean stone jar ready, take out the lemons one by one, squeeze them a very little, and lay them carefully in a jar; lay in the spices all about them, and tie them close down; let them stand a month, and they will be fit to eat. Sugar can be added to taste when served.

**VEAL CUTLETS.**—A correspondent sends this recipe for cooking veal cutlets: After the cutlets are trimmed, salt and pepper them and broil them on each side over a brisk fire for five minutes; then place them without delay on a buttered dish by the fire. While the cutlets are broiling prepare the sauce for them. Mix three eggs with two tablespoonfuls of flour, seasoning with a very little nutmeg and salt and pepper; then mix carefully with two cups of milk and pour over the cutlets. Put the dish in the oven until the cutlets are well browned; then serve.

**WHITE FRUIT CAKE.**—One cup of butter, two cups of sugar, one cup of sweet milk, two and a half cups of flour, the whites of seven eggs, two even teaspoonfuls of baking powder, one pound each of seeded raisins, figs, dates and blanched almonds, and one-quarter of a pound of citron, all chopped fine. Mix all thoroughly before adding the fruit. Put baking powder in the flour and mix well before adding to it the other ingredients. Sift a little flour over the fruit before stirring it in. Bake slowly, and try with a splint to see when it is done.

**CLAM SOUP.**—Put 30 hard clams in a pot with two quarts of water, and let them boil gently for two hours. Then take out the clams, chop them fine and return them to the pot with 12 pepper-corns and a bit of mace, and boil one hour more. While boiling mix a small tablespoonful of butter smooth with two tablespoonfuls of flour, and stir the mixture into one pint of boiling milk until it is smooth. When the clams are done, strain the soup into a tureen and stir in the hot thickened milk.

**SUCCOTASH.**—Empty a can of corn and one of string beans several hours before you wish to use them, draining off the liquor from both. Put together into a saucepan half an hour before dinner, and barely cover with milk and water in equal parts, boiling hot and slightly salted. Cook gently 20 minutes, and stir in a tablespoonful of butter rolled in one of flour. Season with pepper and salt, stew 10 minutes more and dish. You may substitute Lima for string beans if you like.

**JELLY ROLL.**—Three eggs, one cup of prepared flour and one of powdered sugar, one tablespoonful of butter, jelly or jam; rub the butter into the sugar, add the beaten eggs, the flour, and pour into a broad baking pan, well greased. Bake rapidly, and while still warm spread with jelly, jam or marmalade. Roll it up, pin a band of soft cloth about it to keep it in shape, and do not move this until the cake is cold and firm.

**PINEAPPLE FRITTERS.**—Peel the pineapple, taking care to remove all the eyes; cut in slices and remove the core, dip in batter and fry a delicate brown. They may be eaten with a sauce made of sugar boiled to a syrup and flavored to taste.





A. T. DEWEY.

W. B. EWER.

Published by DEWEY &amp; CO.

Office, 252 Market St., N. E. cor. Front St., S. F.  
Take the Elevator, No. 12 Front St.ADDRESS ALL literary and business correspondence and  
Drafts for this paper in the name of the firm.

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Registered at S. F. Post Office as second-class mail matter.

## SCIENTIFIC PRESS PATENT AGENCY.

DEWEY &amp; CO., PATENT SOLICITORS.

A. T. DEWEY. W. B. EWER. G. H. STRONG

## SAN FRANCISCO:

Saturday, July 3, 1886.

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## The Week.

This issue will reach our readers just on the  
eve of the great national holiday. As the  
Fourth falls on Sunday the formal celebration  
will be on the following day, but the small boy  
will enjoy the exceptional opportunity for cele-  
brating this year. He will begin at daybreak  
on Saturday morning, and will have the patriotic  
fervor strong upon him until the last rocket is  
fired on Monday night. The Sunday-school  
teacher may possess his body for an hour on  
Sunday, but his mind will be with the coming  
parade, and his pockets charged to the brim  
with explosives.

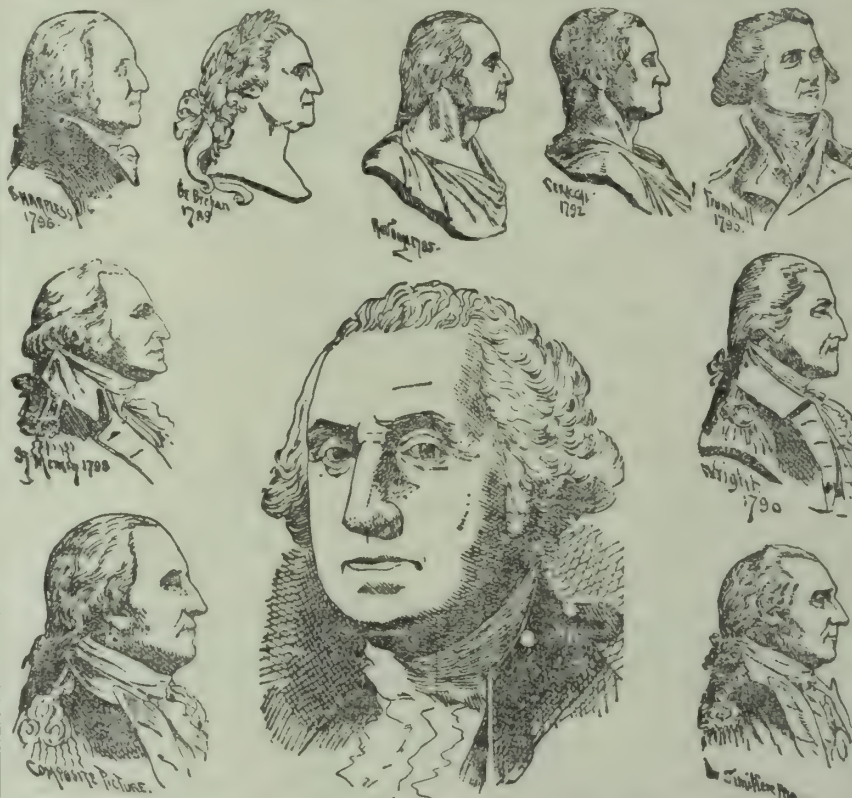
The celebration in this city will be quite sub-  
dued, and will consist of literary exercises during

the day and fireworks in the evening. The com-  
ing grand event, the National Encampment of  
the Grand Army of the Republic, with its wealth  
of displays and parades, will be this year's ex-  
ponent of San Francisco's patriotic fire. All  
our people who can will escape from the city  
and pass the Fourth in the delicious quiet of  
rural resorts.

What the Artists Have Done with  
Washington.

It is quite natural that every patriotic  
American should desire to know just how the  
"Father of his Country" really looked. No  
other American has been so often a subject for  
the painter's brush as George Washington.  
Artists and sculptors, native and foreign, have  
expended their skill upon him with results  
which refuse to agree. Each picture and bust  
represents a different man in looks and char-  
acter. No two resemble each other. But for  
the fact that they are labeled "Washington,"  
it would be impossible to guess who the original  
had been.

Over 300 portraits, busts and statues of the  
great Pater Patriæ by painters and sculptors  
who were distinguished in their day are in ex-  
istence. They depict their immortal subject in



as many different guises. Sometimes they  
make him a noble Roman, with a nose that  
equals the bravest of them in contour and a  
mouth as grim as a stone wall; again, they  
make him a sinister old barrister, a wily diplo-  
mat, a bespangled brigand, or a smirking  
courtier. It was long since discovered that  
every one put some of his personality, and even  
his nationality, into his work. When the work  
is picture-making, particularly portrait-making,  
the subject undergoes a denationalizing process  
and comes out, when the picture is finished, a  
countryman of the artist. This isn't a fancy;  
it's an undeniable and rather tragic fact.

Washington has suffered this kind of trans-  
formation with greater frequency and cruelty  
than any other martyr dead or alive. He, the  
grandest American of all, the truest patriot,  
has been sent out on canvas and in marble as a  
Frenchman, a Dutchman, an Englishman, and  
every other kind of a man that he was not. In  
order to demonstrate this fact, we reproduce  
here a few of the pictures of Washington by ar-  
tists of different nationality. A bust made in  
1792 by Ceracchi, an Italian, makes an inflex-  
ible Roman of him, stern and grim as Cato.  
Unconsciously the Italian artist Italianized him.  
A picture by Wright, an Englishman, made in  
1790, transforms him into a haughty old  
Briton. De Brehan, a Frenchman, made a bust  
of him in 1789, which depicts him as a French  
hero. Houdon, also French, in 1785, completed  
a Washington bust which could well be mis-  
taken as having had for its model a refined and  
elegant French scientist. In 1779 Du Simitiere  
painted a Washington portrait which is so  
blandly French that it must have astonished the  
great American patriot himself. St. Memin, in

1798, almost excelled him in the peculiar art of  
painting an American into a Frenchman. His  
picture is a typical old French nobleman, of the  
severe and dignified school of manners. Sharp-  
less, an American, painted him in 1796, permit-  
ting him to be an American—an American of  
that grave and dignified time.

Out of these seven profiles modern ingenuity  
has evolved, by means of composite photo-  
graphy, one picture which contains the best of  
the seven, and in all probability bears a stronger  
resemblance to the original than any one of  
them. In this the seven artists present, in one  
face, their impressions of the great Washing-  
ton's appearance. Each artist contributes only  
one-seventh of the whole. No one has an op-  
portunity of putting more of himself in the pic-  
ture than he is entitled to. Each artist's work  
differs from the others, yet the picture evolved  
from all is distinct.

The photograph is the work of W. Curtis  
Taylor, a leading photographer of Philadelphia,  
who found his subjects among the collection  
of William S. Baker, of that city. Possibly all  
the world may not know that composite photo-  
graphy has been brought to something like per-  
fection, and that its uses are ennobling. It  
gleans from many the best and builds up a sin-  
gle picture which represents the spirit of many.

## The Destiny of the Democratic Idea.

Before the next issue of the RURAL PRESS  
Independence Day will have come and gone.  
All over the land the orators will lift the veil  
of time upon the sublime enthusiasm with  
which two millions of people arose with one  
accord to assert their rights and follow their  
new-made flag with unshaken confidence  
over many a bloody field until victory crown-  
ed their efforts at Yorktown. But the des-  
tiny of the great idea that has made us one  
of the most rich and powerful nations of the  
earth specially claims our attention.

Among the many legends of the Civil War  
is a story of a dinner party in Paris given by  
a number of Americans on Independence  
Day, at which were propounded sundry  
toasts. Although it was during the darkest  
hours of our civil strife, the bigness of the  
country seems to have been the dominant  
feeling. The first speaker arose and said:  
"Here is to the United States, bounded on  
the north by British America, on the south  
by the Gulf of Mexico, on the east by the  
Atlantic Ocean, and on the west by the Pa-  
cific." Not to be outdone, the second  
speaker announced as his sentiment: "The  
United States, bounded on the north by the  
North Pole, on the south by the South Pole,  
on the east by the rising sun, and on the  
west by the setting sun." This would seem  
large enough to have gratified the most patri-  
otic imagination, but the third speaker put  
on the capsheaf when he said: "I give you  
the United States, bounded on the north by  
the Aurora Borealis, on the south by the pre-  
cession of the equinox, on the east by prime-  
val chaos, and on the west by the Day of  
Judgment."

Extravagant as this post-prandial rhetoric  
seems, it contains a kernel of truth. It is  
now about fifty years since that keenly pen-  
etrative and sagacious Frenchman, M. De  
Tocqueville, said that he did not believe that  
democracy was the best thing for the world,  
but that it was inevitable, and the sooner the  
crowned heads of Europe made up their  
minds to meet it, the better. The ablest  
political writers of the age—John Stuart  
Mill, Herbert Spencer, Walter Bagehot and  
a host of lesser lights—all confess that as  
civilization advances the people begin in-  
stinctively to feel for the reins of power. It  
is becoming every day more apparent that  
the monarchical governments of Europe are  
doomed to melt away like huge icebergs in  
southern seas.

Russia, the brawny, shaggy-bearded giant  
of the North, is the last of the old despotic  
race. But every one knows that this vast  
empire is mined and only needs a spark to  
fire a train that may blow it to atoms. Of  
the limited monarchies, the most of them are  
monarchies only in form, the substance of  
power having long since leaked out of them.  
The average king is a mere figure-head in  
the drama of affairs. A traditional respect  
clothes the royal family with a semblance of  
authority; but let there be the slightest  
rustle of an undue use of it, and it will be  
found to vanish like fairy money. The  
House which represents the popular will is  
conscious of its power and quick to resent  
the very shadow of trespass upon the  
sovereignty of the people. The caldron  
bubbles; chaos ferments. The rays on the  
horizon point to the heaven of the people.

It should be a matter of some pride that  
the movement toward equal rights and the  
present struggle for Home-rule in England,  
the agitations in Sweden, Denmark and Rus-  
sia, and the almost general discontent in  
Spain, all point in the direction we have  
taken. There is a growing faith in Repub-  
lics. Everywhere there are indications that  
the empire of the million has begun—the  
empire of one ruler, or a select circle of  
rulers, is over. Of one thing we may rest  
assured, our country is in front of a world-  
movement which has not yet produced its  
best men, best laws and government, a  
movement that began in primordial chaos,  
and is "bounded by the Day of Judgment."

**NURSERYMEN'S ASSOCIATION.**—A goodly num-  
ber of California nurserymen met in San Fran-  
cisco last week and effected a permanent  
organization of which we will give the particu-  
lars next week.

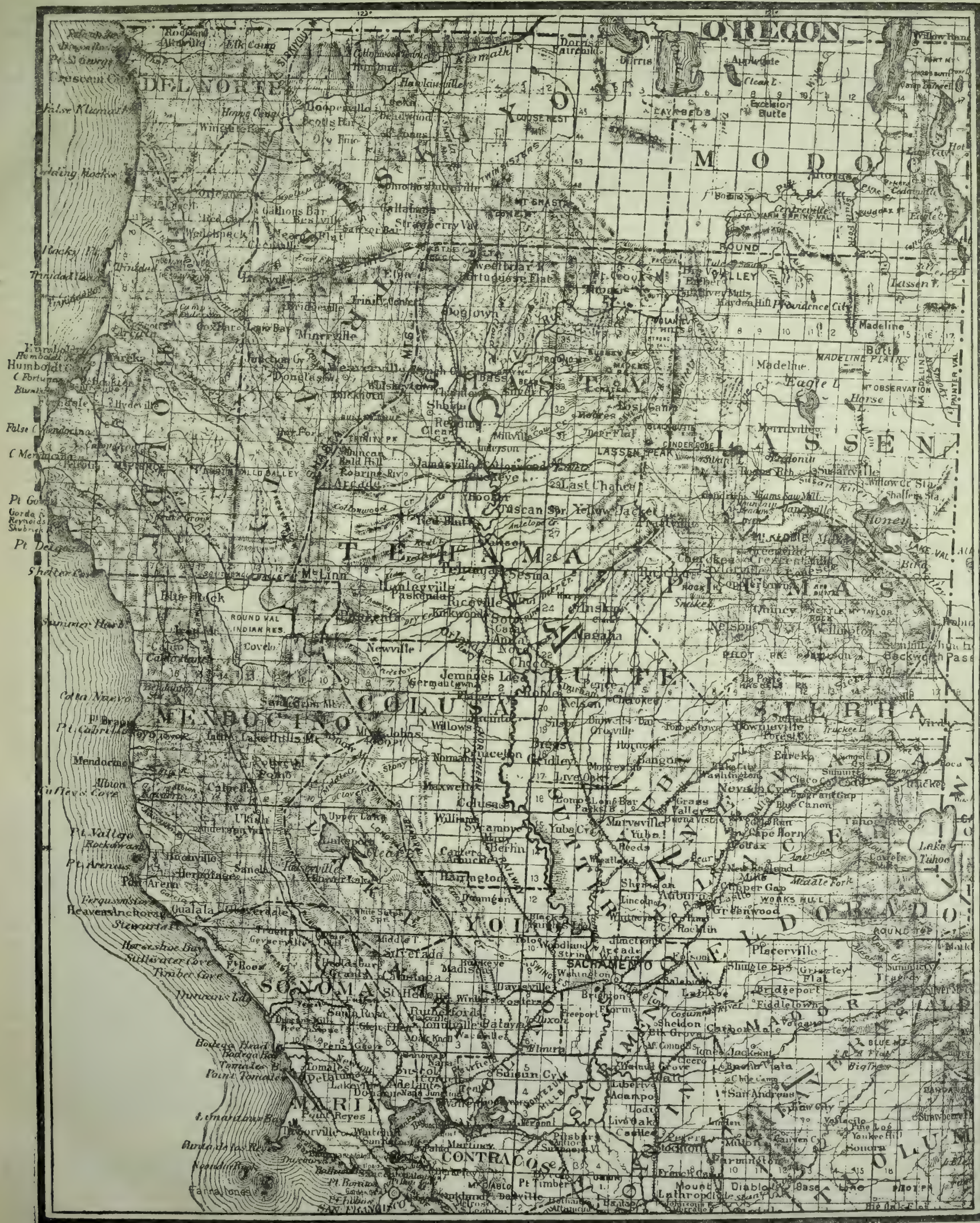


We give herewith a map of that portion of the State of California lying north of an east and west line drawn just below the metropolis

issue to the Sacramento valley, expecting to do as well hereafter for the two remaining divisions, the tier of rich coast counties on the west of the valley and the rapidly advancing foothill counties on the east.

hills and valleys. On the west, from the Golden Gate to the Oregon line, the Coast Range rises from 2000 to 5000 feet high. This range, at its broadest base, has a width of 50 miles. In the eastern part of this section the Sierra Nevada

south. This great valley presents the appearance of an inland basin, and was undoubtedly, in a former age, a vast interior lake. It is 250 miles in length and 50 miles in width. There are many large and beautiful valleys on the



MAP SHOWING PORTIONS OF CALIFORNIA LYING NORTH OF THE LATITUDE OF SAN FRANCISCO.

of San Francisco. It was our first intention to issue a special edition treating fully of the resources and progress of this vast and rich portion of the State, but it soon became apparent that the subject was too large to enable us to give anything more than a cursory treatment in a single issue. We therefore decided to divide the area and give special attention in this

Northern California has an area of 84,000 square miles, or more than 54,000,000 acres. This is an area twice the size of the "Keystone" State, which has a population of 4,000,000. North and south it embraces five degrees of latitude, and east and west three degrees of longitude. The northern half of the State has a diversified surface of mountain ranges, foot-

range extends the whole length, rising from 4000 to 8000 feet in altitude. On the fortieth parallel of latitude these ranges put out connecting spurs, forming the Siskiyou or Shasta range.

Between these two north and south ranges is the Sacramento valley, in the shape of a gigantic horse-shoe, with the opening to the

Pacific Slope and in the interior basins of the continent, but in area, beauty and fertility the valley of the Sacramento excels them all. It was this valley that enraptured and retained the Spanish explorers and the devout Jesuit Fathers of the 16th century; that excited the admiration of the bold rovers of the seas in the 17th and 18th centuries; that extorted the most



extravagant praise from the explorers and pathfinders in the middle of this century, and that made the "argonauts" willing exiles from their childhood homes. Ask any of those wanderers in many countries where is the fairest land he has ever seen, the most genial and hospitable climate, the most bountiful soil and the brightest skies, and where he would rather live, die and be buried, and he would tell you here in the Sacramento valley. This great basin is bisected through its entire length by the Sacramento river. On either side of this stream are wide plains that extend for miles away to the foothills of the Coast and Sierra Nevada ranges.

### Butte County.

[Written for RURAL PRESS by C. E. HEATON.]

Butte county has been greatly favored by Nature in the variety and extent of its natural resources. Lying partly in the Sacramento valley and partly on the western slope of the Sierras, it has a total area of 1746 square miles, or, in other words, 1,117,440 acres. It is bounded on the north by Tehama county, east by Plumas, and south by Yuba and Sutter, while its western boundary is washed by the Sacramento river. Its greatest length from north to south is about 60 miles, and its greatest breadth, east and west, from the Sacramento to the summit of the Sierra, is nearly 50 miles. About 550,000 acres of the county's area are timber lands, between 250,000 and 300,000 acres are agricultural lands, and the balance mineral. The agricultural area is capable of being greatly extended, as there is a large belt in the foothills containing much land valuable for farming and fruit-growing purposes. The principal industries of Butte are mining, farming, fruit growing, lumbering and stock raising. The total population at the present time is estimated at 25,000, which is an increase of about 7000 since 1880. The county is a prosperous one, and occupies the twelfth place in property rank among the 52 counties of the State.

### Watercourses.

This is one of the best watered counties in the State. Up amid the perpetual snows of the Sierras, numerous streams take their rise, and, flowing thence to the Sacramento, intersect the county in all directions, making fruitful as a garden large tracts of agricultural land, furnishing water for hundreds of miles of mining ditches and lumber flumes, and affording excellent manufacturing facilities. Of these streams the largest is the famous Feather river, so closely connected with the early mining history of Northern California. Its three branches, after forcing their way through the mountains, unite just above Oroville, the county seat, and from that point the river flows through rich alluvial lands to the southern boundary, 20 miles distant. Next in importance comes Butte creek, flowing from the northeast corner to the southwest corner, the entire length of the county. There are some rich placer mines along its borders in the mountains, and where it flows through the valley and lower foothills may be found the choicest fruit and vine land in California, a fact that is attested by the fine orchards and gardens lining this stream. Honcut, Chico, Mud Rock and Pine creeks, besides numerous other living streams, all contribute toward the advancement of the mining, grazing, agricultural and manufacturing interests.

### Climate—Rainfall.

"What is the climate like?" As this is one of the first questions asked by the intending settler, and having visited at all seasons all the different localities, the writer feels justified in stating that nearly every kind of climate or degree of temperature may be found within the borders of this favored county, from the, at times, almost tropical heat of the valley portion, where the mercury sometimes stands at 115° in summer, to the cold, bracing climate of the ever-frozen mountain peaks. At the town of Chico, near the foothills, the mean annual temperature is 62.46°, and the mean for the coldest month is 45.19°, a slightly higher mean temperature for the year than either Rome or Madrid, and about the same mean temperature for the coldest month as those two cities. At an altitude of 2000 or 2500 feet a most delightful climate is experienced both summer and winter, the fall of snow at this height never exceeding a few inches in depth. The rainfall in the county averages about 24 inches annually.

### Scenery.

For the tourist and geologist Butte possesses a great many attractions, with its cozy mountain retreats, beautiful orchards and extensive mines. Among the objects of interest are the falls of Fall river, which is a clear, bold mountain stream rising in the mountains near Laporte and emptying into the middle fork of Feather river, about 18 miles above Oroville. The river falls in an unbroken sheet over a precipice between 400 and 500 feet, and striking on the rocks below produces a sound like volleys of musketry fired in rapid succession. A short walk of a few hundred feet from the head of the falls brings one to a point directly in front of them, where a splendid view may be obtained of this miniature Niagara. A cloud of mist or

spray rises from the foot of the falls to a height of 200 feet, and when the sun plays upon the waters the effect is very beautiful. As the falls are comparatively easy of access, the tourist who loves wild natural scenery will be amply repaid for visiting them.

### Mines and Mining.

This is one of the most celebrated of the early mining counties, and has passed through all the exciting scenes and experienced many of the ups and downs of those stirring days. For over 30 years its mountains and hillsides have poured forth a steady stream of golden treasure that has gone to swell the great gold product of the State. Still the supply of the precious metals holds out, new claims are being constantly developed, and at the present time Butte is the center of some of the heaviest mining operations in the State. Mining is carried on chiefly by hydraulic methods, though some very rich quartz lodes have been discovered and worked, and many more discovered that yet remain to be developed; while in some localities the old-fashioned cradle and rocker are still profitably used in washing out the golden sands.

It is reported in mining circles that several new quartz mills will be put in operation during the present year. The principal mining localities are Oroville, Cherokee (Cherokee Flats), Forbestown, Magalia (Dogtown), Lovelocks, Inskip, Mountain House, Wyandotte and Bangor. Five miles above Cherokee the Big Bend Tunnel and Mining Company, of which R. V. Pierce, of Buffalo, is president, have just completed their great tunnel, which has occupied three years and four months in building, and upon which a vast amount of capital and labor has been expended. This tunnel cuts straight across the big bend in the main Feather river where it flows through Dark canyon, and is designed to lay bare the bed of that stream for 14 miles. The tunnel is 1200 feet long, 16 feet wide, and 9 feet high, with much larger openings at both ends. It has a fall of 30 feet to the mile. A dam 16 feet high and 160 feet long is now being built across the river near the head of the tunnel. When that is completed, the entire body of water in the river will be diverted from its old channel and sent through the tunnel, and mining operations will then commence in the river channel thus laid dry. This river bed to be mined is the bottom of an immense canyon, and the indications are that gold exists in great quantities; but, owing to the nature of the ground, which made it impossible to build wing dams or flumes, it has never been worked, though thousands of dollars' worth of gold have been taken out of the river above and below this section. This great work was originated by Major F. McLaughlin, of Oroville, to whom is due the credit of interesting capital in it. The surveys were made by ex-County Surveyor Jas. McGann, who at times was forced to carry on his work while suspended by ropes from the top of some high precipice. In cutting the tunnel a six-foot quartz lode was struck at a depth of 1200 feet below the surface, besides many smaller ones. It is said that the company will not work these lodes until the river bed is mined out, unless during high water in winter when the river can be turned back into its old channel, while the quartz lodes are being worked. Besides gold, nearly all the valuable minerals have been found in this county, and many of the precious stones, the latter being mostly diamonds, found at Cherokee Flats. These are small, and generally range in value from \$10 to \$50 each, though some of much greater value have been unearthed.

### Soil.

Nearly every kind of soil is found in the county, ranging from black adobe to red, gravelly, and sandy tracts. The western or valley portion embraces nearly 200,000 acres of fine level land, a large body of which is rich alluvial, and produces large crops of grain every year.

### The Principal Productions.

The principal cereals are extensively raised, as the following statistics will show: To afford a comparison, we give the figures both for the years 1880 and 1884. In the former year there was cultivated 127,189 acres of wheat, which yielded 2,244,770 bushels; 23,288 acres of barley yielding 516,474 bushels, and 1325 acres of corn that produced 31,210 bushels, which placed Butte for that year third on the list of wheat-growing counties. In 1884 there was sown to wheat 123,715 acres, which produced 2,227,500 bushels, 49,500 acres devoted to barley, yielding 1,485,000 bushels, and 11,000 acres sown in oats, yielding 330,000 bushels, while corn was planted on 950 acres which produced 30,600 bushels.

Among the other crops are included hay, rye, broom corn, alfalfa, and fruit and vegetables of every description.

### The Fruit Interests—Orange Culture.

Fruit-growing, including orange, lemon and olive culture, is making rapid strides in this county, and is destined in the future to prove the principal source of wealth, the horticultural resources being practically unlimited. Aside from the great belt of land in the foothills adapted to fruit-growing, all that part of the county lying in the Sacramento valley proper is capable, with the well-adapted climate, of producing profitably and successfully all the products of the temperate and semi-tropical countries. Here are to be found the principal orchards and vineyards, the largest fruit-grower

being Gen. John Bidwell, proprietor of the famous Rancho Chico Orchards, the fruit from which has an excellent reputation in the San Francisco and Eastern markets. During 1885 there was an increase in the area planted in fruit trees, berries and vines in the county of about 3000 acres; while, for the present year, tree-planting has been especially active. The cultivation of citrus fruits is receiving a great deal of attention. It is estimated that there are 1500 bearing orange trees in the county and as many more to come into bearing within two years. An association was formed during the past winter and a tract of land purchased in the foothills near Oroville, which was cleared of brush and planted with 3000 orange trees; while it is estimated that as many more were planted in other places by private parties. Oranges begin to ripen in November and are in shipping condition the last of the following month. It is claimed that acclimated fruits (seedlings) thrive the best and are not affected by frosts. The oldest orange tree in the county is one that was planted in 1859 at Bidwell's Bar, a famous old, abandoned mining camp on the Feather river, eight miles above Oroville, but where some of the best fruit in the county is now raised. Most of the seedling orange trees in the county sprang from this tree, which came from Acapulco, and has borne fruit for 20 years. The native or seedling orange trees bear at ages varying from 7 to 12 years, though some have been known to produce fruit at the age of five and six years. For many varieties of fruit the foothill region is the true home; here, on the sunny slopes and in the warm, sheltered little valleys, the orange, lemon, lime, olive and Japanese persimmon all thrive better than on the open plain, while the wine and raisin grape grow to perfection. The olive flourishes at an altitude of 1500 feet and the orange at 1000 feet, while peaches, pears, plums, cherries, figs, quinces, berries and vegetables of all kinds grow luxuriantly at an altitude of from 1500 to 3000 feet. Apples thrive well at this and much higher elevations, and are of a finer flavor and much more juicy than when grown in the valley. Though irrigation is not considered absolutely necessary in fruit-raising in this county, it has been found a great aid in many places, many of the old mining ditches being drawn on for this purpose.

### Forests—Lumber Manufacture.

The timber of the foothills, from the edge of the valley to the altitude of 2000 feet, consists mostly of oak and digger pine, and is valuable only for firewood. From that point to the summit the mountains are densely covered with fine qualities of sugar pine, pitch pine, yellow pine, fir, spruce and cedar. There are about a dozen large saw mills in the county, and 10,000,000 feet of lumber is manufactured annually. Six hundred carloads were shipped from Butte in 1885. A large number of men and teams are kept busily employed during the summer months, hauling supplies to the saw mills in the mountains, and transporting lumber to the valley. Common lumber, such as is used for fencing, generally sells for \$10 per M at the mills, and about \$18 per M in the valley.

A large force of men scattered throughout the mountains are engaged in making shakes. These, when of fair quality and put up in bunches, sell for about \$5 per M in the mountains and about \$9 per M in the valley.

### Live Stock.

Stock-raising is profitably and extensively engaged in; the number of live stock in the county being estimated as follows: 100,000 sheep, 25,000 hogs, 17,000 head of horned cattle, 10,000 horses and 2000 mules.

The dairy business is also of considerable importance, and is a paying industry.

### Railroads—Communication.

The California & Oregon Railroad extends lengthwise through the county, running through the valley portion, and the California Northern, starting from Marysville and proceeding north, extends for about 20 miles up into the southern part of the county, following the general course of the Feather river on the east side, to Oroville, the present terminus. This is one of the oldest lines in the State, and but one fatal accident has ever occurred upon it. Considerable traffic is also carried on by the Sacramento river. In addition to these lines of travel, four splendid stage roads lead over the mountains into Plumas and Sierra counties, with which a large trade is carried on.

The principal towns and villages are Chico, Oroville, Cherokee, Biggs, Gridley, Nelson, Durham, Dayton, Magalia (Dogtown), Moores and Live Oak.

### Chico—A Beautiful City.

Chico is a flourishing young city of about 6000 inhabitants, situated on the C. & O. R. R., in the northwestern part of the county, close to the foothills, and a few miles east of the Sacramento river. It is about 100 miles north of Sacramento City, and is frequently spoken of by visitors as the garden city of Northern California. The rich, level farming country surrounding the town is dotted with widespread oaks of noble proportions, many of them showing great age. This is one of the best shaded towns in the State. Its streets are wide and regular, and one may stroll for hours along the well-kept avenues lined with beautiful shade trees, without being exposed to the rays of the sun. Elegant private residences,

set in the midst of tastefully-arranged lawns and gardens, and pretty little vine-covered cottages, are to be seen on all sides, while an attractive feature of the place is a handsome little park, occupying a square in the center of the town. Chico creek, a clear, cool stream from which the town takes its name, flows through the place; and Recreation Park, Bidwell's Park, and other fine groves in the suburbs, contribute to the beauty of the surroundings. The town has well-equipped gas works and water works, and an effort is being made to place electric lights on some of the main streets. The press is well represented by several live weekly and daily newspapers. Chico is noted for the large number and variety of its well-filled stores and the many different business establishments. The High School building, a fine brick structure, the different private schools, and the several large churches, show that educational and religious matters are not neglected.

The new opera house, the commodious public halls, the many hotels and restaurants, and the elegant equipages seen on the streets, give the place quite a metropolitan appearance. Chico has two solid banks—the Bank of Butte County and the Bank of Chico. Both are located in fine brick blocks on opposite corners of Broadway and Second street. The former has a capital of \$250,000, with a surplus of about \$24,000. N. D. Rideout, the well-known banker of Northern California, is president, and Charles Faulkner cashier. The Bank of Chico, organized in 1872, has a paid-up capital of \$100,000, and a surplus of \$30,000. W. D. Heath is president, and Alex. Crew cashier. Both banks carry on a general banking business, and buy and sell exchange on all the principal cities of the United States. Among the manufactories are included planing mills, box factories, foundries, breweries, soda works, carriage and harness factories, and two large roller flour mills fitted with the latest improved machinery. On the east side of town is situated the extensive lumber yard and planing mills of the Sierra Flume and Lumber Company, whose great V-shaped flume extends for 40 miles up into the fine timber belt of the Sierras. The company manufacture extensively sash, doors and blinds of all kinds, and give employment to a large force of men. The immense lumber yard, embracing 15 acres, is filled with lumber and building material of every description. A side track from the railroad, running through the yard, affords excellent shipping facilities. Chico has lines of stages running to Oroville, Prattville (Big Meadows), Cherokee, Deadwood, Colusa, and to Newville, Colusa county, by way of St. Johns and Orland.

### Rancho Chico.

Adjoining Chico on the northwest side is General John Bidwell's princely estate, the famous Rancho Chico, which embraces over 20,000 acres of the most fertile land, and is noted for the great variety of its productions. Here are to be seen miles and miles of beautiful avenues, lined with stately trees laden with the choicest fruits of many different climes; northern and tropical trees and plants flourishing side by side. One famous fig tree on the ranch never fails to attract the attention of visitors. It was planted in 1856, and has attained a marvelous growth. One foot above the ground the trunk measures 11 feet in circumference; the wide-spreading branches have been trained toward the ground, and taking root there, banyan-like, they now form a wonderful inclosure over 150 feet in diameter. The tree is loaded every year, and has produced tons and tons of figs. A short distance in the rear of the General's residence is a pretty little deer park, which adds much to the beauty of the grounds. Chico creek flows through the ranch, and irrigating ditches run in all directions. On the estate is a flour mill, a fruit cannery, a dairy, and numerous hothouses, fruit-driers, packing-houses, etc. A curious feature of the place is the large Indian rancherie situated on the back part of the ranch. The dusky inhabitants of this village live very contented lives here in their primitive fashion, and fare much better than their brethren in many other parts of the State. They are wedded to many of their old customs and traditions and have an immense sweat-house, in which, at certain times, they hold their usual orgies and go through the famous melting process. A brass band, composed of about a dozen braver bucks, is much in demand at picnics and outdoor celebrations. Many of the Indians find profitable employment on the ranch and prove valuable help during the fruit gathering season. The prosperity of Chico would be further advanced by the subdivision into small farms of several large tracts of land in this vicinity now held by a few persons. The Reavis ranch, the Pratt grant and the Parrott grant include immense tracts of land of more than ordinary fertility, which at present is almost exclusively devoted to wheat-raising on a large scale, but should be divided into 20 and 40-acre plots and set out in fruit trees and vines. It is estimated that in this county there are 102 land-owners whose holdings vary from 1000 acres to 116,000 acres each. That these large tracts will in the near future be subdivided and sold off in small-sized farms seems very probable, as the land must soon become too valuable for farming by the present methods.

### Oroville—Its Surroundings.

Oroville, the county seat, is situated just in the edge of the foothills, on the right bank of the Feather river, and is the terminus of the C. N. R. R. It was born in the flush and exciting times of the early mining days, and was



originally called Ophir, a most appropriate name, and one suggestive of the fabulous wealth of precious metals which have literally been taken out of the earth in this vicinity. The town contains a population of about 3000, and is very advantageously located as a trade center and distributing point of supplies for the mountain localities. Stretching away to the south and east is a fine farming country; while in the foothills in the vicinity extensive mining operations are carried on. The town has splendid gas works and water works. The water supply—it is claimed by the citizens—is the best in this part of the State. The court house and the county hospital are fine large buildings; the former was erected at a cost of \$25,000,

has for its mines in the past. Already there are 700 bearing orange trees in the place, besides hundreds of others more recently planted, many having been set out the past season. Handsome residences, surrounded by beautiful gardens in which the orange, lemon, lime, pomegranate and Japanese persimmon flourish side by side, now charm and astonish the traveling visitor who has heard of Oroville chiefly as a mining town. All through the foothills the same fact is being demonstrated, that the old mining localities generally possess the soil and climate especially adapted to fruit-growing. Reliable information in regard to real estate in this section may be obtained from Judge J. P. Leonard, real estate agent, who has been estab-

lished here for 30 years. Oroville claims the distinction of having been the home, at the time of his election, of ex-Governor Geo. C. Perkins, who first embarked in business here away back in the fifties. He still retains valuable interests at this place, being connected with his brother, D. K. Perkins, in an extensive wholesale and retail business under the firm name of Perkins & Company. Oroville is connected by stage with Chico, Quincy, Prattville, Laporte, Cherokee, Dogtown and intermediate points.

#### Cherokee—Great Gold Mines.

Twelve miles north of Oroville is the important town of Cherokee, better known as Cherokee Flats, the center of the heaviest mining operations in Butte. The town is not a handsome one, as it stretches in one street for nearly a mile along the side of a canyon in which the

mining is carried on. The town contains several hotels and saloons, two stores, a number of shops, several public halls and a fine school-house. The population numbers about 800. The Spring Valley Company, an English corporation, owns the principal mine here, and at present is employing more men than ever before. The mining is mostly heavy hydraulic, and several hydraulic chiefs are kept at work both day and night, electric lights, placed on tall masts, being used to mine by at night. This mine has paid its millions. The company has about 80 miles of ditches and six miles of iron pipe leading to the mine. The water supply is gathered in two large reservoirs in the mountains, one near the summit

and one at Concow valley; the latter is two miles long by half a mile wide. The supply of water at the mine is between 2000 and 3000 inches daily. Hundreds of thousands of dollars have been expended on the ditches and reservoirs. The tailings from the mine run down the canyon and empty into the valley along Dry creek, about two miles below this place. As many of the farms along Dry creek were being covered up by the tailings, the company was obliged to purchase them, and also to build expensive levees along the creek, which has necessitated an outlay of over half a million dollars, but has secured to the company perpetual dumping grounds without violating the law against hydraulic mining.

#### Pentz

Lying just in the edge of the valley, about two miles below Cherokee, in the midst of a

perfect labyrinth of mining and irrigating ditches, pipes and flumes, is the little village of Pentz, named after the late W. Pentz, a pioneer of Butte, and long proprietor of the well-known Pentz ranch and hotel, one of the finest farms and most popular hostleries in the county.

There are some fine orchards and vineyards in this vicinity, some of the fruit having secured prizes at the Sacramento Citrus Fair. The Flee Valley and Rock Creek Lumber Co. have a yard and planing mill here, and conduct an extensive business. The saw mills are situated in the mountains at Rock Creek and Flee Valley, about 25 miles distant, and the lumber is shipped to this place by means of a V-shaped flume.

#### Gridley—A Growing Town.

Situated on the C. & O. R. R., a few miles from the southern boundary, in the midst of beautiful groves of live oaks, is the enterprising town of Gridley. It contains about 800 inhabitants, is surrounded by a wealthy farming community, and is a great grain center. The town is well built up and boasts a weekly paper, a bank, a fine public school building and several churches. There are large grain warehouses, hotels, livery stables, and several first-class general merchandise stores, a well-stocked hardware store, and a well-filled lumber yard, besides several mechanics' shops. A fine roller flour mill, with a capacity of from 200 to 300 barrels per day, a planing mill, and a broom factory, are among the manufacturing industries. The broom factory has a large trade throughout the northern counties, the broom-corn used being raised at this place. A splendid one-span wagon bridge, built at a cost of \$18,000, to which the town contributed \$10,000, spans Feather river near the town. Gridley has long been known as a wide-awake town. It has many natural advantages, its people are enterprising, and its future certainly looks bright.

#### In and Around Biggs.

Biggs is a thriving place, and claims to be the third town in importance in the county. It is located on the railroad about seven miles north of Gridley. The town contains about 1000 inhabitants, and is pleasantly situated on the open plain about midway between the Feather river on one side and Butte creek on the other. To the east of town the soil is red loam, and to the west it is black adobe. Good crops are the usual result of farming in this section. The town contains some mammoth grain warehouses, two large hotels, several well-filled stores and mechanics' shops of different kinds. There is a weekly paper, a bank and a fine two-story brick public school building, in which four teachers are employed. Several religious denominations have places of worship and some of the fraternal societies are represented. Biggs also has a system of water works, with pipes laid throughout the town. The citizens have long wanted a flour mill, and, considering the large amount of wheat raised in this section, there would seem to be a fine opening for one here.

#### Other Towns.

Nelson is a prosperous little town on the same railroad, ten miles north of Biggs. It lies in the richest part of the valley, is a shipping point for an immense amount of wheat and boasts of one of the handsomest public school buildings in the county.

Next comes the village of Durham, located on the railroad seven miles south of Chico. It has the usual store, hotel, saloon, blacksmith shop, etc. Like the other towns on this road, it is an important shipping point for grain and derives additional importance from its fine steam flour mill, which is the means of drawing a large trade to the town.

Nord, Dayton, Moores and Live Oak are small towns and important fruit and grain centers in other parts of the valley. Centerville, Dogtown, Nimshew, Lovelocks, Powellton, Forbestown, Deadwood, Yankee Hill and Mountain House are important mountain villages in the mining and lumber districts. According to a late report Butte has 78 school districts, maintains 98 schools and has 4083 school census children; 500 miles of mining ditches, 125 miles of telegraph lines and 150 miles of telephone lines. The assessed value of property of all kinds in the county in 1885 was \$17,066,271, an increase of \$4,178,177 since 1880. In the mountains there is some Government land yet remaining subject to location, much of it adapted to fruit growing, but from which the brush and trees must first be cleared before it can be brought under cultivation. Land adapted to farming and fruit-growing can be purchased all the way from \$12 per acre for partly cleared foothill land to \$50 and \$100 per acre for rich valley land, such as is now offered for sale in the vicinity of Gridley and Biggs. Butte county is easy of access, and to parties seeking homes in California we say, pay it a visit and carefully examine its resources and attractions.

**THE WATER OF TREES.**—In the latitude of New York, Prof. P. D. Penhallow has found the proportion of water in trees and shrubs to vary according to these general laws: 1. The water in woody plants is not constant for all seasons, and depends upon conditions of growth. 2. It is in greatest amount late in May or early in June, and least in January. 3. It is in greatest proportion in the sap wood; least in that which is older. 4. When plants grow most rapidly they have most water.



THE SIERRAS—EASTERN BOUNDARY OF THE VALLEY.

and is well arranged in all the different departments. The town has first-class hotel accommodations and boasts some conspicuous buildings. Business in all its different branches is well represented. Rideout, Smith & Company—established since 1866—have a bank here and conduct an extensive general banking business. Among the manufacturing industries is a fine four-story roller flour mill, with a capacity of 150 barrels of flour per day. The press is ably represented by the *Mercury* and *Register*, two papers that have contributed greatly toward the development of the resources of the county. To the editor of the latter paper, S. S. Boynton, is due the honor of having originated the Northern California Citrus Fair, which has so thoroughly demonstrated the fact that Northern California is the home of the citrus family of fruits. Oroville bids fair to become as famous for its orange groves in the future as it



## Colusa County.

[Written for the RURAL PRESS by CHAS. E. HEATON.]

Colusa, the banner grain county of California, embraces an area of about 1,800,000 acres, and includes within its borders nearly one-fifth of the great Sacramento valley. It extends from the river of that name on the east to the summit of the Coast Range on the west, a distance of over 45 miles; while its length from north to south is just 60 miles. About three-fourths of the county's area is adapted to agriculture; the balance is mountainous, but valuable for its timber and stock ranges. The population numbers about 15,000, but when the great ranches—many of which contain from 5000 to 25,000 acres—are subdivided into moderate sized farms, and diversified farming takes the place of wheat growing, this county, with its generous soil and great natural resources, can easily support a population of from 150,000 to 200,000. A healthy movement has already set in in this direction. Besides several private sales, two organized land sales have recently taken place. The Northern Immigration societies are aiding the matter, and fresh stimulus has been added by the recent citrus fairs held at Sacramento and San Francisco, which have demonstrated conclusively the wonderful resources of the northern counties.

## Rivers and Creeks.

The Sacramento river, which forms most of the eastern boundary, is, in this county, a clear, deep stream, unaffected by mining debris, and has an average width of 350 feet. It is navigable to the north-east corner of the county by steam barges carrying about 300 tons of freight, and by boats of lighter draught as far north as Red Bluff. The land parallel with the river on both sides, for some miles in width, is a rich, dark alluvial, and will produce anything that can be grown in any part of the State. Oak, sycamore, ash, cottonwood, and willows grow in abundance along the river banks, forming a serpentine path of green through the center of the plains.

Stony creek, a valuable stream taking its rise in the Coast Range, and flowing through the northern end of the county, empties into the Sacramento 12 miles east of Orland. A few miles back from its mouth it goes dry during the latter part of the summer, but in winter, where it flows through the plains, is a rapid stream, from 800 to 1000 feet wide, and from 8 to 12 feet deep. Great quantities of fish come up the creek in winter time and are easily caught with a seine. There are some beautiful, fertile valleys along this stream in the mountains. There are a number of smaller creeks—all dry in summer—which empty into the plains, and do not reach the river. The valley is therefore constantly enriched with the deposits from the rich wash of the hills.

## Irrigation.

Irrigation has not been much resorted to in this county, because, as a rule, it has not been needed. Recently, however, the subject has begun to attract a great deal of attention. Two companies have been formed and two large canals have already been surveyed to tap the Sacramento and Stony creek, and will, if completed, supply water to a large body of land and greatly aid in diversifying the crops. The Cheney Slough Canal Company, besides a few individuals, have the only ditches at present in operation. This company irrigate about 5000 acres in the lower part of the county, the water being taken from the river in large iron pipes. Experiments are also being carried on with a monster steam pump. At a recent test in pumping, three minutes after beginning with 60 pounds of steam the flow averaged 25,000 gallons a minute. As water can be found any place on the plains at a depth of 10 to 20 feet, this will no doubt prove a success.

## Development of Wheat-growing.

Agriculture made but little progress in this county until 1870; previous to that time stock-raising was the chief industry and there were but a few scanty settlements west of the Sacramento river. From that date settlers began to arrive in greater numbers; the profits of wheat-growing began to be understood, farming operations were extended over the plains, the stock law followed in 1873, Colusa county rapidly advanced as a grain-growing locality, and in 1876 exported wheat to the value of \$4,500,000. The cereal crop continued steadily to gain in importance until 1884, when the yield of wheat reached nearly 10,000,000 bushels, and barley over 2,000,000 bushels, this great crop making Colusa the banner grain county of the State. For several years so great was the fertility of the virgin soil that large crops were raised by winter-sowing and volunteer. This method has since given place to summer-fallowing, which is found to insure the best crops, except along the river and bottom lands, where the soil, being a rich alluvial, is sown with grain every year.

## Stock Raising

Is still a prominent interest in this county, followed mostly in the mountainous and hilly portions, where the raising of sheep, cattle and hogs is profitably engaged in, and the breeding of Angora goats has been successfully pursued. The poultry business is beginning to receive a great deal of attention in this county, as it is attended with much profit and success.

## Fruit and Viticulture.

Fruit and viticulture, though as yet in its infancy in this county, is destined in the near future to become a leading industry. With wheat selling at from \$1.50 to \$2.25 per cbl., other branches of husbandry received little attention, but the decline in the price of this cereal during the last few years has led to much study and many experiments, and though matters have not been greatly changed so far, enough has been accomplished to show that the large tracts of land that have for years been used exclusively for grain raising are also wonderfully productive in growing many varieties of fruit, either with or without irrigation, though the former is generally accepted as the method calculated to insure the best results. Peaches, pears, apricots, plums, figs, grapes, berries, and nut fruits, all seem specially adapted to the soil and climate in the different sections of the county. Apples find their true home in the belt along the foot of the mountains, where they attain a fine flavor. Citrus fruits have been experimented with, and some fine specimens raised both on the plains and in the lower foothills. Some of the older settlers along the river and the different streams in the county have small family orchards that have yielded fruit which can scarcely be surpassed in quality; peaches weighing nearly one pound each, plums as large as eggs, and watermelons that would fill a large washtub, have been raised.

## Climate.

The winters in the valley are mild, ice seldom forming a quarter of an inch thick. The thermometer during July and August, the hottest months, averages about 100°, sometimes showing 116°; but as there is generally a breeze stirring, outdoor work seldom has to be stopped on account of the heat, and sunstrokes are almost unknown; while the nights are generally cool and pleasant. A day's drive through grand scenery will take the traveler to the cool, bracing climate of the mountains, where, after harvest, scores of ranchers with their families may be found enjoying a brief holiday amid the tall pines of these glorious camping grounds. Here deer, bear and lesser game are plentiful; while in the numerous ice-cold streams the mountain trout disport themselves. The average annual rainfall is about 20 inches.

## Timber Resources.

The eastern slope of the Coast Range is thickly covered with good qualities of pine timber, but little of which has been utilized, there being only one or two saw mills of small capacity in the county; but with the increase in population and value of the timber lands the day is not far distant when the lumber business of Colusa county will become an important industry. The middle range of the foothills is also thickly studded with oak timber, which furnishes fuel at reasonable rates to the inhabitants of the valley.

## Mines.

The discovery of gold on Sulphur creek in the southwestern part of the county, a number of years ago, and the experiments carried on since then, has lately developed into a mining excitement of considerable importance, by the additional discovery of large quantities of gold-bearing quartz along this creek, assaying from \$100 to \$150 per ton. A ten-stamp mill has already been put in operation, and a San Francisco and New York company, who have purchased several claims along the creek, have lately shipped to the mines \$20,000 worth of machinery for a new quartz mill now being erected. Quicksilver, iron, copper and chrome mines have been discovered, but have not been worked to any extent, though the deposits of all exist in considerable quantities.

## Mineral Springs.

There are many valuable mineral springs in this part of the county, that are growing in popularity each year, as their healing qualities become known. Among them are Wilbur's Hot Sulphur Springs, on Sulphur creek—which have obtained a favorable reputation as a cure for rheumatic and other complaints—Cook's and Fout's Springs, in the vicinity of Bear valley, and Hough's Springs, the latter near the Lake county line, and but a short distance from the famous Allen and Bartlett Springs, most of the travel to which passes through this place. The location is a beautiful wooded slope at an altitude of about 1500 feet. A large hotel and a number of neat cottages have been erected at this place, and the grounds laid off in a tasteful manner.

## The County Seat.

Colusa, the county seat, is situated in the midst of oak trees, on the west bank of the Sacramento, in the southeastern part of the county. It is surrounded by a rich farming country, and has a population of between 2000 and 3000. The county buildings, consisting of the courthouse, jail, hospital, and new hall of records, are substantial buildings, having an estimated aggregate value of \$75,000. The town contains a large flour mill, extensive lumber yards, a number of business houses, and a bank with a paid-up capital of \$500,000. The Colusa Sun is a weekly paper edited by W. S. Green, and is known as one of the leading Democratic papers of the State. All the trades and professions are well represented. A fine wagon bridge spans the river at this point, connecting the county seat with a small but rich portion of the county lying between the river and Butte creek, a stream entering the river a few miles below Colusa. Lines of daily stages run to

Marysville, Chico, Williams, and other points. A narrow gauge railroad, nearing completion, is now being built from Colusa to connect with the Northern railroad at a point near Williams. It is rumored that it will be extended westward from that town through the hills to Bartlett Springs, via Antelope and Bear valleys. Jacinto and St. Johns, at the mouth of Stony creek, are river towns in the northern part of the county. The former is situated upon the great Glenn estate which fronts for 20 miles along the river, and has become widely known as the largest wheat farm in the world. Expensive wagon bridges have been constructed across both streams near the latter town, and in its vicinity some fine oranges have been grown.

## The Northern Railroad.

Which was completed through the county in the fall of 1882, enters the southern end of the county near the foothills, and, gradually moving out in the valley, crosses the northern boundary about midway between the river and foothills. It becomes merged in the California & Oregon road at Tehama, and on the completion of this line will be the direct route, by rail, from San Francisco to Oregon and Washington Territory. A number of prosperous towns, all founded since 1877, have sprung up along the railroad. Beginning with College City and Arbuckle on the south, the others, following in the order named, are Berlin, Williams, Maxwell, Willows, Germantown and Orland.

## A Model Town.

College City is a flourishing town of 500 inhabitants, three miles to the east of Arbuckle. It is the seat of Pierce Christian College, an institution that has greatly advanced the cause of education in this county. It is a pretty little place, and is the model town of the county, there being no saloon allowed or liquor sold within two miles of the college. Stages connect with all trains at Arbuckle, which is a somewhat smaller town, and divides with College City the trade of this rich section of country.

## Williams.

Williams is an important town, 12 miles west of the county seat. It contains a large brick public school building, several stores, a well-equipped flour mill, and foundry, and supports a weekly paper, the Review, which is ably edited and devoted to local interests. Several stage lines converge here, this being the chief distributing point for tourists for Allen and Bartlett Springs and the different health resorts in this county. During the summer months the big six-horse Concord stages, rolling in and out of town, give the place a very bustling, business-like appearance.

## Maxwell.

Maxwell is ten miles from Williams, and something of a rival of that place; and, like the latter town, has been greatly retarded in its growth by several destructive fires. It boasts a weekly paper, and is a shipping point for a large amount of grain. It is but a few miles from the foothills, and is surrounded by a country well adapted to fruit growing.

## An Ambitious Young City.

Willows is a newly-incorporated city of about 1200 inhabitants, and one of the most enterprising towns of Northern California. It was for some years the terminus of the railroad, and enjoyed, almost from its foundation, an excellent degree of prosperity. The town contains several large warehouses, fine railroad buildings, a number of handsome brick business blocks, a bank, and one of the largest and best equipped hotels in the county. Two weekly papers are published, the Journal and Democrat. There is a public school of four departments, several fine churches and some costly residences. The business portion of the town has several times been destroyed by fire; but in every instance the ruins had not fairly quit smoking before new buildings were in course of erection.

Germantown, the center of a wealthy colony of Germans, is the next place on the railroad. Eppinger & Co., of San Francisco and Dixon, have a branch house here and conduct one of the largest general merchandise stores in the county. The town contains a brewery and several mechanics' shops.

## In and Around Orland.

Last comes Orland, situated half a mile south of Stony creek and close to the low undulating hills which terminate six miles west of town in the black buttes, a number of lofty promontories, from whose rocky summits a splendid view is obtained of the whole valley. It is a lively town of 900 inhabitants, and is the center of a populous farming country. The town is generously laid out; the lots are large, and the streets wide and regular; and, as the northern end of the county possesses some of the best natural roads in the State, the location is all that could be desired. A long wagon bridge, constructed at a cost of \$13,000, spans Stony creek, directly north of town. The railroad also crosses the creek near the same point. A tri-weekly stage, running from Chico, Butte county, to Newville, near the foot of the mountains, stops at Orland; distance to each place, about 20 miles. All branches of trade are well represented. There are several conspicuous buildings, among them the large warehouse of Logan, De Pue & Co., 50x750 feet, laid throughout with a concrete floor; the new public school building, costing \$6000; the Roman Catholic

church, and the Orland college, a two-story brick building, located in the center of the college addition, a plot of 40 acres adjoining the town on the east side. This latter institution has only been a short time in existence, but is steadily growing in favor. The Times is a weekly newspaper, well patronized. Like most of the other towns on the railroad, Orland has several times suffered severely from fire. A large flour mill, built at a cost of \$25,000, was burned a few years ago, together with a large amount of grain. The insurance was very light, and other difficulties arising it has never been rebuilt. It was paying handsomely at the time. There are no other mills within many miles, and a milling business equaled by few in the State certainly awaits any man who should erect a good flour mill at Orland.

This is the only railroad town in the county possessing a natural park, a large oak grove on Stony creek being used for that purpose, and is the popular resort for picnics and national celebrations. Good fruit and vine lands, within four miles of town, are offered for sale at \$15 and \$20 per acre. A preliminary survey has just been completed, looking to the construction of a narrow gauge railroad from Orland via African Valley and Newville, to the foot of the mountains, there to connect with the Round Valley wagon road from Mendocino county. There are several other small towns in different parts of the county, of more or less importance as trade centers and shipping points. The price of land ranges from \$10 to \$50 per acre, according to quality and location. A great deal of land is rented for grain-growing, the renters paying from one-fourth to one-third of the crop in the sack. There are no Government lands subject to location, except a few mountain ranges. The assessed value of property of all kinds, according to the assessment roll of 1885, is \$21,560,786, an increase of over \$9,000,000 since 1878. The tax rate is \$1.35 on the \$100. The county is out of debt and stands eighth on the list in property rank.

## Orland.

## Sacramento City and County.

[Compiled for the PACIFIC RURAL PRESS.]

Sacramento, California's capital—the Queen City of the Plains—is situated on the west bank of the Sacramento river, the principal stream of the State, and is the most centrally located city in California. The site is level, and broad thoroughfares, 80 feet in width, numbered one way and named alphabetically the other, traverse the city. Not only is Sacramento one of the most beautiful, but statistics prove it to be one of the most healthful, cities in the civilized world. The climate is equable and agreeable, averaging about 60° the year round. Tropical trees and plants flourish, and the orange, the pomegranate and the almond may be seen growing in gardens which are in perennial green. A very large proportion of the population own their own homes, and seem to vie with each other in perfecting the beauty of their surroundings. No house is too humble to have its garden, containing rare plants of foreign or native growth, and in the springtime cottages may be seen completely embowered in roses and trailing vines. Most of the principal thoroughfares have rows of elm, poplar, walnut or other trees, planted on either side, which, when in full foliage—especially when viewed from a distance—give the city almost the appearance of a dense forest.

The population of Sacramento has steadily increased since its earliest settlement. According to the census, there were in 1850, 6820 inhabitants; in 1860, 13,788; in 1870, 16,283; in 1880, 21,420, and its present population is estimated at 30,000.

The State Capitol building—the architecture of which is fashioned after that of the National Capitol at Washington—which is the pride of all Californians and excites the admiration of all visitors, is located in a large and beautiful park, with terraced grounds and broad graveled walks. The park is planted with native and tropical trees, plants and flowers, and is one of the loveliest spots upon earth. In these magnificent grounds are also situated the State Printing Office—one of the most extensive and complete institutions of the kind in the United States, and the immense Exposition building of the State Agricultural Society, constructed at a cost of nearly \$100,000. Nearly all the religious denominations have places of worship, and some of them have several churches. All of these have large congregations, a reliable indication of a lawful and steady state of society. The public schools are among the best to be found anywhere. There are 15 or 20 public school buildings in the city, many of them large and costly structures. The city owns its water works, and is abundantly supplied with the cheapest and most wholesome water in the State.

In Sacramento are located the race-track and fair grounds of the State Agricultural Society. The annual expositions of this society are yearly growing in importance and magnitude, and always attract thousands of visitors. Sacramento is a great railroad center. The Central Pacific has machine shops, roundhouses, rolling mills, etc. Two routes—the California Pacific and Western Pacific—connect Sacramento to San Francisco and the ocean. The California & Oregon road leads up through the great Sacramento valley, making its products tributary to this market. A branch from the California Pa-



cific runs through the rich counties of Yolo and Tehama, connecting with the California & Oregon. Steamboats also make regular trips between Sacramento and San Francisco, via the Sacramento river and the bay.

#### Sacramento County.

Sacramento county is bounded on the north by Placer and Sutter, on the south by San Joaquin and Contra Costa, east by El Dorado and Amador, and west by Solano and Yolo. The Sacramento river courses the entire length of the county on the west side, and the American traverses the northern portion from east to west, debouching into the Sacramento river at this point. The Cosumnes river crosses the southern portion of the county, forming a junction with the Mokelumne. For some years after the discovery of gold on one of the tributaries of the American river the eastern or foothill portion of Sacramento was a great placer mining section, and bustling mining camps and villages sprang suddenly into existence, and almost as suddenly disappeared as the diggings were exhausted. Even now, however, there is considerable mining going on.

Sacramento county has an area of 1026 square miles, with a population of from 43,000 to 45,000. The census of 1880 placed it at 37,000, but it has since then increased materially. Farming, fruit-growing, hop culture, wine-making, fruit-drying, dairying, etc., are the chief industries outside the city, aside from what mining is carried on in the foothills and the granite output of the Folsom quarries.

#### Sacramento County's Orchard Fruits.

Sacramento county doubtless leads all others in the State in the production of orchard fruits, those of the citrus family alone excepted. Her

as is evidenced by the amount and quality of the crops grown on it, even with scant cultivation. This soil is, over a great portion of the district, but 15 inches deep and never more than five feet. Immediately below this is the bedrock, on the top of which is a thin crust, similar, in some respects, to the glazing on earthenware, and so hard that it will often break the tempered point of a pick. Under this surface crust the hardness diminishes and ceases at from two to four inches, and then appears an easy-picking marl, which readily disintegrates on exposure to the air. This marl is claimed by some of the farmers to be a valuable fertilizer and has been used as such by a few, but whether the good effects said to follow its use are to be attributed to the actual presence of plant food, or only to the assistance lent in the mechanical manipulation of the soil, is yet to be learned.

All over this district an inexhaustible supply of excellent water is to be found in the first sand immediately below the marl, and therefore at a depth of from five to twelve feet. A day's labor will give a man a well with water enough in it to feed a large windmill. The country about Florin is dotted all over with windmills for raising water to be used for irrigating vines, trees and small fruits.

With such a shallow soil, very little rain, of course, suffices. Eight to ten inches is plenty for a good crop, and better, as regards results, than 16 or 20 inches. In this fact is one reason why the crop in Sacramento county in the memory of civilized man has never been a failure, although other localities will often produce a larger yield.

#### Vegetables.

The marvelous richness of the bottom lands along the Sacramento river was early exem-

the average is about ten cents. In 1884 seed sold as high as 20 cents a pound. In some seasons seed has been imported for local use, but usually there is a considerable surplus to supply outside wants. Alfalfa hay in this market varies in price from \$9 to \$14 a ton baled, the average being about \$11. These are wholesale prices to the producer. The hay is mostly consumed here, though some is shipped to the mountains or more distant points. Two tons of hay to each cutting is an ordinary yield. Irrigation is not practiced on the bottom lands in Northern California, though experiments at Colusa this season show that the crops can be increased by occasional flooding.

It has been found that hogs will thrive throughout the year on alfalfa alone, and that they need no other food until it is desired to harden their flesh in preparation for slaughter. An acre in alfalfa will maintain 20 hogs. In illustration of the productiveness of alfalfa, the experience of a Bear river farmer may be cited. He cut seven and a half tons to the acre in one year, taking off three crops, and in the same year sold the pasturage of the land for four months at \$2 a head for stock.

Owing to the fine growth of alfalfa, all the best and largest dairies of the county are located on the river bottoms. We give below some of the largest dairymen, whose carefully selected stock and system, and general use of recognized improved methods, entitle them to the name. The figures indicating the size of the herds are approximate only, but will give a fair indication of the truth. William Johnston, of Richland, milks 100 half-breed Jerseys. J. B. Green, of Clarksburg, has 150 head graded Shorthorns. Dwight Hollister, of Courtland, has doubtless the best Shorthorn dairy herd in the county. He has about 100 head high grade—all three-

was held yesterday afternoon in the Board of Trade rooms in this city, in accordance with published notice, and the matter considered. As a result of the deliberations, it was decided to take advantage of the very prosperous condition of the immigration work, and to extend the plans and increase the funds and facilities, sufficient to reap the benefits of the successful work inaugurated less than two years ago. To this end a new organization was formed, to be known as the Central and Northern California Immigration Association, having an active Directorate of 15 members from Sacramento and representation in the other counties covered by the section of the State named.

This will afford a very active and efficient Board of Directors at the central point where the headquarters of the organization is located, and in every way secure increased facilities and greater efficiency in the work. The directors elected from Sacramento city and county are T. B. Hall, F. R. Dray, N. D. Rideout, E. K. Alsip, Joseph Steffens, R. D. Stephens, Frank Miller, A. S. Hopkins, D. O. Harvey, C. R. Parsons, L. L. Lewis, J. A. Parker, C. H. Hubbard, E. J. Holt and Wm. Ingram, Jr. The board subsequently organized by electing A. S. Hopkins, President; T. B. Hall, Vice-President; Wm. Ingram, Jr., Secretary; and Frank Miller, Treasurer.

Subsequently the former organization, known as the Sacramento County Immigration Association, held a meeting and disbanded, turning over its assets and work to the new immigration association. After this action had been taken a meeting of the Board of Directors of the new Central and Northern California Immigration Association was held, and most vigorous plans were considered and adopted for carrying forward the work so auspiciously in progress. The new association is in a most healthful financial condition, and its directors enthusiastic.—*Record-Union.*

#### The First Trainload of Northern Fruits.

EDITORS PRESS:—Twenty years ago, or even less than that, this part of the country was considered worthless except for mining purposes. No one ever regarded it as of any value for agricultural or horticultural pursuits; but recent developments prove it to be a grand success as a horticultural district. No section of the State can excel, and I think few, if any, can equal it. We can raise to perfection a full line of fruits, from the apple to the orange, including the olive, which does exceptionally well. Towns and villages are growing rapidly; depot and track facilities have to be increased at every railroad station; land is advancing rapidly; men of means are investing in land, clearing and planting it to orchards. These men are not amateurs or adventurers, but practical business men, such as P. W. Butler, Parker Whitney, and the firm of W. R. Strong & Co., of Sacramento. The last-named gentlemen have been fruit-shippers on a large scale for many years, and, of course, know what they are doing; and, by the way, these gentlemen with the aid of E. T. Earl, another fruit-shipper of Sacramento, have this day forwarded to the East

#### The First Special Train of Green Fruits

Under the new arrangements with the railroad company. This is the first full trainload of fruit that ever crossed the continent (except trains of oranges from the Southern counties) and it reflects great credit on the shippers. Very few men could have got up a train of 15 cars of fruit thus early in the season, and when there is so little shipping fruit ripe. A month hence 40 cars could be got up much easier than 15 now. These men have a right to be proud of their success, especially since they had been repeatedly told that with the special arrangements with the railroad company, and with Porter Bros. at the East to sell their fruits, all such men as Strong & Co. would be completely shut out and must take a back seat. It now seems that the back-seat fellows have come to the front and stand ahead. The train which left Sacramento at 4.15 P. M. to-day, June 24th, passed Penryn at 5.45 P. M. running at a high rate of speed. It is to be pushed through on the fastest time possible, making no stop except for wood and water. It will no doubt attract great attention all along the line, as it was most beautifully decorated with flags.

Penryn, June 24th.

FRUIT-GROWER.

#### Full Description of the Train.

The Sacramento papers are naturally very much delighted with the shipment of the first full train by Sacramento firms. The *Record-Union*, after a general discussion of the features of the event, gives the following interesting particulars:

Two of the most prominent fruit-shippers in the State—W. R. Strong & Co. and E. T. Earl, members of the California Fruit-Growers' Association—have shown themselves equal to the emergency, have demonstrated the practicability of the railroad company's proposition (to carry trainloads at \$300 per car), and have inaugurated what must become a new and an important era in the great fruit industry of our State.

Yesterday those firms, after a quiet but thorough preparation of several days, loaded and started the first special fruit train that has ever left California. A description of this pioneer train, that will blaze the way for countless numbers that will speedily follow, will no doubt



SUTTER'S MILL, WHERE GOLD WAS FIRST DISCOVERED IN CALIFORNIA.

orchards line the eastern shores of the Sacramento river from end to end of the county. Among them are the largest in the State, aggregating thousands of acres. From Freeport down to the county line pretty much all the best bottom land is planted with fruit trees. Several river steamers are kept employed during the season to carry to market the products of this magnificent belt of orchards. Among them are those of the Runyons, embracing hundreds of acres. Here, too, is the Kercheval orchard, containing 40 or 50 acres in pears alone. The largest peach orchards in the State are also to be found here. On the American river the county can also show numerous fine orchards, including the Hopping pear orchard, which this year gave a return of over \$11,000 from 20 acres. In this belt is Routier's fine orchard and vineyard. On the red lands, or plains, in the region about Florin, there are hundreds of acres devoted to orchards, vines and berries. Near the capital, on these high lands, are three nurseries of fruit trees, covering a large area. Here, also, is a new orchard of some 150 acres, recently planted by C. W. Reed, one of the most experienced fruit-growers in the State. Going eastward, the great Natoma vineyard is encountered before the foothills are reached. This is one of the largest vineyards in the world, and lines the highway for miles on either side. It contains about 3000 acres, including several hundred acres in orchard. In the neighborhood of Folsom, in the foothills, are numerous vineyards.

The tract of land known as the "Redlands," and also as the "Bedrock Lands," extends, perhaps, from Brighton to McConnell's, and from the lower Stockton road to the Cosumnes river. There are over 100,000 acres of "bedrock" land, and it is generally held in small pieces of from 40 to 160 acres. There are not many who own in one piece more than the latter number, and the very highest in one piece, so far as known, is 970 acres. Included in this district are the towns of Florin, Galt, Elk Grove, Franklin and Sheldon.

The soil is a red clayey loam, very fertile,

plified in the great yield of sweet potatoes and other root crops. The first sweet potatoes cultivated here were of the Sandwich Island variety, sometimes called "yams" or "reds." The yield in early days was astonishing, and still remains large, even where manuring has not been resorted to. Five hundred sacks to the acre is about the largest yield reported. This would be over 25 tons to the acre, or from 800 to 900 bushels. E. F. Aiken, one of the early growers, raised on his ranch near Courtland a Sandwich Island potato weighing 15 pounds. The average annual product now is probably about 200 sacks to the acre, which would be regarded anywhere as a large yield. The sweet potato requires a light-colored, deep and sandy soil, and there are few localities which produce it in perfection, as do certain of our Sacramento river lands. Its cultivation, of late years, has fallen mainly into the hands of Portuguese and Chinese. Formerly it was a very profitable product, but now that the price has fallen to 50 or 75 cents per 100 pounds, the returns are not as remunerative. The variety principally grown now is the Carolina, which is preferred to the "reds." The cultivation is by slips, after the manner common in the Southern States. Shipments are made to various points along the line of the overland roads, as far as Omaha.

#### Stock and Dairy.

In Sacramento county there are several thousand acres devoted to alfalfa, and its cultivation is common throughout the Sacramento valley on suitable soils. The yield in this section is enormous. Three or four crops a year are obtained, and the annual yield averages from six to eight tons an acre. Occasionally ten tons to the acre is obtainable. Sometimes two hay crops are taken and also a seed crop, and sometimes stock is turned upon the land at intervals between the hay crops, or the land may be used entirely for pasturage. An average seed crop here is from 300 to 400 pounds to the acre. The prices of both seed and hay fluctuate a good deal from year to year. The price of seed varies from 7½ to 15 cents a pound, and

quarters and upward. J. M. Stephenson, of Franklin, has 100 graded Jerseys and Shorthorns. C. W. Clark has about the same number of graded Durhams. All of these dairies feed alfalfa, and all find their markets in Sacramento and San Francisco. They make butter only and feed their milk to the hogs. The average yield of Senator Johnston's herd is 200 pounds per year to each cow, and this doubtless would give a fair average for the other dairies mentioned. Besides the herds mentioned, there are a number of others of inferior grade. The largest of these (and the largest, indeed, in the county) is owned by N. M. Fay, who has a large cattle ranch on the Sacramento river about 13 miles below this city. He makes both butter and cheese. In addition to these there are a number of milk dairies milking from 15 to 50 cows each.

#### Immigration Work at Sacramento.

An important step in the immigration work having headquarters in Sacramento took place June 23d at the meeting held in the Board of Trade rooms. For some time the Board of Directors of the Northern California Immigration Association, with its members so scattered over the several counties of this section of the State, and many of them not active, has fallen so far short of answering the rapidly-increasing demands for furnishing the necessary information, by publication and otherwise, to applicants, and for general distribution at the East, that the work has very largely devolved upon the Sacramento County Immigration Association, both for funds and active work. This the county organization has supported so far as necessary, until the success of the work has demanded more expanded outlay of means and broader plans to keep pace with the incoming tide of immigrants and information anxiously sought for.

To meet the exigencies of the situation, a meeting of prominent business men and citizens



prove of interest to many of our readers who are watching the development of the business, and also to those who recognize the indisputable fact that Sacramento is beyond all questions of doubt the grand central point from which these shipments must be made.

The train consisted of 15 cars, containing 300,000 pounds of freight, and, with the exception of 30,000 pounds of potatoes, was entirely green fruit. When it is considered that each specimen of the fruit, each individual peach, apple, pear, apricot and plum has to be wrapped in paper, and all must be accomplished within about 36 hours prior to the departure of the train, the magnitude of the undertaking will be appreciated. In the work of picking, making boxes, packing, hauling, loading and handling this enormous quantity of fruit, it is estimated that over 500 men found employment on this train for two days, an equivalent to the labor of one individual for over three years. The fruit consisted mainly of the following varieties: Apples, Bartlett and other pears, peaches, plums and apricots.

Messrs. Strong & Co. and Earl do not handle fruit on commission, but make direct purchases, and have already contracted for large quantities in all the leading fruit districts. Among those whose fruit make up the shipment under consideration may be mentioned the following:

In the Sacramento river district, Messrs. Davis, Stewart, Barry, Kennedy, Talmage, Crofton, Reynolds, Crew, Thisby, Hensley, Hanson, Bryan, Johnson, Johnston, Williams, Ralston, P. Green, J. Green and G. Green, Dean, Osborn, Calloway, Doty, Simms, Bates, Wedley, O. R. Runyon, W. Runyon, Kercheval, Hollister.

In the American river district, Messrs. Stephens, Routier, Olsen, Grondone, Hutchinson, Reed, Flint and others.

Winters and Vacaville districts, Messrs. Seaman, Thisell, Tucker, Porter, Reed, Brink, Pleasants, Martel, Pierson, Cantelow, Steiger, Collins, Garlish, Korn and Lyon. The picking and packing were done under the able supervision of Messrs. C. B. Strong, Coulter, Osborn, Curtis, Steiger and Glatz, representing Strong & Co., and Messrs. Rhoads, Mixer and Collins for Mr. Earl.

Some of the most particular work in connection with the getting up of this train was the loading of the cars, which was under the management of J. H. Platt and Mr. Harding, with a small army of assistants.

The shippers were aided as much as possible by the railroad company's employees, who spared no pains in placing the cars promptly and otherwise assisting in their speedy loading. The shippers expressed themselves as being obligated in this respect to Messrs. Urquhart, assistant superintendent; C. A. Stevens, freight agent, and Mr. Kelsey, his assistant; also to Martin Holland, chief yard-master, and Robbins, his assistant.

The train, when loaded and standing on the track west of the passenger depot, presented a very handsome appearance, with a strong engine at the front and a neat caboose attached to the rear, awaiting the signal to pull out of the yard and start upon its long and rapid journey over the Sierras, the great plains and the Rocky mountains to the Missouri river. The engine, caboose and each of the 15 cars was

#### Gaily and Tastefully Decorated

With flags, streamers of bunting and the tricolor show-cards of the two shipping firms. The engine and caboose thus gaily dressed presented quite a holiday appearance, and will prove an attractive sight to the residents of the many cities and towns of the States and Territories through which the train passes en route to its destination. In addition to the decorations mentioned, a large white placard was nailed on the center of each car, printed in red and blue letters, as follows:

SPECIAL  
FRUIT TRAIN  
ON  
PASSENGER TIME  
TO  
MISSOURI RIVER.

A large number of people assembled at the depot to witness the departure of the train, and just prior to its leaving photographs were taken of it. The train was drawn by engine No. 18, which is one the largest and most powerful running between Sacramento and Truckee. It was run by M. L. Rudeck, engineer, and A. K. Prather, fireman. The train was in charge of D. C. Halsey, conductor, with V. Curran, J. Congrove and E. Fay, brakemen.

At 4:15 promptly the train started on its Eastern trip, followed by the best wishes of Messrs. Strong & Co. and Earl's many friends.

It was originally intended to fill 17 cars, but this being the first train, the railroad company suggested that 15 would insure its going through on passenger time, and more might not. Two carloads of fruit, therefore, which was at the depot ready for shipment, was diverted. While this train will not run with the rapidity of the express, it makes no stoppages except for wood and water, and thus, although running slower, it makes up by constantly forging ahead, and like Billy Birch's bug "it will get there" on express time "just the same."

The firms making this initial special train shipment intend from this date, together with other members of the California Fruit-growers' Association, to forward similar special trains of cars, or more, twice a week or oftener.



Mount Shasta.

Behold the dread Mount Shasta where it stands Imperial 'mid the lesser lights, and, like Some mighty, unimpassioned mind, companionless And cold. The storms of heaven may beat in wrath Against it, but it stands in unpolluted Grandeur still; and from the rolling mists upheaves Its tower of pride e'en purer than before. The wintry showers and white-winged tempests leave Their frozen tributaries on its brow, and it Doth make of them an everlasting crown. Thus day by day and age by age, Defy each stroke of time, still rising higher Into heaven!

Aspiring to the eagle's cloudless height. No human foot has stained its snowy side; No human breath hath dimmed the icy mirror which It holds unto the moon and stars and sov'reign sun. We may not grow familiar with the secrets Of its hoary top, whereon the Genius Of that mountain builds its glorious throne! Far lifted in the boundless blue, he doth Encircle, with his gaze supreme, the broad Dominions of the West, which lie beneath His feet, in pictures of sublime repose No artist ever drew. He sees the tall, Gigantic hills arise in silence And peace, and in the long review of distance Range themselves in order grand. He sees the sunlight Play upon the golden streams which through the valleys Glide. He hears the music of the great and solemn sea, And overlooks the huge old western wall, To view the birth-place of undying melody! Itself all light, save when some loftiest cloud Doth for awhile embrace its cold, forbidding Form, that monarch mountain casts its mighty Shadow down upon the crownless peaks below,

That, like inferior minds to some great Spirit, stand in strong contrasted littleness! All through the long and summery months of our Most tranquil year, it points its icy shaft On high, to catch the dazzling beams that fall In showers of splendor round the crystal cone, And roll in floods of far magnificence Away from that lone, vast Reflector in The dome of heaven. Still watchful of the fertile Vale and undulating plains below, the grass Grows greener in its shade, and sweeter bloom The flowers. Strong purifier! From its snowy Side the breezes cool are wafted to the "peaceful Homes of men," who shelter at its feet, and love To gaze upon its honored form; aye, standing There the guarantee of health and happiness, Well might it win communities so blest To loftier feelings and to nobler thoughts— The great material symbol of eternal Things! And well I ween, in after years, how In the middle of his furrowed track the plowman In some sultry hour will pause, and wiping From his brow the dusty sweat, with reverence Gaze upon that hoary peak. The herdsman Oft will rein his charger in the plain, and drink Into his inmost soul the calm sublimity; And little children, playing on the green, shall Cease their sport, and turning to that mountain Old, shall of their mother ask: "Who made it?" And she shall answer: "Child, it was thy God!" And well this golden State shall thrive, if like Its own Mount Shasta, Sovereign Law shall lift Itself in purer atmosphere—so high That human feeling, human passion at its base Shall lie subdued to the law's mandate; As high in man's esteem and just as pure As the immaculate snow on that mountain's brow.

—John Rollin Ridge.

#### Shasta County.

[Compiled for the RURAL PRESS.]

This county is situated in the northern part of the State, being separated from Oregon by the counties of Siskiyou and Modoc. It is bounded on the east by Lassen, on the south by Tehama and on the west by Trinity. The extent of the county is 2,500,000 acres. The Sacramento river traverses it from north to south, about two-thirds of its territory being to the east and one-third to the west of that stream.

The Shasta of the past was known only as a stock and mining country, and thought to be possessed of a cold and disagreeable climate, a rough and mountainous surface, a worthless and unproductive soil, inaccessible to the homeseeker, and full of malaria to the hardy pioneer; but the developments of the past few years have quite dissipated these notions and brought in their stead a conviction that no other section of the State offers better inducements for general farming.

Placer mining was the principal industry of the early pioneers, and though the placer mines are not what they were in early days, still there is much gold dust yet extracted from that class of diggings. But quartz mining in our county is yet in its infancy. Many rich mines have been discovered and partially developed during the past year. Iron ore of the best quality is known to exist in vast quantities on the McLeod and Pit rivers, only a few miles north of Redding. Limestone is found at various points, and in former days the burning of lime was a lucrative calling. Extensive marble quarries also exist and have been heretofore utilized.

The middle-northern part of the county is very rough. The lumberman here has a vast area of forest from which to draw his supplies, the streams furnishing the choicest of mill sites. To the east and northeast of Redding, within a distance of from 30 to 50 miles, is a large extent of pine timber, among it some of the finest sugar pine. Also, on the west side of the county and on the Pit and Sacramento rivers is much good timber. There are a number of saw mills, from the simplest to the best, but they have never yet been able to supply the demand. Thousands of shakes, shingles and fence-posts are made in this belt of timber.

The mountain saw mills are 30 to 40 miles from Redding, and the price of common lumber at the mills is from \$8 to \$10 per M. At the mill in the city it is from \$16 to \$20 per M. The town of Millville is very prettily located near the junction of two or three mountain

streams, contains 350 or 400 inhabitants and is about 12 miles from railroad. There is a good deal of very nice level land in its immediate vicinity suitable for fruit and general farming. The land near the railroad is all taken up by actual settlers—that is, on the east side of the river. On the west side and near the town there is a quantity of vacant Government land which has been returned by the surveyor as mineral, and which must be proven better adapted to agriculture than mining before homesteads can be filed. This has been done in a number of instances and probably can be in most cases, as the district is undoubtedly exhausted.

The Surveyor-General's report for 1881 showed only 143,339 acres inclosed, and less than 50,000 acres under cultivation. There has been a considerable increase of population and acquiring of property since then, but immigrants can still find thousands of acres of Government and railroad lands whereon to make comfortable homes. Certain portions of the county are well adapted to stock-raising, grain and grasses, while other portions are equally well suited for fruit-growing.

Redding, the principal town, is located on a plateau 70 feet above and near the west bank of the Sacramento river, and is said by travelers to occupy one of the finest sites in the State. It is the distributing point for Trinity and the western part of Siskiyou counties, portions of Modoc, Shasta and a portion of southeastern Oregon; has a population of about 1800. It derives a large trade from the country on the eastern side of the Sacramento, which is crossed by a free bridge about a mile east of town. In this vicinity wheat, barley and oats grow luxuriantly, while the apple, peach, plum, cherry, fig, grape, berries and early vegetables are raised with success and profit, and experiments in the last few years with the orange, Japanese persimmon and soft-shell almond prove that they are nearly if not as sure a crop as the peach.

Shasta, seven miles northwest of Redding, is the county seat, and the United States Land Office of the Shasta district is here located. It is the oldest town in Northern California. Some of the oldest orange trees in the county are planted here and produce regularly fine fruit. Among the more notable towns and settlements are French Gulch, Anderson, Cottonwood, Igo and Janesville.

In answer to Eastern questioners, D. N. Houn has recently given a description, which we slightly abridge:

From Redding southward the level valley will average four miles in width. The soil is alluvial or sedimentary, containing a good deal of disintegrated rock or gravel and is excellent

for small grains, alfalfa, prunes, plums, pears, figs and small fruits. Bordering the valley on the east and extending back 16 to 20 miles is a series of plateaus or benchlands, varying in elevation from 700 to 1000 feet above the sea level. These are red in color, soils sandy clay loam, granite and clay, and are covered mostly by a growth of white and black oak (scrub) and brush, requiring to be cleared before cultivation. There are a good many boulders scattered over them, and considerable gravel. These lands are peculiarly adapted to fruit and vines. We do not count them good wheat or grain lands, although they will produce fair crops when properly cultivated. East of the plateaus come the foothills and mountains proper. Among these are many benches and comparatively level tracts on which to make beautiful homes. They are pretty heavily timbered with oak, pine and cedar. There are plenty of springs and streams of pure, cold water. The soil is deep red, rich, and when cleared very productive of small grains, grasses (timothy and clover) and hardy fruits, berries and vegetables of all kinds. In the northeastern portion of the county are two fine valleys, the Fall and Pit river. These are 3500 feet above the sea level, and are nearly level. Soil, loam, rich and very productive. Small grains, grasses and vegetables grow to perfection, and yield heavily in this section. It is an excellent stock and dairy location; bunch grass is natural and heavy, and the water excellent.

On the west bank of the Sacramento, and extending back 12 to 18 miles, the land is rolling and billy, rocky in some places and gravelly in others. The growth of timber and brush is almost the same as on the east side. Where it is level enough for cultivation, excellent fruit and grapes may be grown, also small crops of grain and vegetables. In the southwestern portion of the county are the "Bald Hills"—high rolling hills, devoid of timber, soil adobe—a very good country for small grain and stock. The extreme western part is mountainous, but affords good summer range for stock. The climate is peculiarly favorable to sheep.

#### Grain and Grass Culture.

Almost the entire area sown to grain in this county, says Mr. Houn, is for hay, as that pays best, and not for threshing or milling purposes. Good hay brings very readily on the field, when baled, from \$15 to \$20 per ton. Generally wheat and oats are sown together for this crop, and the yield will vary from one to two and a half tons per acre. When threshed the yield of wheat, oats and barley will average 20, 30 and 35 bushels per acre, respectively. Corn is grown to some extent, and is fully up in quality to that raised east of the mountains.

Our mountain country is excellent for corn. The natural grasses and wild oats have been almost eaten out by many years of overstocking with cattle, sheep and hogs; so that no calculation must be made on natural grasses for feed or hay. Alfalfa, so far as tried, succeeds well without irrigation, and two crops can be relied on. When an elevation of 1500 or more feet above sea level has been reached, timothy and clover grow very luxuriantly and yield enormous crops, frequently cutting as high as four tons to the acre. Our grass and grain-growing area is very limited, compared with the entire area of the county, and all kinds of feed must necessarily maintain a good price.

The lowest thermometer in the valley and surrounding country, up to an elevation of 1500 feet, is 24 degrees above zero, and that is of rare occurrence, lasting but a few hours. Oranges and lemons have not been planted here so extensively as in Butte county, or in Tehama perhaps; but a good many which have been growing in different parts of the county for a dozen years have done and are doing well; so that it is safe to say they can be grown here successfully. More attention has been given to orange culture this season, and more trees planted, than in all past years put together. There are some olive trees growing and doing well, but none yet in bearing.

Good land can be purchased within five or ten miles of town and railroad, at prices ranging from \$6 to \$30 per acre, according to location, improvements, etc. Mixed farming, with some fruit, would probably be best for a person of moderate means, wishing to make a home; for during the years that necessarily intervene before he can derive any revenue from fruit he will be producing something that is a source of income.

The rainfall averages 40 inches, and drouth is never known.

The Redding Free Press, a few weeks since, remarked that during the past three years almost an entire revolution in the agricultural and horticultural development of the county has been effected. Lands counted worthless prior to that time have been taken up by the enterprising and energetic settler, cleared of the timber and brush and planted to fruit trees, vines and vegetables and sown to grain, and have produced beyond the expectation of the most sanguine. No part of the State has excelled this in the growth of trees and vines, or in the size or flavor of the fruit produced. Instead of the brush fence and dilapidated dwellings of the old-timer, who depended upon stock for his livelihood, the now rabbit-tight fence and neat dwellings of the new-comer, fresh from the snowbound East, give the county an appearance of thrift and beauty quite pleasing to the eye. Nor is this improvement confined to any particular locality, but extends from the river to the summit of the mountains on either hand.



## Solano County.

[Compiled for the RURAL PRESS.]

Solano county lies north of Suisun bay and Carquinez straits, with Napa, Yolo and Sacramento counties inclosing it to the west, north and east respectively. Of its 670,000 acres about 100,000 are marsh, much of which has been reclaimed and rendered productive. Of the remainder, two-thirds are valley land and one-third foothill. The valley lands extend from the Sacramento to the foot of the Coast Range, have rich, alluvial soils, and produce abundant crops of grain, vegetables and fruits. The foothills are in the western part of the county, and have light loamy soils. Springs are abundant, and water is found at from 10 to 40 feet below the surface.

Solano has free water communication with all points along the bay and the rivers which empty into it, besides enjoying great rail facilities. The California Pacific Railroad runs through nearly the whole width of the county east and west. The Vacaville Railroad runs from Elmira to Madison, in Yolo county. There is also a branch from Vallejo Junction to Vallejo and from Suisun to Vallejo.

Stock raising has been one of the more important industries, as a large portion of the

what may be found elsewhere in this State. Shut in from the fogs of the Napa valley by the high Coast Range and from the sudden changes of temperature characteristic of the Sacramento valley by the foothills which bound the valley on the east, it enjoys an almost perennial spring. The further north in Vaca valley one goes the warmer he finds it, and the dangers from destructive frosts diminish in like ratio. The climate is as much semi-tropical as that of Los Angeles. Here are raised some of the finest oranges, lemons, nectarines, pomegranates, olives and figs, beside the usual fruits of the temperate zone; and what is remarkable, indeed, and rather a puzzle to those who do not comprehend the physical features, and hence the climatic conditions of this section, the Messrs. Wolfskill, whose ranch of semi-tropical fruits is situated on Putah creek, about 14 miles north of Vacaville, are enabled, through the wonderful mildness of the winter and spring weather, to have their oranges for sale in the San Francisco markets a week—often two weeks—in advance of the orange-raisers of Los Angeles, and those who are judges say the quality of these Vaca valley oranges is excellent indeed.

These two valleys, which are essentially one, extending north from Vacaville to Putah canyon, 14 miles, are almost entirely free from both the cold winds and blasting hot winds

seminaries and one college are here located. The United States Arsenal has extensive buildings and grounds.

Fairfield, Suisun and Dixon are places of considerable importance—Fairfield being the county seat, and so closely joined to Suisun that they constitute virtually one town. They are the trade centers for the western and central portions of the county, while most of the trade of the upper section goes to Dixon.

At Rio Vista, on the Sacramento river, salmon fisheries are carried on quite extensively. The other towns of the county are Elmira and Batavia, on the railroad, and Collinsville, on the river.

The prices asked for unimproved land in Solano county vary widely and are regulated more by climatic advantages than by the character of the soil. A very large acreage is available for cultivation, and deep and rich enough to make farming profitable. In the warm valleys, where the fruit and grape interests are well developed, lands are worth from \$50 to \$250 per acre, according to improvements, and pay well even at these apparently high figures. In the northern part prices run from \$20 to \$50 per acre, and in the foothills as low as \$2.50 to \$10. The Government lands are on the hills, and, as a general thing, are not very desirable.

There are some 50 school districts in the county and about 5000 school children, an as-

mento valley and nearly in its geographical center. It is long and narrow, bordered the entire length (some 60 miles) by the Sacramento river, which is second only to the great Columbia, as an artery of commerce and navigation. The Feather, its chief tributary, also navigable, runs through and borders it for 30 miles.

Besides its water connections with Sacramento and San Francisco bay, the county northward from Yuba City is traversed by the California & Oregon Railroad. The California Pacific Railroad formerly penetrated it from the Knight's Landing direction and extended to Marysville, but that route was abandoned some years ago, owing to frequent interruptions and destruction of the track by freshets. Not a farm in the county, however, is over ten miles from water or railroad communication, and fully three-fourths of them lie within five miles of the public highways.

The soil of Sutter county is unsurpassed in fertility, and experience has demonstrated its wonderful adaptability to all the cereals. The better qualities of grain lands often yield from 30 to 60 bushels of wheat per acre. A careful estimate places the average annual wheat crop at 75,000 tons, and barley about half as much. In other products the crop is diversified according to wants and practicability. The yield of fruit from the river orchards is very large. The



OUT-DOOR LIFE IN CALIFORNIA.

county is embraced in the Coast Range foothills, which are specially adapted for grazing.

But Solano is best known as a grain-grower, having always been among the first wheat counties of the State, and having produced fair crops in seasons of extreme drought. Being close upon the bay, the moist, cool winds and fogs therefrom have operated greatly to the advantage of the grain crops when localities farther inland were suffering from lack of rain and from a scorching sun. Cheap transportation to market also has been strongly in its favor, as farmers have had the benefit of unlimited competition among small vessels.

Years ago, big ranches were the rule in Solano county, but of late these have been divided, and farms of 1000 acres and upward are not often met with. There is a steady and increasing demand for land in the more favored sections, and the county may be ranked among the most prosperous and promising north of the bay.

Fruit-growing, wine and raisin-making engage more and more attention every season. One of the oldest orchards in the State is located on the west side of the valley section, close under the protecting hills of the Coast Range, being the result of the early enterprise of John Wolfskill, a pioneer. From this orchard the market for many years received the earliest fruit of the season; but more recently the Vacaville section has been forcing its claims in this respect. Some of the finest and earliest cherries come from that locality, and within the last few years there has been a regular boom in lands thereabout. The PRESS of May 16, 1885, contained an article, by Prof. G. F. Foster, on Vaca valley, portions of which we reproduce below.

The climate of this region is unique, unlike

which sweep over the central plain. The winds from the Pacific, which come in through the Golden Gate and spread out like an enormous fan into the Sacramento and San Joaquin valleys, pass by the narrow opening into Vaca valley, leaving it and its fellow valley further north under the full influence of the sun. Though the climate of all this region is semi-tropical, it is, singularly, wonderfully uniform. The mercury in summer never reaches within 15 degrees of the extreme high point attained at Sacramento, nor does it ever in winter touch the low point of the same place. Even at Vacaville, where the temperature is somewhat affected by winds from the sea and from the north, there are never more than a few sharp frosts at the beginning of the year, while there are points in Vaca valley on the sides of the foothills where frosts have not occurred for years, for instance, at the ranch of Charles Martel, some six miles from Vacaville, where a tomato vine has been growing and bearing unhurt by frost for more than half a decade.

Vallejo, situated on San Pablo bay, is the largest town, having a population of 6500. It derives a large share of its support from the Government navy yard on Mare island, which employs from 500 to 1200 men. All branches of business are well represented. The buildings are substantial, and the Good Templars' Orphan Home is really an ornament to the place.

Benicia, on the Sacramento river, 35 miles from San Francisco, once the capital of the State, has a population of about 2000. It is favorably located for commercial and manufacturing purposes, and has made remarkable progress within the last five years. There is a very large manufactory of agricultural implements here, and four tanneries. Two female

surance that educational facilities are not lacking.

## Sutter County.

[Compiled for the RURAL PRESS.]

The State of California, as formed in 1849, included 27 counties. One of these was named Sutter, in honor of the pioneer, Gen. John Sutter, who was for several years among its residents. Part of its original territory has been acquired by Butte and Colusa counties, and the Sutter of to-day is bounded by Butte upon the north, by Yuba and Placer on the east, by Sacramento and Yolo on the south, and by Yolo and Colusa on the west.

The surface is generally level; but in the northern part the Buttes, a series of rough, craggy peaks, covering about four townships, rise to a height of some 2000 feet. Springing abruptly from the plain, they constitute a very interesting feature of that region.

In 1849 the county seat was established at Oro, on the bank of Bear river, but the following year, and before much settlement had taken place, it was removed to the village of Nicolaus, on Feather river. Six years later that honor was transferred to Yuba City, which still retains it. It is the largest town in the county, in the center of one of the most fertile sections of the State, and distant from the State capital about 50 miles. Yuba City is connected with Marysville by a long and substantial bridge across the Feather river.

The county has a peculiar geography, touching neither the Sierras nor the Coast Range mountains, but lying wholly within the Sacra-

orange, the lemon and the fig flourish alongside the apple, pear, peach, apricot, almond, nectarine, and grape in endless variety. Irrigation is not needed nor practiced, and yet at Christmas time the oak, the willow, the apple and other trees have not entirely dropped their green foliage. The rearing of domestic animals is receiving increased attention, and their number, value and pedigree are making gratifying progress.

Sutter, in proportion to its size, is one of the richest of the agricultural counties of the State, but of late years its farming area has been greatly restricted by the filling up of Bear river with debris from the hydraulic mines, which caused the river to overflow and deposit vast quantities of mining debris on the flat lands along its course. The damage resulting from this cause has been estimated at several million dollars; and to guard against further inroads by the destroying floods, the citizens of the county have raised vast levees. Wherever the land has not been injured by these deposits, however, it is of the first quality and yields heavily, and if there should be a permanent cessation of hydraulic mining, it is expected that large areas now seriously impaired by debris will again become valuable.

The old Mexican grants, under which a great portion of the land was originally held, have been segregated and settled up, until now the population numbers in the neighborhood of 7000. There is no Government land in the county, but in some localities private holders will sell at reasonable figures. There are still many large farms which, with an increase of population, will be cut into much smaller holdings; and a few acres of this rich soil, carefully tilled, can be made equal in value of production to a large farm in many parts of the East.



Land which to-day is selling at \$50 to \$75 per acre is cheaper than that in localities where it can be had for \$10 to \$20, and at the highest figure is equal in intrinsic value to what elsewhere brings from \$150 to \$200.

Like its neighbors, Sutter county is favored with a winterless climate and in healthfulness is unexcelled. It abounds in pleasant homes, and its people are among the most enterprising. Its taxable property has doubled in the past six years; it has long exhibited virtually no delinquent list—an unerring indication of solid prosperity—and claims greater wealth, per capita, than any other county in the State. It is assuming an importance in California's progress not dreamed of a few years ago. In all parts the settlers' cabins are giving place to elegant two-story comfortable farm-houses, some of them rising to the dignity of mansions, and all surrounded with an air of thrift and refinement. The citizens take great interest in educational matters, and the school facilities of the county are excellent and fully adapted to the requirements of the population.

### Tehama County.

[Written for the RURAL PRESS.]

Tehama county has an area of 2,000,000 acres. It has an east and west length of 78 miles, north and south of 38. It is the seventh county in wheat-growing rank, the fourth in wool; it has the largest vineyard in the world at Vina, where 3000 acres of the choicest varieties are grown under one management.

From foothill to foothill on the south it has 43 miles of arable land, and at northern boundary, but one mile less in width, all of which may be cultivated to cereals or fruit, and comprise a grand area of varied plant life, within which the State of Delaware might be placed with many acres to spare, and Rhode Island could find room without encroaching on the foothills, and all her people be provided with homes and land on which to supply their wants. This vast area is fringed on the east and west by noble mountain ranges teeming with a wealth of grasses and merchantable timber. Much of the land is rich bottom loam and level plateaus of deep soil, rich in plant food, while other lands are rolling hills very productive in plant life. Thousands of acres of productive lands lie outside of this at greater elevations, and in thermal belts high above the valley many small plateaus are found where frost is never destructive to the most sensitive fruits.

#### Fruits.

The fruit-bearing capacities of the county are beyond computation. All the fruits and products of the temperate zone and most of the semi-tropical fruits and plants are very prolific even with the least care and attention. Apricots, pears, peaches, apples, figs, olives, prunes, oranges, lemons, almonds, cherries, English walnuts, Italian chestnuts, nectarines, pomegranates, all varieties of grapes, berries, vegetables and melons are now produced at a handsome profit. The ablest horticulturists say that prunes, figs, olives and raisins will grow to greater perfection here than anywhere in California; while the most of other fruits are as well adapted to our soil and climate as to any other portion of the State.

#### Climate.

The United States Signal Service reports show for the three places—Red Bluff, Sacramento and Los Angeles—for the eight years last past the temperature to be as follows:

	Red Bluff.	Sacramento.	Los Angeles.
Lowest temperature.....	24°	22°	28°
Mean " " " " " " " "	64°	61°	65°
Rainfall 7 years average.....	27in	19in	12in
" " " " " " " "	28.42		

The percentage of rainy, clear, and fair days at Red Bluff for eight years last past is: clear, 60 per cent; fair, 21 per cent; rainy, 19 per cent.

The advantage of humidity Tehama possesses over Los Angeles is five per cent, thus rendering irrigation unnecessary except to increase the production, as in any soil or climate water will do.

Our county sent to Sacramento Citrus Fair in 1885, oranges, lemons, olives and pomegranates not from hot-house plants, but from trees grown in open air without any protection during their lives. The lemons were from trees 15 years of age that had borne continuously for years without a failure; the oranges in some cases have matured their fruits at three years after planting. They grow in the black loam of the bottom lands, and they grow on the red and gray hills of the highlands; their beautiful verdure is always the same, and the luscious fruit ripens in midwinter.

California fruits mature earlier than in most States, while Tehama comes in among the earliest in California, and in the future its bright climate and warm soils, its abundance of rainfall, will bring not only the earliest but the choicest fruits to the markets of the world. Thousands of acres peculiarly adapted to fruit culture can be purchased for one-fourth to one-half the price similar lands now bring in older settled counties.

He who will work can in a few years pluck the orange, the peach, or the fruit of his own choice from trees of his own planting, and eat

them under the shade of his own vine and fig-tree on land worth \$500 per acre, that cost him but one-tenth to one-fifth the money.

#### Antelope Valley.

Just east of Red Bluff, contains many thousands of acres of land that will grow fruit or grain, and every acre of it is susceptible of irrigation from the Sacramento river from Antelope, Payne's and Mill creeks, that run through the valley. Fine crops of grain are grown there now as elsewhere in the county without irrigation, and for a third of the century not a crop failure, but experience teaches that one-third can be added to a crop by irrigation. The flume of the Sierra Lumber Company runs through the valley, carrying its lumber to Red Bluff. The Antelope water company's mains also pass through this valley. Water, pure, cool and healthy, can anywhere be obtained at a depth of 30 feet.

By using some of this abundance of water berries of all kinds can be made very prolific, and some varieties kept bearing for nine months every year. A narrow strip of land on Deer creek, cultivated to fruit by Chinamen in a very imperfect manner, turns off about \$75,000 worth of dried fruit annually; better methods would double the yield, in the opinion of fruit men.

Wood is plentiful; lumber is made in the mountains and floated down in flumes to the valleys. Lumber will always be cheap and easily gotten in Tehama county. The hill lands are especially the home of the sweet grape. The raisin grape and the choice table varieties grow and mature in luxuriance. The wine grape, especially for the sherry and port wines, and most valuable for blending with the Sonoma and Napa valley grapes, on account of its great abundance of saccharine, arrives at greatest perfection on our hills.

The wheat product of 1884 was 3,000,000 bushels, with a large acre average.

The broad waters of the Sacramento river (at all times a large stream) receive and carry off the entire drainage of the county. Red Bluff, at the head of navigation, is a beautiful town of about 3500 people. The river and railroads bring means of cheap transportation to Tehama county. With such a stream no fears need ever be had of unjust freight charges, as the water is free alike to all men.

#### Streams, Forests and Game.

Tehama has a healthy climate. The Sacramento river, fed by mountain streams, the sources of which, lying in the high lands of the Sierra Nevada, whence they are ever receiving fresh accessions of pure, cool, limpid water, are mostly perennial. Their descent before leaving the mountains being very rapid, give immense power for driving mills or machinery, very little of which, however, is employed. The pine-covered mountains east and west send their cool breezes laden with health-giving tonics to the plains below. The streams abound with trout, pike and other varieties of fish, and the ubiquitous catfish, the salmon and sturgeon all appear in season, affording rare sport as well as cheap and nutritious food.

Red Bluff is the home of some of the most ardent sportsmen. It is but a few hours' ride to the finest deer-grounds in the State. Valley quail, mountain quail, grouse, rabbits, hare, duck and geese, and all in easy reach.

#### Natural Scenery.

Four hours' ride by rail brings us to the foot of Mount Shasta, whose crown is ever covered with snow, whose summit measures 15,000 feet above sea level. At the foot, wild flowers and grasses grow green and luxuriant, and sweet breezes forever blow. In summer never hot, the evening always cool, the lovely valleys spread around, the mirrored lakes that greet one everywhere, the grand old peaks, deep granite canyons, the green sylvan glens where stately trees sigh and nod their heads in the breeze, all invite to rest and invigorate the jaded system with new blood and increased energy, sending you back home, after a time there joyously spent, rejuvenated and ready to meet cares and work, happy and fresh—all because of your few days in this, the finest, grandest of Nature's summer resorts on the American continent.

#### Land Prices, Titles and Taxes.

From what has been said of Tehama county, it will be supposed that the lands of such a favored locality are too high priced for the average settler, whose small store of ready cash will be needed to lay out and start his new possession. But the prices are relatively and intrinsically lower here than in any other agricultural county in the State. No real estate boom has ever been attempted here, and values are founded on real returns and actual sales have been confined almost exclusively for years to actual residents of the county. The county has never had the benefit of advertising as most counties of California have; it has not made inducements for new residents; it has waited, knowing that time would make known its great riches and seekers would find it in the future. Good grain land, ready for the plow, can be had at from \$10 to \$25 per acre; good river-bottom land at from \$40 to \$70 per acre. Cheap lands can be had at \$5 per acre and some even lower, from which trees and brush must be cleared. Besides this there is Government land to be had as pre-emptions, homesteads and otherwise. But these are mostly remote from market and roads must be built to open them up. Where prices are so reasonable

it is better to purchase land to which title is perfected, unless several can go together in one locality and work in unison for roads and needed means of communication. But to all who wish to secure Government land, there are plenty of citizens who will assist deserving persons in finding and locating such lands. Titles are universally perfected. They come through Spanish grants, confirmed by the United States; by United States patents and State patents. Incidental, disturbing elements must be carefully inquired into, and no intelligent purchaser of land will pay out his money until he has submitted his title to an intelligent land lawyer for approval.

Taxes are light; for 1884 the State and county levy was \$1.55 per hundred dollars; the average assessed valuation of land was only \$4.44 per acre, thus making the taxes very light.

#### Money and Land Needed to Start With.

The information now given is sufficient to enable an intending settler in this county to determine quite closely what he may require and what it will cost. Much less money is required than in any other country, on account of the cheapness and productiveness of land. Most of it is clear of timber; where it is not, unless quite a distance from town, the timber will pay for removing it—no stones to remove, no drainage, fencing is cheap, the climate is so mild that houses and barns are cheapened; but few warm clothes are needed, all necessities of life are cheap, stock does not need either so much stabling or food as where the climate is cold. He who will work need not have a great deal of money, though the more one has the greater his opportunities. The right kind of a man may venture to start in on even a few hundred dollars, and by energy and intelligence win in the end. He can buy a piece of land and pay part down—say one-half—and if his means run short he can always find work at \$25 to \$30 per month, with board—during harvest season, \$2 to \$3 per day. Each different man and different business will require different amounts of land. If but one branch of business is followed, such as horticulture, fruit or grape growing, or vegetable gardening, and irrigation is practiced, from five to 40 acres will do. Where land is cheaper and no irrigation is attempted, and more varied industries pursued, a larger amount of land may be safely purchased at the start—say one, two, three or more hundreds of acres. On part, one may grow grain, pasture a few head of stock, on some cultivate his own vegetables and some root crop, raise a few head of hogs and chickens, all of which will give both occupation and an income until his orchard and vineyard come into bearing, and add materially to his income. This can all be done in Tehama county. The soil, the climate, the rainfall, the nearness to market, all insure success to the industrious and intelligent farmer.

Red Bluff, Cal.

### Yolo County.

[Written for RURAL PRESS by J. R. SPRINGER.]

As there does not seem to be any one else to write up Yolo county, I will make the attempt. In the first place, I think that the public at large knows but very little of this northern part of the State, and it is probably our own fault in not letting it be known through the PRESS as have our southern brethren, and they are now reaping the reward of their energy. Many localities in the far West from time to time have advertised their country for no other purpose than to get up a boom in land, and frequently the transportation companies are at the bottom of it, and exaggeration has been so great in some States that the country has been called the "Fools' Paradise," and rightly named. But those charges cannot be brought against us in California; for, while we invite emigration, we have something solid and substantial to offer, for it is apparent to any one that is at all conversant with this country that the population can be trebled without suffering any inconvenience.

While wishing to place ourselves squarely before the public, and not to appear to be engaged in a "wild-cat" scheme to our own benefit and the public loss, I have written this preface to my article; and now I will say some of the things that can be said of Yolo county, and might be said of many of our neighbor counties around us.

Our county is bounded on the north by Colusa county, on the east by Sacramento river. The counties bordering are Sutter, Placer and Sacramento. On the south is Putah creek and the county of Solano, and on the west the Coast Range mountains and the counties of Napa and Lake.

The principal streams that drain the county are Putah and Cache creeks, but there are numerous channels that carry the water off in the winter and are dry in summer. They head in the mountains west of us and run out on the level valley land and spread out and stop.

The greater portion of the county is apparently level, but has a slight inclination to the east. The western boundary of the county is on top of the first range of hills, and runs northwest on the west side of Cache creek for some distance in the mountains, making the principal part of the broken country of the county in the northwest corner. The hills on the west are very abrupt, making but little

broken land in comparison with the size of the county. The eastern portion, lying along the Sacramento river, is a tule marsh, covered with water in winter, where thousands of wild fowl gather and the sportsmen find plenty of sport, but dry in summer, and thousands of head of sheep and cattle find pasture after the feed dries up in the mountains. This strip of tule land is needed to carry off the overflow of the Sacramento river (as it extends to tide-water) and the drainage of the Coast Range mountains, as the banks of all the streams are higher than the surrounding country, and when the water once gets out there is no getting back till it reaches the tide-water of San Francisco bay. This marsh is from one to ten miles wide on the east of this county.

#### Soils.

The soils are adobe and a grayish loam in some places, mixed with sand. The adobe lies along the edge of the tule marsh for a mile or so wide, and in the west and southwestern part, lying along what is called Willow Slough, which heads at Madison, near Cache creek, and runs in a southeast direction for six or seven miles and then empties into the tules. The grayish loam soil runs from Dunigan at the north southeasterly to the southern part of the county, except where Willow Slough cuts through it. This belt is from 5 to 15 miles wide. The extreme southwestern corner is more or less mixed with fine sand and small gravel about the town of Winters, while along the streams of Putah and Cache creeks there is a sediment deposit that is a wash from the mountains, and is composed of a fine sand and a clay loam that is among the richest land in the county. Especially is this true near the sinks of the creeks, as the streams run out into the tules and spread out and lose their channels.

#### Rainfall

I have not the data in regard to the average, but there has only been but one time since the country was settled that it has suffered, and I have seen a good average crop of grain raised when the ground was not wet over one foot, and that year it rained about eight inches; but that is not of frequent occurrence. I should judge from the estimates made that 16 inches would be the average, and possibly higher. I think that I am safe in saying that this county will stand the lack of a heavy rainfall better than the upper Sacramento valley or the San Joaquin. We always raise a crop of everything we produce, but some years not so heavy as others. The extreme wet winters are not always the best for cereals, as too much straw is the result, which causes it to lodge, which makes it difficult to gather.

#### Temperature.

The temperature in the winter will average about 45°. The extreme lowest is about 23° above, and the highest probably 70°. It does not often reach either extreme. I have not seen it lower than 23° during the last eight winters. The summer average is about 60°; the extreme lowest about 50° and highest 110°, which is equal to 85° or 90° in the Atlantic States; and even at that temperature, which does not last long at a time, and only in the middle of the day at that, sunstrokes are unknown, and the heavy work of the harvest is done during that time. It is always cool in the shade and at nights. When the sun begins to drop over the western mountains, the temperature begins to fall; and when evening comes the heat has gone and a laboring man can awake in the morning feeling fresh and vigorous for the labors of the day, which is so unlike experience in the corn-growing regions of the Mississippi valley. Many come here and get well who were troubled with weak lungs and throat diseases, but, of course, there are some whom it does not agree with. The dry air of the summer is a certain specific for many who have contracted diseases in damp localities. There has not been for 20 years or upward any epidemics through the county, and were it not for persons that come here sick, our mortality list would be very small, and be supplied from age and high living.

#### Agricultural.

The principal business of the county is agriculture, and wheat takes the lead. It is grown everywhere, even on the lower foothills of the Coast Range, and on all kinds of soil, and yields abundantly. If prices were as prolific there would be no trouble, for every one knows the present depression in the wheat market. Still, the market will give a margin to the grower. Wheat and barley are the principal cereals grown in this county, but there are some corn and oats grown.

Stock raising is a very important business in the county. Horses, cattle, sheep and hogs are numbered by the thousands, and their growth is a very profitable industry. Alfalfa, the principal feed for stock, grows to perfection, and not only supplies feed for horses, cattle, sheep and the Angora goat, but supplies the place of the western corn for the hog. Many is the hog that gets into the slaughter pen which never saw any grain and nothing but an alfalfa field.

Fruits of nearly every kind grow here to perfection which are grown in semi-tropical countries. The vine, fig, pomegranate, orange, lemon, almond, olive and many other kinds, besides the apricot, plum, prune, peach, pear, apple, Japanese persimmon and cherries. How many other kinds no one knows, for I have yet

(Continued on Page 18.)



# CALIFORNIA WIRE WORKS,

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REGULARLY LICENSED MANUFACTURERS OF



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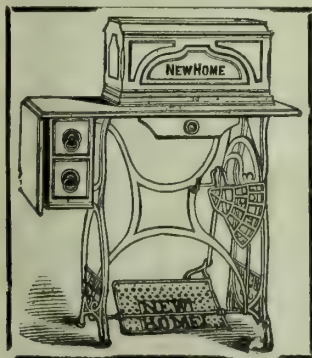
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IN UNOCCUPIED TERRITORY.

Best Stand,  
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Best Woodwork,  
Best Wearing.



## PORT COSTA WAREHOUSE & DOCK CO.,

LOCATED AT PORT COSTA, CALIFORNIA.

G. W. McNEAR, President and Manager.

THESE POPULAR WAREHOUSES ARE NOW READY FOR THE SEASON'S BUSINESS.

Storage 25c. per Ton per Month until Amounting to \$1, Balance of Season Free. Liberal Advances Made at 6 per cent per Annum. Insurance at Lowest Rates.

### SOME OF THE ADVANTAGES OF STORING WITH THE PORT COSTA WAREHOUSE & DOCK CO.:

PORT COSTA is the best market to sell; by having wheat on the spot, ready for immediate delivery, often enabling the farmer to secure a much better price than is obtainable for wheat to come in from the country, which is always uncertain on account of the difficulty to get prompt transportation.

The PORT COSTA Warehouses are regular for delivery of wheat sold on the Call Board. Frequently wheat is in demand for Call Board delivery, and brings much higher prices than wheat to arrive, as deliveries have to be made within five days after call, in lots of 100 tons, piled and inspected.

Wheat stored in the Country Warehouses must ultimately be shipped to PORT COSTA and incur extra expense if delivered on Call Board sales, which can be saved by shipping direct to PORT COSTA from the harvest field. Wheat at PORT COSTA, when on the market for sale, can be sold and cashed at once, with no fear of rejection or drawbacks of any kind, as the

grain is on the spot for inspection. Ship your wheat while the bags are in good condition.

Since the erection of Warehouses and Docks, by G. W. McNear, at PORT COSTA, millions of dollars have been saved to the farmers in freights alone.

Grain received from car or barge without extra expense of any kind to shippers, and prompt returns made. Each farmer's lot always kept separate.

Wheat will be piled in 100-ton piles, when requested, without extra cost, if notified when shipped.

Holders of wheat at this point have the full benefit of competition of all buyers for milling or shipping. We also have superior cleaning and smutting mills for the handling of all grades of inferior grain. Ship your wheat to Port Costa, care of G. W. McNear, and prompt returns will be made. No charge for weighing into the warehouse.

For further information apply to

**G. W. McNEAR, 306 California St., S. F.**



## Yolo County.

(Continued from page 16.)

to hear of any kind that has failed that has been tried; but fruits will not grow promiscuously as they do east of the Rockies, but every locality is especially adapted to some variety. While many localities may grow many kinds, there are others that can grow but few. The adobe soil in some places will not grow any kinds successfully but the pear, plum, apricot, fig and apple, while the gray loam will grow all.

This county has an irrigating ditch that takes water from Cache creek, which supplies water to the alfalfa fields around Woodland. Some fruitmen use it, but not as much as formerly, for men are learning that the best quality of fruit is raised without irrigation.

The vine will grow anywhere it is planted except the very poorest adobe land, and our raisins and wine have a world-wide reputation. R. B. Blowers, the man that took the premium at the world's fair at Philadelphia in 1876, lives at Woodland, and I think we can produce an article of equal quality yet. About the large grape yields that can be substantiated, it is useless to speak, as we wish to confine ourselves to matters that people will give credence to. However true those other matters may be, let people see for themselves when they come here.

## Educational.

Our standard of education in our common schools is much higher than any other State I know of, and we have a college at Woodland, the county seat, called "Hesperian college," with always a good corps of teachers, and which has turned out many of our best men of this coast. In fact Woodland can rightly be called an educational town, as it has three large public schools besides the college. The facilities for learning are not any better anywhere than here, and people avail themselves of them. We are a reading people and will very favorably compare with many of the older portions of the East. This coast is not heathenish, as is said of us in the East, as those who know us can testify. All the towns in the county are well supplied with churches; Woodland has seven, and other towns in proportion to population, and they are usually well filled. Only (in this inland county) during the warmest part of the summer, while many go to the mountains and mineral springs, can any noticeable falling off in numbers be observed; and I will say that religion is not so much worn on the coat sleeve, but goes down into the pocket and feels sorry in dollars and cents for the needy and unfortunate.

We will say to all who have been looking toward this coast for some time in view of giving us a visit: "Come and see us." You are welcome; we will treat you well. We are desirous of a good, solid, substantial element in our population that, with us, will help develop the great resources of this golden West.

## Towns.

The principal town is Woodland, the county seat in point of numbers, with about 3500 population. Winters is located in the southwest, Madison in the west and Dunnigan in the north, Cacheville in the center and Knights Landing on the Sacramento river, nine miles northeast from Woodland. All are railroad towns. Davisville in the south and Washington in the east I forgot to mention. Woodland has two daily papers, the *Mail and Democrat*, and five hotels, the Byrnes not much behind the finest in the State. There are two banks, Bank of Woodland and Bank of Yolo; two water works, one flouring mill (steam), ice works, gas works, two wineries, one brewery, two planing mills, three warehouses. Main street is lighted by electricity.

## Prices.

Land will run from \$10 to \$150 an acre outside of town limits, and there are large tracts in this county that are being divided up into small ones, and sold to settlers desiring to engage in fruit culture. There is land where I live that can be bought or leased for a term of years to either raise vegetables or fruit.

If my description seems to be incomplete, the fact of my being engaged in horticulture and not used to writing will account for it.

Woodland, Cal.

## Fruit Drier on Exhibition.

One of the Meeker Sun Fruit Driers, with all the latest improvements suggested by the experience of last season, is now on exhibition at the factory, 5th and Bryant streets, on and after Monday, Jan. 25th.

As now arranged we consider it much the most perfect and economical of any of the various driers to which the attention of fruit-growers has been called. Its various productions are the perfection of purity and excellence, and at the same time the most economical in cost of production. Fruit-growers are invited to examine and test the drier and the fruit prepared in it. Those using this drier last season realized handsome profits on their fruit.

## Consumption Cured.

An old physician, retired from practice, having had placed in his hands by an East India missionary the formula of a simple vegetable remedy for the speedy and permanent cure of Consumption, Bronchitis, Catarrh, Asthma and all throat and lung affections, also a positive and radical cure for Nervous Debility and all Nervous Complaints, after having tested its wonderful curative powers in thousands of cases, has felt it his duty to make it known to his suffering fellows. Actuated by this motive and a desire to relieve human suffering, I will send, free of charge, to all who desire it, this recipe, in German, French, or English, with full directions for preparing and using. Sent by mail by addressing with stamp, naming this paper, W. A. NOYES, 149 Power's st., Rochester, N. Y.

## Yuba County.

(Compiled for the RURAL PRESS.)

Lying obliquely southeast of Butte, east and north of Sutter and bordered more or less by the western limits of Placer, Nevada and Sierra counties, is Yuba. It includes nearly 400,000 acres, of which fully one-half are foothill lands, and 175,000 valley, largely under tillage. It is amply watered by the Yuba, Bear and Feather rivers and their tributaries. Springs are abundant and well-water is easily obtained. Timber covers the mountain sides in the eastern portion. Fuel is plentiful in every township. Sand and limestone abound in the hills, and bricks are made everywhere.

Yuba, now classed among the agricultural sections, was formerly a mining county. For several years following the discovery of gold in this State, it had a large and busy population. In the foothills and along the rivers and gulches thousands of men were engaged in digging for gold; but placer mining began to decline about 1856, and Yuba, like nearly all the other mining districts, at once experienced a falling off in the number of its inhabitants. This decrease continued for some years, until new and permanent industries were established, and the character of the population had greatly changed. In the mountain and foothill section of the county, notably at Smartsville and in that vicinity, hydraulic mining, which superseded the placer system, was, until a year or two ago, maintained on an extensive scale. But as this system had entailed immense injury to the river channels, destroyed a vast area of agricultural land in the valley, and seriously threatened the

12 years, and is still rapidly appreciating. The city is handsomely laid out, and contains many fine residences, public buildings, schools, etc. In the days of its prosperity it was regarded as one of the prettiest towns in the State, and it hopes soon again to claim that credit.

Other places of note are Wheatland, the center of a rich agricultural district, and one of the most prosperous of the smaller towns, with 700 inhabitants; Smartsville, Camptonville, Strawberry Valley, Brownsville and Timbuctoo.

The famous Briggs orchard, whence came the chief fruit supply of the State 25 years ago, was located in the southern part of the county, on the bank of the Yuba. As long ago as 1860 this orchard contained nearly 70,000 peach, 6000 pear, 4000 cherry, 30,000 apple, and 16,000 other fruit trees. To-day its site lies buried under 15 feet of slickens, on which the chief vegetation is a wilderness of willows and cottonwoods. In order to overcome the effects of this filling of the rivers from mining flow, the levee system of the county has been brought to a high state of perfection. Vast sums of money have been expended to bring the levees to their present serviceable condition, and it is believed that little or no danger exists of future overflows. The Yuba river is said to have had a great quantity of its debris washed out the past winter, thereby increasing the carrying capacity of its channel, and this cleaning out and deepening will continue each rainy season, with increased protection afforded by the levees.

Severe as has been Yuba's experience in the past, we trust there is a bright future in store for her. There are for sale within her borders large areas of cheap foothill lands, well adapted to all the fruits. There are several thousand acres of vineyards in the county, in which all the grapes of the world grow to perfection.



SOURCES OF STREAMS - OLD MINERS' DITCHES USED FOR IRRIGATION.

existence of Marysville, the chief city of the county, suits were instituted to enjoin the operating of these vast hydraulic mines. After long, tedious and expensive litigation in the State and Federal Courts, the famous Sawyer decision was rendered in favor of the plaintiffs, and as there seems to be little if any probability that it will ever be reversed by the United States Supreme Court, the business of hydraulic mining may be considered as practically at an end. Outside of these mines, and some small manufacturing enterprises, the main business of the population is that of farming and horticulture. The valley and such of the bottom lands as have escaped injury from the flow of debris are very fertile and produce enormous crops of wheat, barley, oats, corn, hops and the whole range of vegetables. The foothills, which formerly swarmed with miners, are regarded as specially adapted to horticulture. All the fruits of the semi-tropics are produced at an elevation of 1000 feet above tide-water. There are a thousand bearing orange trees in Marysville. Sicily and other kinds of lemons are grown. Fig, olive, and all the nut-bearing trees flourish.

The whole population of the county is about 14,000, 6000 of whom are found in Marysville, the county seat, at the junction of the Yuba and Feather rivers. As early as 1852 3 several flouring mills were in successful operation in the wheat-growing section, and in 1867 a woolen mill was established in Marysville, which turned out as high as \$200,000 worth of goods in a year. It is still in successful operation, and its products stand high in market. In the same city several large foundries have been maintained, the bulk of their business coming from the mines in Yuba and other counties. In early days there was considerable steamboat traffic between Marysville and Sacramento, but this has greatly declined since the California & Oregon Railroad was constructed to that city and across the county. Occasional trips are, however, still made between these points, and even between Marysville and San Francisco, by small trading steamers, but the bulk of the business is done by rail. For many years Marysville was at a standstill, owing to the constant danger apprehended from flooding in consequence of the filling up of the river channels with debris; but, since the decision of the Federal Court perpetually enjoining hydraulic mining, this has been greatly changed, and it is claimed that real estate there now commands higher values than it has done in the last 10 or

swimming rink, dining hall and spring house, and during the warm months present a scene of stirring activity, when the tourist, the traveler and invalids long to leave the crowded walks and heated atmosphere of the city and seek rest and repose in the secluded haunts of nature. The natural scenery and surroundings of this quiet retreat are all that the lover of nature could desire, being situated in one of the most beautiful and charming of Napa county valleys; one which possesses rare attractions of climate and scenery. It is like a gem set in the bosom of the evergreen mountains, giving one an ideal picture of the "sweet vale of Avoca," with its winding streams spanned by rustic bridges, its curving roads, well-kept, and affording pleasant drives, revealing glimpses of comfortable farm cottages, half hidden by waving trees and orchards. The green and fertile fields are broken by mountain spurs and hill pastures, whereon feed flocks of sheep, herds of fat cattle and bands of horses. Among the surrounding mountains, and within a radius of a few miles, are various other health resorts—Walters Springs, Samuel Springs, and Anguin's-on-the-mountain—all more or less patronized for the curative properties of their mineral water and the invigorating influence of mountain air, etc.

The moderate price of land and the ease with which homes are obtained by persons of limited means, is due to the fact that as yet the iron progenitor of progress—the railroad—has not penetrated this section. It is, however, hoped that in a short time this disadvantage will be overcome, as interested parties with the necessary capital are now engaged in taking preliminary steps toward the building of a railroad, to run from tide-water through portions of Napa valley and Chilis valley, traversing Pope, and continuing into the heart of Lake

county, piercing its rich valleys, and famous mineral regions.

## Howell Mountain.

Rising above the valley and partially encircling it is the beautiful and evergreen mountain of Howell. Along its green-crested sides and rising higher and higher until we reach its pine-fringed summit, the might of man has cleared in places the forest of its heavy growth, revealing the dark, loose and fertile soil. Many sweet and comfortable homes nestle amid its pine-crowned heights, and midway up its verdant slopes is located the semi-tropical or thermal belt. Here flourish citrus fruits—the orange, lemon, fig, and, unsurpassed in richness of flavor, the purple clusters of the vine. Many acres of vineyard and orchard are planted, and many more acres of evergreen forest wait for strong arms and brave hearts to hew homes in this enchanting wilderness. The climate is uniform, the summer heat is tempered by the invigorating breeze from the ocean. Out of the reach of fog, out of the track of the north wind and above the frost belt, its attractions can scarcely be enumerated. Among its frowning chasms and aerial peaks is some of the grandest and most romantic scenery in Northern California.

To the traveler, the tourist and health-seeker, and lastly, though not least, the emigrant, in search of a pleasant location and comfortable home, this lovely valley and its circle of mountains with their many advantages of soil, climate, productions, beauty of scenery, rural retreats and health resorts, offer better inducements and finer opportunities than many older settled and better known sections.

## Don't Fail to Write.

Should this paper be received by any subscriber who does not want it, or beyond the time he intends to pay for it, let him not fail to write us direct to stop it. A postal card (costing one cent only) will suffice. We will not knowingly send the paper to anyone who does not wish it, but if it is continued, through the failure of the subscriber to notify us to discontinue it, or some irresponsible party requested to stop it, we shall positively demand payment for the time it is sent. LOOK CAREFULLY AT THE LABEL ON YOUR PAPER.

## Cheap Money for Farmers.

Farmers in this State will be glad to learn that they can borrow on mortgage any amount, from \$5000 to \$500,000, from S. D. Hovey, 330 Pine St., San Francisco, at 6 to 7 per cent and taxes.



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In Valley and Foothills.  
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**740-Acre Stock Farm, Vineyard and Orchard;** two-thirds can be irrigated. Situate 4 miles north of Folsom. Large orchard and vineyard in full bearing; good crop of alfalfa; will be sold cheap. **GREAT BARGAIN!** Could be divided into 10 good farms of 74 acres each. Call at once for particulars. Price, \$28 per acre.

**130 Acres.** Thirty thousand bearing grapevines and 300 assorted fruit trees, with abundance of timber, and 20 acres alfalfa. One mile from Folsom. One of the best homes in California. Price, \$7500; ½ cash.

**160 Acres Best Fruit Land,** one mile east of Loomis. Great bargain. \$45 per acre.

**160 Acres.** Thirty acres in vines; all good fruit land, 6 miles N. E. of Folsom. \$4000.

**80 Acres.** Best fruit land, near Ophir; well improved, with best quality of fruit trees and vines. Price, \$4500.

**40 Acres.** Same character and similarly improved, and adjoining the above, both situate in Ophir, Placer county, Cal. \$2500.

All of the above are capable of irrigation; will be sold cheap.

**1007 Acres,** on the east bank of the Sacramento River, at Kirkville. Finest soil in California. \$75 per acre.

**480 Acres Grain Land,** 11 miles southeast of Sacramento. Improved, with crops, well fenced and good buildings. \$35 per acre.

**160 Acres Improved Land,** with crop. New two-story frame dwelling, large barns, granary, sheds, etc., with 5 acres of orchard and vineyard. Nine miles southeast of Sacramento. Price, \$6000; ½ cash.

**160 Acres,** 4 miles southeast of Florin, Sacramento county, improved, with 16 acres bearing vines, etc. \$30 per acre.

**257½ Acres Improved Land,** with buildings. About 60 acres meadow; sufficient timber for ranch use; all good grain land, abounding in living springs of sweet, clear water. Situate two miles west of Shingle Springs. Price, \$7000; ½ cash.

With many other smaller farms. Also, 9000 acres Hay Land in Lassen County, 3000 acres other lands adjoining, commanding 20,000 to 30,000 acres best quality outside range, making the best cattle range in California. An abundance of good water. All well fenced with barb wire on juniper posts. This is the celebrated Meadow Ranch. Besides a great number of dwellings and city lots situate in the city of Sacramento. \$50,000.

All the above lands are for sale cheap and title guaranteed.

Call and get information at office, Room 8, up stairs, Bryte's Building, southwest corner J and Seventh Sts., Sacramento.

For information, address

**B. N. BUGBEY,**  
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P. O. Box 204. Sacramento, Cal.

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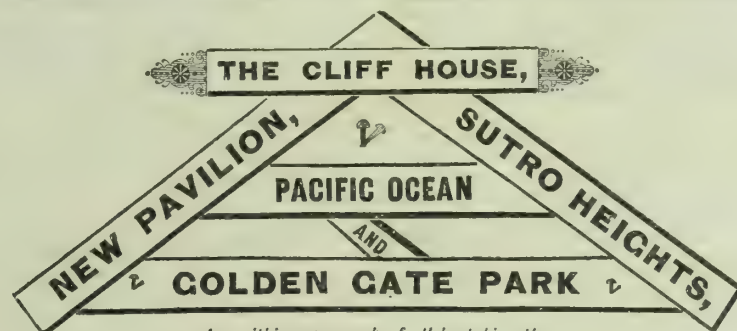
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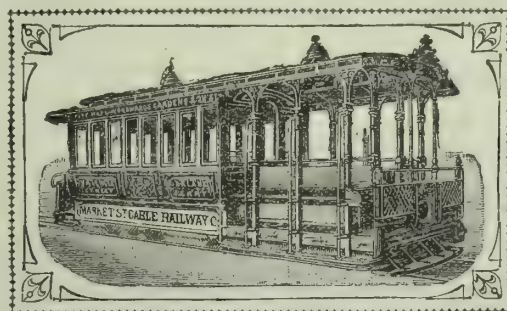


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The various lines of which run from foot of Market Street nearly the entire length of that great THOROUGHFARE.

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lands passengers at the Stanyan St. entrance of GOLDEN GATE PARK and directly opposite to

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### HIGH-CLASS POULTRY.

Clean sweep on Plymouth Rock Chickens at Great California Poultry Show at San Francisco, Jan. 11th to 16th, 1886. The Best is the Cheapest. Illustrated Catalogue sent free on application; worth \$1 to any breeder of poultry. Send me your name on a Postal Card; 5000 copies of fine Illustrated Catalogue for free distribution.

## LANGFORD COLONY.

## Homes amid Fruit and Flowers.

The Langford Colony has been located on the rich alluvial soil of the Mokelumne Valley, two miles from the flourishing railroad town of Lodi; one mile from Harmony, a station on the San Joaquin and Sierra Nevada Railroad, on the bank of the Mokelumne River.

The soil of this Colony produces Corn, Alfalfa, all kinds of Vegetables, every Fruit of the Temperate and Semi-tropic zones; all of the nut-bearing trees; without irrigation.

It is the favored home of the Peach, Apricot, Orange, Lemon, Fig, Wine, Table and Raisin Grape.

This land will be sold in quantities to suit the purchaser, on time, at low rates of interest.

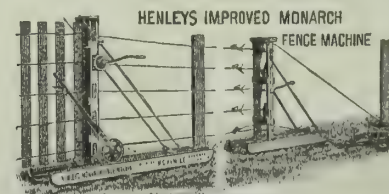
A settler here can support himself from the first day of location, and in two and one-half years can have an independent income.

For soil, water, climate, market, school and church facilities, this Colony has advantages superior to any ever offered the home-seeker.

Orchards and Vineyards on land less fertile than this yield from \$300 to \$500 per acre.

SEND FOR PAMPHLET.

**CHAS. R. PARSONS,**  
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HENLEY'S

**Monarch Fence Machine,**  
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With one of these Machines a farmer can build his own fence cheaper and better than he can buy it, or make it by hand. TRY ONE. Send for Catalogue.

OSBORNE & ALEXANDER, Agents,  
628 Market Street, San Francisco  
Mechanics' Tools,  
Hardware, and Machinery.

### FOR SALE.

Berkshires, old and young, registered, at farmers prices. Jersey Bull, 5 months' old, solid faun, very large; also A. J. C. Bull, fashionable strain. Inquire Room 28, Merchants' Exchange, San Francisco.



## Stockton Notes.

[Written for the RURAL PRESS by MRS. W. D. A.]

June 12th the hardest norther ever known in June blew, twisting and lodging heavy grain into tedious cutting, and rattling out the brittle but juicy heads from three to five bushels to the acre, and snapping off many heads from the tall, slender straws. It was well that grain was so much advanced, for it shrunk late sown.

These longest days of the year, the weather is breezy and comfortable.

Harvest has begun. The resolute army has gone forth with combined machines and headers to the ingathering of the greatest harvest since 1880. It is estimated to take 4000 mules to cut the crop of the State. Truly, "there is work and bread for all; and the sun shines always there." And it does shine always here, if any place on earth. Bread is cheap; work is plenty for patient, saving workers. Clothing is cheap, and summer calls for little.

Houser, Mingos & Shippe's harvester factory, the largest on this coast (doubtless largest in the world), has sent out all machines made this year. Holt, Myers and other shops have machines running to the great satisfaction of owners. Harvesters in good grain average 300 sacks daily with five men and from 16 to 18 and 20 horses, cut for \$2 an acre and waste far less than headers, though they are still used by owners and where many trees are in fields, and because all harvesters do not dump the straw for stacking.

No fires have occurred. Much grain is turning out better than expected; other a little less. The bulk of the crop is not insured, though many have deemed it necessary because of careless tramps. Wheat is worth only \$1.20 per cental.

Butter is worth from 15 to 18 cents. It is a good thing that Congress has taken time to hear the people; that the House has passed the bogus butter bill with five cents a pound tax, and the Senate dare not do otherwise, for maker and consumer have been cheated long enough, and the making of tallow butter diminishes the number of cows kept, consequently runs down the farms.

A word about gardens possible here, this and many other years, with a little watering: Peas put in the first October rain, on table April 6th—last year, April 2d; cabbage, 10th; beans and potatoes, May 15th; cucumbers, June 12th; corn, June 18th—fine ears without worms. Onions sown November 1st and set and watered in May, Yellow Danvers and Silver Skins will be large August 1st. Of course, some years, frost may nip corn, tomatoes, cucumbers and squashes. Striped beetles always come the last of June, and late beans and vines have to be dusted with ashes, air-slacked lime or dust, and given plenty of water. I save Hubbard squashes thus for plenty in winter; cut the last one for pies June 22d.

The 23d the city voted on putting the liquor license up to \$50 a month. Strenuous efforts were made on both sides, but saloons, by "a flowing matter of whisky," won by 350 majority; 2100 votes being cast. Some best citizens voted against it, urging that if men wanted to make beasts of themselves they would get it somehow. This may be so, but it would shut up some of the doggeries that draw into their toils the weak with their earnings. Ice-water, cake and ice-cream were furnished by ladies, so that none need go to saloons. If women could, the city would soon be rid of these vice-breeding retreats. No sadder sight is seen than men standing around the many fine saloons that line Main street. Ninety-seven licensed saloons flaunt in Stockton.

Dr. W. H. Mays, Superintendent of the State Insane Asylum, in a recent article, says 25 per cent of the insane are drunkards, and that it costs \$150 to keep a patient a year, and that most inebriates live years but are rarely cured, dementia usually succeeding. Not less than 80 inebriates are cared for in this asylum year by year, at a cost of \$12,000 a year.

Spellman & Knealy, of Stockton, are to build the Gridley monument, theirs being the lowest bid—\$1776. Something over \$1400 was raised last year and put at interest, so that less than \$300 will have to be raised. The dedication will be next Decoration day. The State ought to help the family. The following has been introduced in the House of Representatives by Hon. Jas. A. Louttit:

A BILL—To compensate Reuel Colt Gridley for services rendered during the late war.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of the Treasury be, and is hereby, authorized and directed to pay to the heirs of Reuel Colt Gridley, late of California, the sum of \$10,000, out of any sum now in the Treasury not otherwise appropriated, to compensate the said Reuel Colt Gridley for the amount expended and services rendered by him during the late war in raising funds for the benefit of the United States Sanitary Commission.

Cautious citizens and the City Government, as the Court-house, jail and Hall of Records are to be built and the delinquent tax-list printed, decided not to incur the expense of celebrating the Fourth, but the firemen determined to parade and with fireworks flame through the sky the story of 1775.

Stockton Parlor, Native Sons, have taken the grand old day into their hands, too, and mean to have a nice celebration.

The bill to legalize trades unions was passed

in Congress, so we have an authorized body here.

Anti riparian and riparian rights are all the talk now—a mighty subject with many sides. The riparians are willing that a part of the waters should be taken for irrigation, but not for monopoly. An Anti-Riparian Club is organized here, which claims that the cattlemen monopolize the waters of most of the State.

Stockton, June 26.

## Small Farms.

A reader of the RURAL, at Selma, Fresno county, asks us to publish the following:

SELMA, Fresno Co., Cal.

EDITOR IRRIGATOR:—I noticed an article in the Bulletin of the 5th inst., headed "California Lands." The writer says: "Could small tracts of 20, 30 or 40 acres be readily obtained, the State would at once receive a considerable increase in population, for small farms are being sought for, but few are being found. We think such statements as this should not go unchallenged, as they tend to stop the influx of immigration to California."

I traveled all the State south of San Francisco last fall, and have been from San Francisco to Los Angeles within the last month and found no scarcity of small farms; in fact, nearly all the valley land upon which water can be got in Los Angeles, San Bernardino and San Diego counties is being sold in small tracts, the prices of which certainly rule high; but Fresno and Tulare counties have thousands of acres divided into small tracts, and would have much more if there was any demand, the general opinion being that the supply is so much greater than the demand that it does not pay to subdivide, because a man has to wait so long for purchasers and give such good terms to secure sales. Here in the southern part of Fresno county there are colonies being founded where land can be bought in tracts to suit over five acres, very reasonably, and some of it will be sold without any payment, the purchaser contracting to build and improve, and paying seven per cent for five years on the purchase money, so that men of very small means can procure good homes, and there are thousands of acres of land that can be rented for wheat at one-fifth the crop. Of course there are also lands in small tracts for sale in the northern part of the State, but the irrigated counties take the lead, as they are essentially adapted to the cultivation of small farms.

But so long as people will stay in San Francisco and Los Angeles and wait for what they have not energy to inquire about or hunt up, so long will there be a scarcity of small farms, and plenty of people to write such paragraphs as the above mentioned, which are calculated to do great harm to this State: like the old cry which went to the East that all California was in the hands of large holders and the prices of land were high. Such statements may apply to certain portions of the State, but when applied to the entire State are falsehoods, which ought not to be allowed to go out to the world as truths.

L. S.

In accordance with the above we would state that this excessive demand is not for small farms unimproved but for well-improved places. There are but few improved places for sale; the owners, knowing their value, hold them at a very high figure or will not sell at all. As the writer of the above says, there are plenty of small tracts of unimproved land to be had at a very low price and on reasonable terms.—Selma Irrigator.

## Sacramento Notes.

Mr. Van Gelder, of C. W. Reed & Co., the well-known Sacramento nurserymen and fruit-shippers, dropped into our sanctum one morning last week. Their firm, he remarked, plants everything with a view to shipping—no bing for canning or drying. Speaking of the season's yield in Sacramento county, Mr. Van Gelder put apricots at a quarter crop. Growers there have given up planting Moorparkes and the Peach 'cot is now the favorite. Peaches will scarcely exceed half a crop. The varieties chiefly raised are California and Early Crawford. Of pears, plums and prunes an average quantity is looked for, the stone-fruit, however, being not so heavy as last year. Grapes are doing finely and give the same generous promise as in other districts.

John Miller, of Walnut Grove, was in Sacramento June 24, and informed the Record Union that reports published concerning the lower Sacramento river country were hardly as favorable as the facts warrant. While the fruit crop is short, the better prices being paid on account of numerous buyers will make the income to growers very satisfactory. Fruit-shippers are paying, in entire crop lots, to be delivered on river bank in crates, for peaches, three cents per pound and upward, and for prunes \$1 per box and more.

The tules are fast becoming dry enough to be plowed, and within two weeks will be put out to beans, potatoes and barley.

## Take a Receipt.

ALWAYS TAKE A RECEIPT from a newspaper agent. Not simply because a few out of many are tricky or careless, but because accidents will sometimes happen to the best of business men. It is a favor due to the publisher that every subscriber shall take a receipt from the agent, or clerk whom they pay. All our receipts have a corresponding stub which agents are accountable for and are required to return.

## About Obtaining Patents.

## Patents are Virtually Contracts.

The Patent Law provides that in case a patent, which is the evidence of the contract, is not executed in compliance with the requirements of the law, it may be annulled and rendered void. Hence, it is of the greatest importance to every inventor that his patent or contract be skillfully and accurately drafted, in order that it may afford him complete protection for his invention during the life of his patent.

## Secure a Good Patent.

An inventor should first ascertain whether or not his improvement has been patented to another. This requires an exhaustive search among all the patents in the class to which the invention relates. If, by this "preliminary examination," the improvement is found to have been previously patented, the inventor will receive, for the small sum of \$5 for the examination, a verbal or written report showing definitely wherein his invention has been anticipated, thereby saving him further expense and perhaps much time, anxiety, etc.

To avoid all needless delay, however, and secure patents at the earliest moment practicable, inventors will do well to forward a model, drawing or sketch, with a plain, full and comprehensive description of their invention (stating distinctly what the particular points of improvement are), with \$15 as a first in payment of fees. If the improvement appears to us to be novel and patentable, the necessary papers for an application for a patent will be prepared immediately and forwarded to the inventor for his signature. When he receives the application and finds it duly prepared, he will carefully sign and return the same plainly addressed to us, with postal money order or express receipt for our own fee. The case will then be promptly filed by us in the Patent Office, and vigorously prosecuted to secure the best patent possible. [This course is the most expeditious and satisfactory, as no time is lost in transmitting correspondence relative to the preliminary steps.] When the patent is allowed the inventor will be duly notified, and on sending the final Government fee of \$20 to us, we will order the issue of the patent, and forward the same as soon as it is secured from the Patent Office.

The payments are thus divided and made easy. We make no pretense of doing cheap work, in order to entice custom, nor do we afterward make additional charges to bring the bill up to a fair compensation. We do our work honestly and thoroughly, and we never give up a case so long as there is a chance of obtaining a patent. The Agency charge, including drawings, rarely exceeds \$40, and for this we do all we can without appealing the case.

## Models and Drawings.

Models are now seldom required by the Commissioner of Patents, and generally only in intricate cases. Perfect drawings of practical working machines are more satisfactory to the Patent Office than the old cumbersome system of storing up an immense bulk of countless models.

Drawings or sketches, sufficient to illustrate the invention clearly, with a description that will enable us to make a full set of perfect drawings for the Patent Office, is all that we require. A model will answer our purpose as well, however, in cases where the inventor can more easily furnish it.

The value and even the validity of a patent often depends on the character, clearness and sufficiency of its drawings. There are thousands of existing patents in which the improvements are but partially or poorly illustrated in the drawings. When an attempt is made to dispose of such patents, the vagueness and defects of the drawings oftentimes prejudice capitalists and manufacturers against the invention, while in reality it may be of great value, and would meet with ready sale had it been skillfully, completely and artistically portrayed. In all cases prepared by us, the drawings are made under our personal supervision, by skilled draftsmen in our constant employ, and every precaution is taken to have the invention fully and clearly shown by different views, so that the improvement will be readily understood by the Examiners in the Patent Office, and comprehended by the public when the patent is granted.

## Advantages to Inventors on the Pacific Coast.

The firm of DEWEY & Co. has edited and published the MINING AND SCIENTIFIC PRESS continuously since 1860, a period of 25 years. Few agents, who are still engaged in the business, have had so long extended practice in patent soliciting. The members of the firm give personal attention to the application entrusted to their care; and their familiarity with inventions and with local affairs in the Pacific States and Territories, enables them to understand the wants of inventors on this coast more readily and thoroughly, as we believe, than any other agents in America. Thus there is saved a great deal of the time which ordinarily—when a stranger agent is employed—is wasted in preliminary writing back and forth.

This happy combination of long business experience together, and wide connections, has placed our firm in a position unquestionably most fortunate for affording inventors prompt and reliable advice, and the best facilities for securing their full patent rights with safety and dispatch at uniformly reasonable rates.

Every patentee of a worthy invention is guaranteed the gratuitous publication of a clearly-stated and correct description of his invention, in one or more of our influential and reliable newspapers, affording just the circulation best calculated to widely inform the class of readers especially interested in the subject of his invention.

## Caveats.

A Caveat is a confidential communication made to the Patent Office, and is therefore filed within its secret archives. The privilege secured under a caveat is, that it entitles the inventor to receive notice, for a period of one year, of any application for a patent subsequently filed, which is adjudged to be novel and is likely to interfere with the invention described in the caveat, and the inventor is then required to complete his application for a patent within three months from the date of said notice. Caveat papers should be very carefully prepared. Our fee for the service varies from \$10 to \$25. The Government fee is \$9 additional. To enable us to prepare caveat papers, we require only a sketch and description of the invention.

## Rejected Applications.

Inventors who have rejected cases (prepared either by themselves or for them by other agents) and desire to ascertain their prospects of success by further efforts, are invited to avail themselves of our unrivaled facilities for securing favorable results. We have been successful in securing Letters Patent in many previously abandoned cases. Our terms are always reasonable.

Inventors doing business with us will be notified of the state of their application in the Patent Office whenever it is possible for us to furnish such information.

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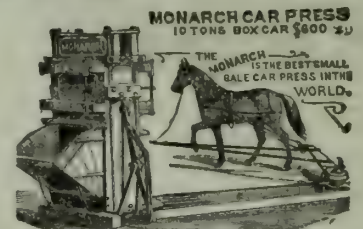
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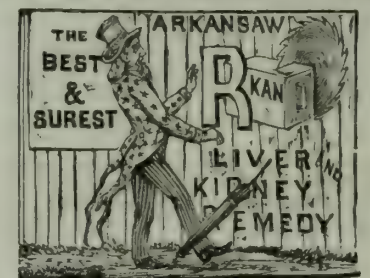
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## TWENTY-FIRST

## Mechanics' Institute Fair,

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LIBERAL PREMIUMS of Gold, Silver and Bronze Medals, Diplomas and Cash will be awarded. Members of the Institute entitled to Season Tickets at half rates.

PRICES OF ADMISSION—Double Season Ticket, \$5; Single Season Ticket, \$3; Adult's Single Admission, 50 Cents; Children's Single Admission, 25 Cents.

Full information given or sent on application to the Assistant Secretary, 31 Post St.

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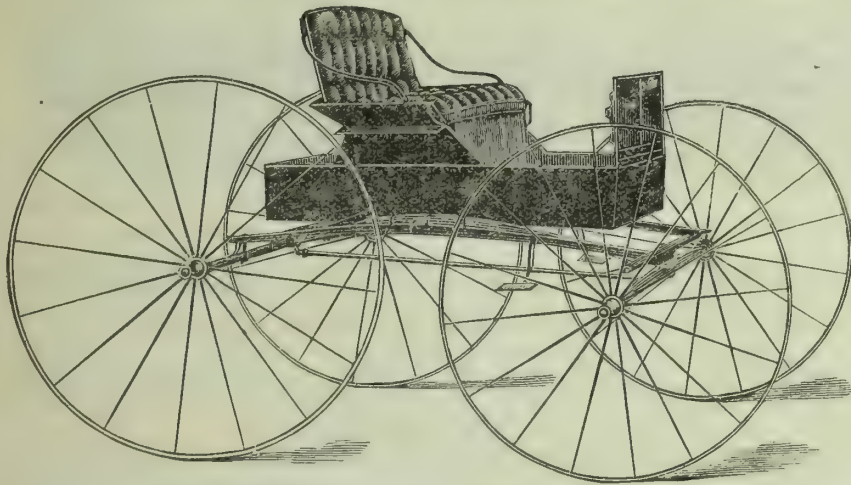
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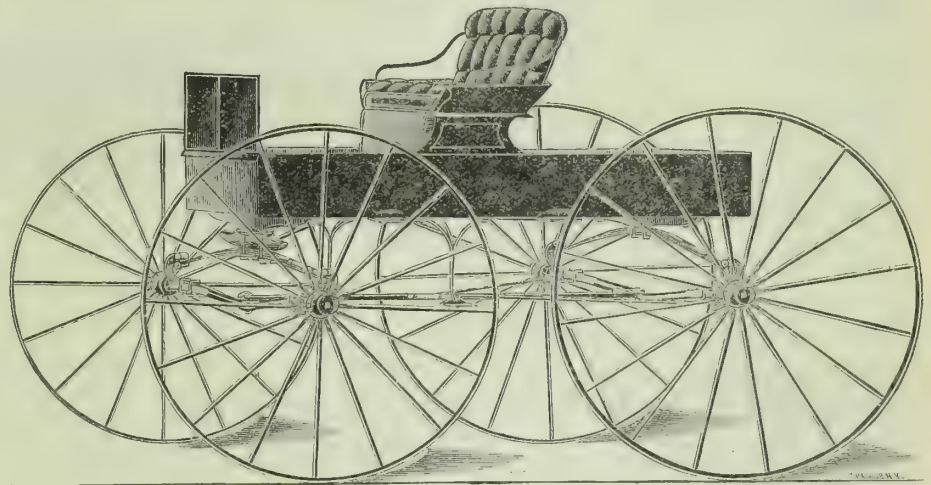
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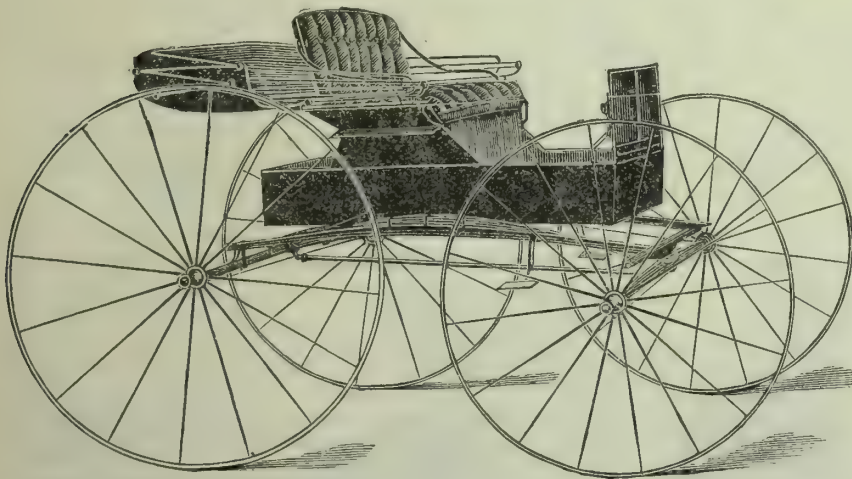
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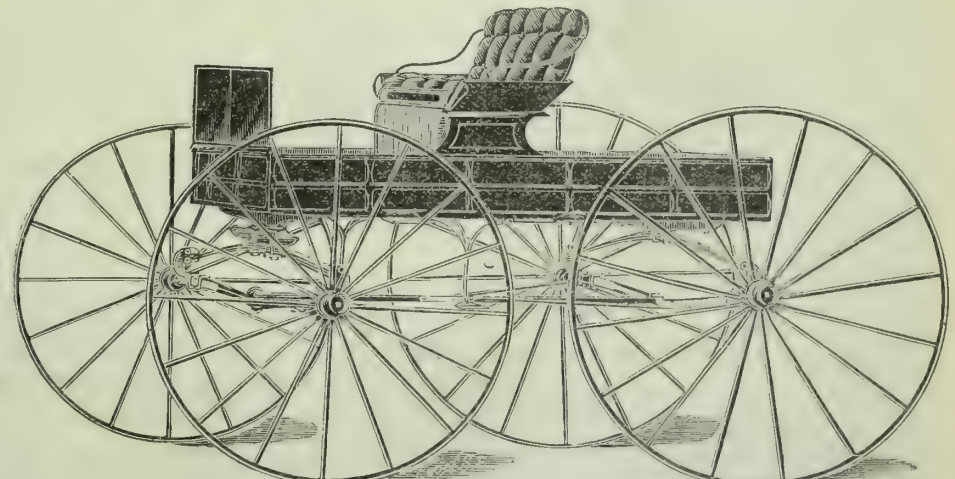
No. 5—Side Spring Piano-Box Buggy, without Top.  
No. 10—Same kind, except with Corning Body, without Top.



No. 100—Lowell Business Wagon, Plain Body, with one or two seats, and with or without drop-end gate.



No. 5—Side Spring Piano-Box Buggy, with Top.  
No. 10—Same kind, except with Corning Body, with Top.



No. 105—Lowell Business Wagon, Panel Body, with one or two seats, and with or without drop end-gate.

These Buggies are hung on the long, easy side spring, the springs being outside of the body, instead of under it, thereby obtaining the entire benefit of the spring.

These Business Wagons have movable seats. These wagons are intended to take the place of a heavier wagon for light delivery purposes, and are also very handy for use on Fruit Ranches. Being hung low, they are especially adapted for Sewing Machine Wagons. With an extra seat they make just the wagon for family purposes.

## EVERY VEHICLE MADE BY US FULLY WARRANTED.

We are convinced that no manufacturer can successfully make all the numerous styles of vehicles that are called for, as good, or as low in price, as one who confines himself to a few styles. By making a few styles, we can give closer attention to each one, and the result will be more perfect work, and therefore better satisfaction to our customers. All of our Vehicles are made with the same discriminate care as if ordered by special customers, and hence those who desire a strictly first-class job can obtain it from us without being subjected to the OVER-TAX OF FANCY PRICES, and not receive a corresponding value therefor. We are making a few styles, and while there are many kinds of Vehicles we cannot furnish you, our GREAT POINT is, that on those WE DO MAKE, we can offer you very superior advantages and defy all competition. Would call particular attention to the fine Wheels and Bodies we are using.

These Vehicles must not be classed with the cheap Eastern goods which are made only to sell. They are as good as the BEST made and LESS in price. We make and sell FIRST-CLASS, substantial, and durable work at about the price of Eastern cheap work. Buying our material in LARGE QUANTITIES DIRECTLY FROM THE MANUFACTURERS, and using the latest improved machinery, we are enabled to do this.

We have Single and Double Harness, HAND MADE, made from OAK LEATHER, on which we are prepared to meet the closest competition.

Send for Circular giving full description of the material used, terms of warranty, etc. We particularly invite a personal inspection of our factory, where can be seen the MATERIAL USED, the process by which they are manufactured, and the vehicle in different stages of construction. We ask you for a sample order, guaranteeing that we will give you satisfaction in price and quality. WRITE FOR PRICES.

## Lowell Manufacturing Company,

P. O. Box 54.

OAKLAND, CALIFORNIA.



## Grain Storage and Shipment.

## The Great Establishments on Carquinez Straits.

At the meeting of the American Society of Mechanical Engineers, held last month in Chicago, a paper on "Handling Grain in California" was read by John H. Cooper, of Philadelphia. The writer treated first of the characteristic California invention, the combined harvester and its operation, matters with which readers of the *RURAL PRESS* are quite familiar. This year the manufacturers of these machines have been unable to fill all the orders received for them. Another portion of Mr. Cooper's paper treats of the grand warehouses lately constructed on Carquinez Straits, and this part of his essay, with the engravings, we reproduce herewith:

A glance at the map of California shows that almost the whole of the watershed from the Sierra Nevada mountains, which rise along the entire eastern boundary of the State, is delivered into the beds of two great connecting rivers and valleys: that of the Sacramento coming down from the north and that of the San Joaquin running up from the south, both areas forming an immense basin and covering a space in the aggregate apparently one-third of the whole State. The one natural outlet for all these waters is through a chain of bays, chief of which is the Bay of San Francisco, extending to the southward from the open way to the sea, and lying nearest to it. The waters first unite in Suisun bay, which lies to the extreme eastward, thence they pass to north-eastward through the Straits of Carquinez into the Bay of San Pablo, which rounds the northernmost end of the group; from this on the flow is to the southward, meeting the waters of San Francisco bay, whence all move westerly into the Pacific ocean by way of the Golden Gate. Somewhere on the shores of these grandest of bays, a shipping point would naturally be selected; not necessarily very near to the city of San Francisco, because the main line of railway does not reach it, nor yet, as they are made on any available part of the shores of any one of these bays, because of their very wide and shallow beaches, which would necessitate long and costly approaches and track extensions, providing it is desirable to build a warehouse, as it must be, beside the deep waters.

The location, although 35 miles from San Francisco, is well chosen; it lies opposite the town of Benicia, on the southern shore of the Straits of Carquinez, two miles northeast of Martinez and one mile southwest of Port Costa; the port of entrance of all west bound trains, which is made over the back of the *Solano*, the largest ferry-boat, so called, in the world.

The available ground for building is narrow between the place of deep water and the lines of railway which run closely to the bulk of the hills. In plan the littoral edge is curved, with the greater circle at the base of the hills; the radius roughly stated is a mile, having its center located somewhere within the precincts of Benicia. This slender segment of wetted foot-land embraced in the site of building and track departures has a chord of 3250 feet. Within this crescent figure, curving with its curve to a radius of 4723 feet, the buildings and approaches have been erected, the whole structure resting upon driven piles, which are surmounted by a solid and even floor above the level of the main lines of railway. The scour of the outflowing waters during the run of the tide through this bend is sufficient to keep it as now, a very deep channel, always open.

A panoramic view of the whole structure is offered in Fig. 1, as it now stands, beyond the waters of the strait, with a line of ships at wharf, trains of cars upon the railway approaches, and with a background of rounded hills, the usual horizon of a California landscape. This is reproduced from a photograph taken from the Benicia side of the strait, and admirably pictures the immense storage and shipping establishment erected by and conducted under the auspices of the Nevada Warehouse and Dock Company.

The improvements of this company, comprising the docks, buildings, and railway switch connections, cover, under franchise grants of the Board of Supervisors, 3250 feet in length, and a width from of 150 to 300 feet, or thereabouts, of State submerged land. The dock frontage of 2300 feet will afford space for eight or ten large ships, with facilities for hauling into or changing berth and loading, which are nowhere else to be found. The warehouses, of which there are two sections, one of 770 and the other of 912 feet in length, have in their greater extent a width of from 110 to 170 feet, with over 190,000 square feet of floor area, and 20 feet clear height for storage. Besides which, under the trestle supporting the covered elevated double railway track on the water front side of the warehouses, is an area of over 80,000 square feet, completely protected from weather and largely available for storage should there be occasion to use it for this purpose.

The elevated double track, which, by an easy rising grade from the main line of railway, brings the grain-loaded freight cars on to a platform 50 feet wide and 11 feet above the floors of the warehouses and wharves, is com-

pletely covered and protected from weather. This elevated road is one of the grand features of the establishment. It extends the entire length of the whole warehouse system, whence bags of grain from the cars can be slid down chutes to the warehouse floor or into the holds of vessels by aid of gravity alone. These tracks are on the water-front side of the warehouses, while another track extends the whole length of the warehouses on the shore side, all of which connect with the tracks of the Southern Pacific Railway. This accomplishes a meeting of rail and water transportation in a way most favorable to the economical handling of the staples of the country.

Between the approaching ends of the two warehouses is a space of 150 feet. On the elevated railroad side of this, and near midway, is a handsome three-story office building with high attic, mansard roof surmounted by an ornate cupola. The first story on the wharf level is fitted up for offices and occupied by grain-shipping firms. In the second story, on the level of the elevated railway track, are arranged the counting-rooms of the company. The third story is provided with sleeping apartments and conveniences for the resident manager, while the high attic contains capacious water supply tanks. Additional buildings, including a hotel for the accommodation of the large staff of weighers, clerks, shipping agents and others, have been built following the completion of the warehouses and to meet the exigencies of the growing business.



FIG. 1. GENERAL VIEW OF THE WAREHOUSES OF THE NEVADA WAREHOUSE &amp; DOCK COMPANY.

The power for driving the grain cleaning and grading machinery, the sack elevators and carriers, the fire pump and other machinery, is furnished by a 100 horse-power O'Neil cut-off engine and horizontal tubular boiler, and is carried by a line of shafting under the main floor, through the grading house, across the western end of warehouse No. 2 to the water side, where it is further employed to operate a swinging crane for discharging ballast and a series of "gipsies," or

veyer. The upper pulley, *E*, carrying the elevator belt, is secured upon a shaft which is driven by the main line of shafting through countershafts and bevel gears. The lower elevator pulley, *E'*, is carried in a tightener slide beneath the table *T*, upon which the bags are placed, ready to be slid on to the rests of the elevator belt over a grating in the table top through the slits of which the rests pass in their upward flight. The carrying capacity of these elevators is 20 sacks per minute.

The conveyor *D* is an endless double chain of iron links embracing steel axles, with a flanged wheel running loosely upon each end of each; the links are connected crosswise by strips of wood securely bolted, three to each pair of links. Upon these strips of wood the bags are delivered lengthwise at *D* by the elevator *E*.

Continued double tracks, composed of light iron bars, "edge laid" upon wooden stringers, extend above and below the roof tie beams nearly from end to end of warehouse. The conveyor is capable of being driven in either direction at a speed of 165 feet per minute, by proper open and crossed belts upon countershaft pulleys; spur gears being employed to overcome the great resistance of so long a linkage laden with weight of many bags of grain at once.

The belts run on large pulleys at high speed on a level with the tie beams and within command of hands at warehouse floor by convenient strap shifters.

The cross conveyers, of which there are four, run from the main conveyor to points over the

into car or ship, or they may be sent from the middle of the warehouse to either end.

This machinery will deposit bags of grain into hold of ship as fast as they can be taken from stacks and weighed and trucked over the warehouse floor to the nearest elevator.

The number of bags that can be gotten out of a car, slid down the chutes, and delivered upon the conveyor by one elevator in one hour, is about 1200. The main conveyor has a longitudinal movement in either direction throughout the whole length of the warehouse connecting with four conveyers moving transversely toward car or ship, and provided with seven elevators extending from floor to tie-beams of the roof, equally spaced along the main line of transfer. When these are taken in connection with the elevated railway, upon any part of which cars can be placed, with the wharf extending the whole length of the warehouse where ships can lie in berth, and the facility with which numerous chutes can be placed in descending lines from any chosen number of elevated points, it can be readily seen that the whole area of the warehouse floor, the entire lines of wharf and railway, are within easy reach. Finally, it may be added, that to any point desired on these a continual stream of bags of grain can be automatically sent and delivered.

At present this system of handling bags of grain is confined to warehouse No. 2, but a similar plant can be extended throughout the entire area of warehouse No. 1, by carrying the

elevated railway, delivering the bags to a height about level with the top of a car body. They are run at a speed of 220 feet per minute, and are composed of heavy belts with cross strips of wood, the ends projecting beyond the edges of the belt and resting upon and are guided by ways framed to and supported by the building. The return fold of the belt is allowed to sag freely, and by its own weight produces sufficient grip upon the 5-foot driving pulley *G*, which is located beneath the main conveyor so

conveyor and shaft lines for driving the elevators across the intermediate space between the two under a covered way and over a supported framework at even height of present conveyor and in same line therewith.

The following statement will show the tonnage of grain handled at Nevada dock, Port Costa, from June 1, 1884, to June 1, 1885:

Flags of Vessels Loaded.	No.
American	55
British	96

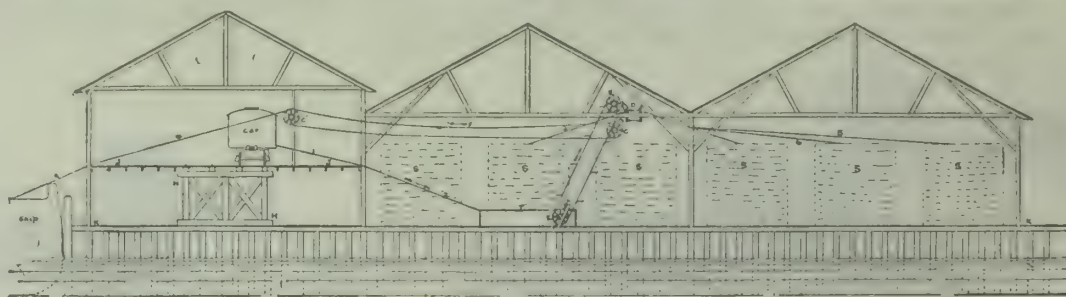


FIG. 2. CROSS SECTION OF WAREHOUSE NO. 2—MACHINERY END.

small, vertical windlasses, set at distances of 200 or 300 feet apart between the tracks of the elevated railway, and around which a turn of rope can be thrown as they revolve, to draw loaded freight cars to any desired point, when there is no locomotive at hand, to haul ships into the dock, change their berths, and perform other pulling service.

The grading house is provided with the best and most improved grain cleaning and grading machinery, and has a capacity of 600 sacks per hour, or 800 tons in 24 hours.

Lines of 6", 5" and 4" iron water pipes extend from the steam pump in the engine-room the entire length of the warehouses and dock range; these are furnished with 33 hose connections, at distances of about 128 feet apart, and on each side of the warehouses to which sections of standard San Francisco Fire Department hose are attached ready for use. An auxiliary fire engine pump and boiler for rapid steam generation are located and arranged for quick use in case steam is not "up" in the larger boiler.

A cross sectional view of warehouse No. 2, cut through the end near the space between the two where the motive machinery is placed, is given in Fig. 2, showing, in a general way, and without much regard to exactness of dimension or fullness of detail, the mechanical appliances for elevating the bags of grain to a higher level and for conveying them back to the floor and across the warehouse. The relative positions of ships at wharf and the cars upon the elevated railway are plainly seen.

The elevators, of which there are seven, are located at nearly equal distances along the line of the main conveyor, *D*. They consist preferably of broad, heavy belts to which steel brackets or rests are riveted in cross lines of three each, each set properly distanced to give time for hands to place the bags upon them, as also to enable bags to get out of the way of one another in transit from the elevator to the con-

as to receive the bags therefrom and send them across the warehouse in the direction of the arrow *F* over the belt returning pulley, *C'*. This pulley is carried on adjustable bearings in a framework supported upon the floor of the elevated railway.

The gravity transfer of the bags is conducted on inclined chutes, on which, when worn smooth by use, and having guiding strips on each edge, the bags are found to run on a descent of about one in four.

These chutes are portable and adjustable every way, and are shown in some of the positions in which they are used. Nos. 1 and 2 extend from car door to table, *T*, where the bags are placed in succession against, and to be taken by the up-going belt of the elevator. Nos. 3, 4, 5 and 6 are placed to right and left from the conveyor to any stack, *S*. No. 7 is fixed in position between the main conveyor and the cross conveyor, and Nos. 8 and 9 conduct the bags into the hold of a ship from the pulley *C* of the cross conveyor.

The discharge of the bags from the main conveyor at any desired point is effected by a smooth-faced board placed upon edge close over and at an acute angle with the line of the conveyor. The head end is firmly secured, and the tail end rests loosely in a vertical slit. This arrangement, simple as a railway switch, acts as well in practice. It yields to the bags at first contact, and then straightens out automatically with the persistence of a spring, throwing the bags from the conveyor "end on," to finish their journey down the chutes, thus illustrating the ease with which movement is made after motion begins, when the difficulty of "starting" friction is overcome.

Bags of grain can be brought from any part of the warehouse to be cleaned and graded, if necessary, and returned to be restacked after this process has been completed; they may be sent from either end to the other extreme end, taken over the distant cross-conveyor and put

German	5
Norwegian	1
Dutch	1
Italian	2
French	1

Total number.....161

Total quantity of grain in warehouses on storage at any one time during the year, 78,000 tons.

The total quantity of grain put on board of vessels out of cars, craft and warehouses for the year, 327,688 tons.

These warehouses were erected under the superintendence of Mr. Ira Bishop, who also invented and patented the bag handling machinery, which was planned and made at the shops of the San Francisco Tool Company at the time, under the management and superintendence of Mr. John Richards.

The engines, boilers and main lines of shafting were made and erected by the Union Iron Works.

It is an agreeable task to write of things seen in a land the visiting of which was a delight, the leaving of which was a regret and the retrospect of which is more than a remembrance. When so many substantial evidences are seen, as now, of prosperity in agriculture, in manufactures and in commerce, we may lament the waste of work and life in the rage for getting grains of gold, but we can feel glad that this has given way to the more peaceful pursuit of raising golden grain. No longer does glitter of metal alone tempt the fortune seeker from Eastern homes and occupation. The insignificant nugget which first met the eyes of James Marshall in the saw-mill race at Coloma, fancy may form into the first link of a golden chain which now represents \$1,500,000,000 of the world's wealth of precious metal. Vast as is this sum, it is trivial when compared with the value of the yield of the soil, and the worth of this is not to be measured wholly by the money which it brings in the world's market.

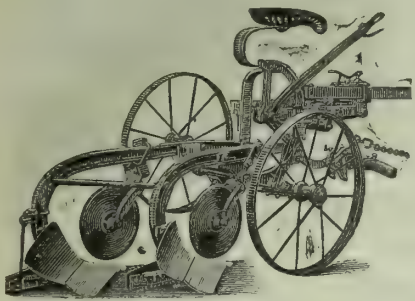


# THE JAY-EYE-SEE GANG PLOW! PACIFIC GROVE RETREAT, MONTEREY, CAL.

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STEEL BEAMS! STEEL WHEELS! STEEL FRAMES!

And best of Hardened Plow Steel Bottoms, with Land Gauge Attachment.



This new departure in the construction of Sulky Plows is fast winning immense popularity everywhere. The J. I. C. Gang, with two 12 or 14-inch bottoms weighs only 600 pounds.

It Cannot be Strained or Broken.

It is the easiest managed Gang Plow, because it has a power lift, and the lowering and raising of the Plows is done by the horses.

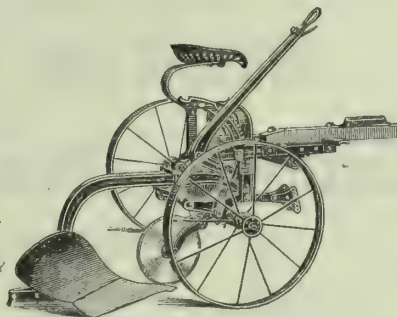
## THE JAY-EYE-SEE SULKY PLOW!

Is constructed on the same principle as the Gang, and is made of steel throughout. Weight only 400 pounds. Made with 14 and 16 inch bottoms.

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**SIMPLEST IN CONSTRUCTION**

And therefore the strongest and easiest managed. Order one on trial and be convinced. Prices same as for iron-frame Plows.



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**JASPER J. JONES, - Proprietor,**

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Wyandottes, Plymouth Rocks, Light Brahmas, Houdans, Langshans, White Leghorns, Buff Cochins, Partridge Cochins, Creve Coeurs and Bronze Turkeys.

ALSO PEDIGREED SCOTCH COLLIE SHEPHERD DOGS.

AT THE GREAT POULTRY SHOW,

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CLEAN SWEEP ON PLYMOUTH ROCK CHICKS.

1st on White Leghorns.

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2d on Bronze Turkeys.

Cochins I have added to my Yards since January. They will speak at the next show.

By sending your address on a postal card, I will send you a finely illustrated Catalogue free, worth one dollar to any breeder of poultry.

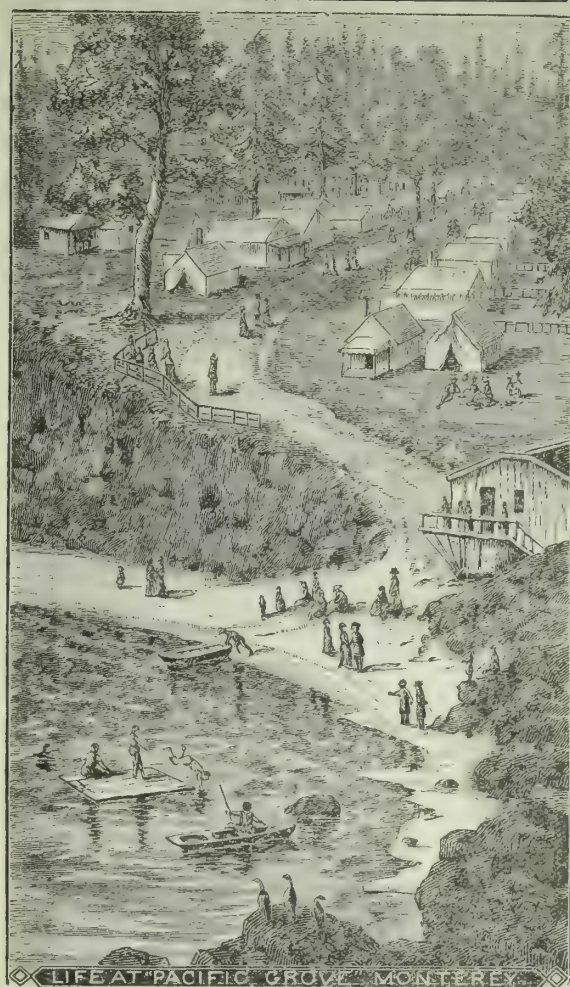
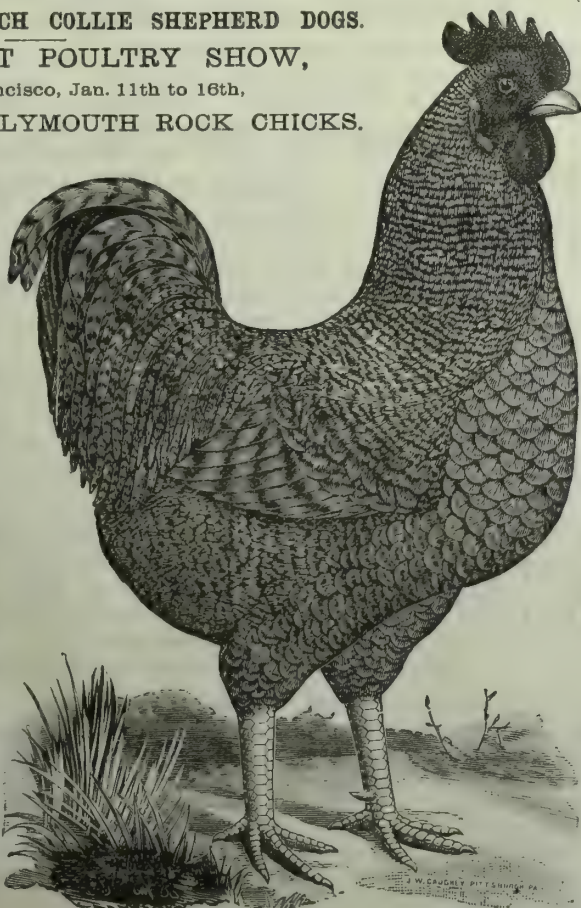
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5000 Catalogues for free distribution. Don't forget to send me your name. Address as above and mention the RURAL PRESS.



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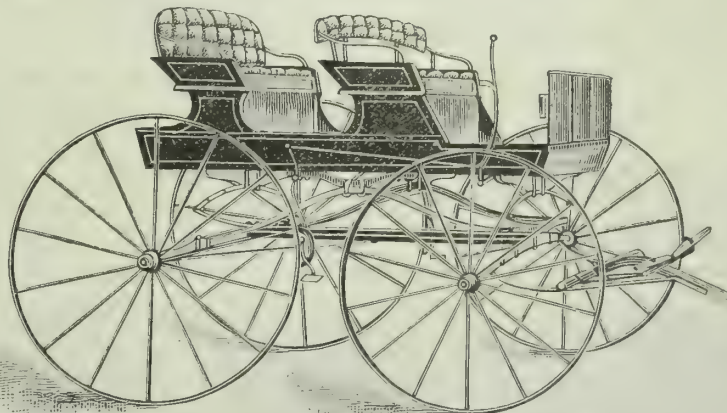
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TERMS FOR BOARD—By the Week, \$7.00, by the Day, \$1; Single Meals, 50 Cts.

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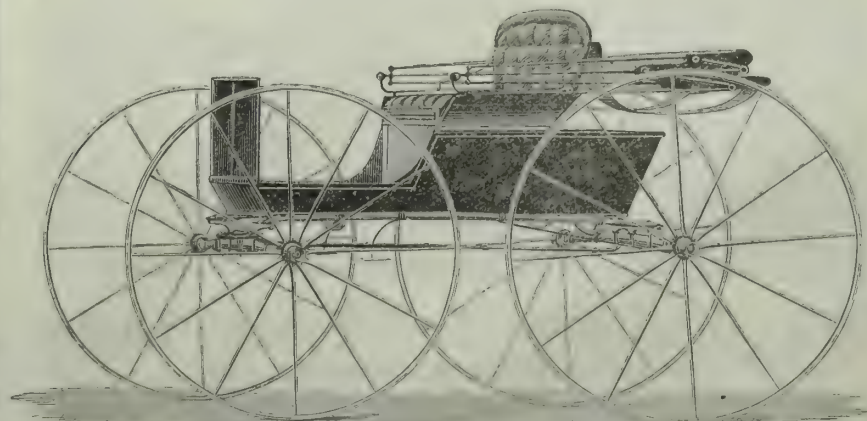


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The next term of this well-known Institution will commence on

Wednesday.....August 4, 1886.

For Circulars giving particulars, address

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Mills Seminary P. O., Alameda Co., Cal.

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A BOARDING AND DAY SCHOOL

Young Ladies and Children,  
1222 Pine St., San Francisco.

Thorough training in practical studies and accomplishments, and pleasant surroundings, are the principal advantages offered.

Fall Term Opens July 26, 1886.

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REFERENCES—Rev. W. I. Kip, Bishop of California; Rev. C. O. Tillotson, Santa Cruz; Hon. C. H. Hartson, Napa; John D. Yost, San Francisco; F. A. Hihn, Santa Cruz; E. J. Wilson, Vallejo; Capt. A. D. Wood, San Francisco; Eugene Sherwood, San Francisco.

## IRVING INSTITUTE



A SELECT SCHOOL FOR YOUNG LADIES.—The next session will begin Monday, August 2, 1886. For catalogue or information address the Principal, Rev. EDWARD B. CHURCH, A. M., 1036 Valencia St., San Francisco, Cal.

## MISS BISBEE'S SCHOOL

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1020 OAK ST., - - - OAKLAND,

WILL RE-OPEN

WEDNESDAY, JULY 28th, 1886.

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Monday.....August 2, 1886

REV. E. B. SPALDING, Rector.

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BUSINESS  
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Fall Session Will Open July 28, 1886.

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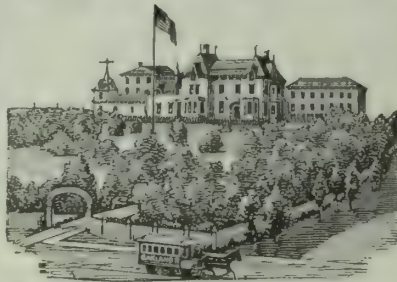
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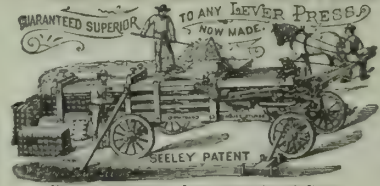
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We have pressed 400 tons with our Whitman Hay Press. We have pressed from 8 to 14 tons a day; in grass hay, from 8 to 10 tons per day with ease; we have pressed in grain hay, 8 tons in 6 hours. In grain hay, bales run from 180 to 240 pounds; in grass hay, 125 to 190. We have pressed 190 pounds with 10 feeds, which the \* \* \* Press cannot do, as their feed box is smaller. Our bales are much smoother and more tightly than those made in the \* \* \* Press. We have averaged 15 tons a day in wild oat hay.

GREGG BROTHERS.

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"ACME" WHEELED The Z. O. 50 P. C.

RAKE

Acme STACKER,

As shown above, with two rakes like this, \$175. The cheapest stacking outfit. Will stack, from swath, 40 or 50 tons per day.

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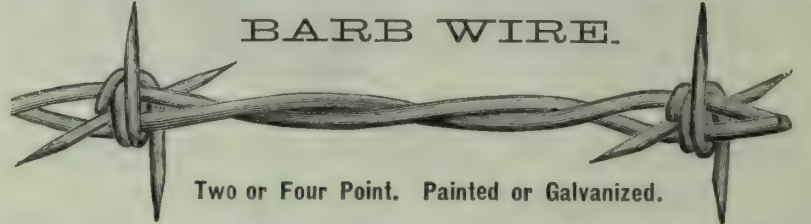
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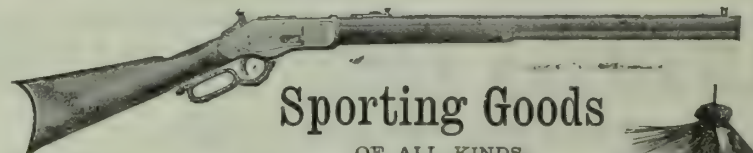
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IT WILL PAY TO USE IT, for it reduces the bills for kalsomin-ing, paper-hanging and house cleaning. It preserves from damage clothing, bedding and carpets. It saves and renders productive vines and fruit trees, and renders ornamental plants and shrubbery thrifty and beautiful.

BUHACH IS A NECESSITY in the city residence, the farm-house, the miner's cabin, the hotel, the restaurant, the saloon, the orchard, the vineyard, the poultry yard and stable.

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Full Seminary Course of Instruction given. Pupils fitted to enter the State University and Vassar or Smith College. SEND FOR CIRCULAR

MARY E. SNELL,  
RICHARD B. SNELL, } Principals.



## The Fell Field Fire.

As the fields get dry at mid-summer, the yearly reports of wasting fires flock in. Our exchanges the past fortnight have been bringing sorry tales of crops turned to smoke and ashes. From Los Angeles and Tulare counties, all along up the San Joaquin valley, through Fresno, Merced and Stanislaus, come accounts of how the flames were discovered, how they made headway and devoured grain and stock and pasture, or were checked and subdued by the quick-rallying, hard-fighting ranchers.

Some of these conflagrations have proved exceedingly costly. Near Horr's ranch, on the 18th of June, several thousand acres of grain were destroyed; at Los Banos, two days later, 3000 acres, the damage being estimated at \$25,000; and at Altamont, Alameda county, that same Sunday, wheat, barley, hay and grass were consumed to the value of \$15,000 or \$20,000. Here and there, a header or harvester was burnt up. In one instance a horse was so badly roasted that it was necessary to kill him; and some of the stubborn fire-fighters themselves were severely scorched.

The losses were in some cases covered, or partly covered, by insurance; in others, hapless renters saw the result of their year's toil annihilated in an hour. But in any case, so much labor was lost.

These disasters are ascribed to various causes. Malicious incendiaries and wanton tramps are, perhaps, chargeable with a few; thoughtless boys at play and reckless campers have started others; sparks from a passing locomotive are believed to have kindled more than one, and the hot journal of a header is debited with 70 acres near Los Angeles.

But carelessness on the part of some one—employer, hired man or visitor—especially in dropping matches when the cigar was lighted, or in throwing away the stump when he had had his smoke, appears to deserve the blame for far the greater part of all these cruel, disheartening calamities.

We leave it for our readers to draw the lesson and point the moral.

**SANITARIUM IMPROVEMENTS.**—The Rural Health Retreat, at Crystal Springs, near St. Helena, has hitherto been conducted as one of the best and most successful sanitariums ever attempted in California. Lately its capacity has been increased some one-third by the addition of 18 rooms for guests and patrons, enlarged departments and apparatus for bathing, and a good-sized hall for gymnasium and other purposes. These, with other improvements about the place, with its effective management and attentive corps of helpers, every one of whom is interested in the welfare of their patrons, insure the permanent success of the institution. We consider the Retreat, in its beautiful location and honest deportment, the most successful institution ever attempted in this part of the Union for the benefit of its sick and over-worn guests who come from all parts of this coast and the United States.

**THE CYCLONE WINDMILL.**—The "Cyclone," built by the Pacific Manufacturing Company at Santa Clara, is the result of years of study by one of the best practical windmill-men in the United States. Claiming to be less complicated and more durable than any other mill in the market, it is also thoroughly self-regulating, and when the force of the wind reaches a certain point, an automatic latch locks the vane parallel with the wheel and stops its running. The power, too, is applied to the pump with a minimum of friction. Preferring a small profit on many sales to a large profit on few, the proprietors have cut the prices down to \$65 and \$75 for 12 and 14-foot mills respectively. If you need a windmill, we would refer you to the advertisement in another column, and the descriptive circulars issued by the company.

## Our Agents.

OUR FRIENDS can do much in aid of our paper and the cause of practical knowledge and science, by assisting Agents in their labors of canvassing, by lending their influence and encouraging favors. We intend to send none but worthy men.

JARED C. HOAG—California.  
J. J. BARTLETT—San Joaquin Co.  
G. W. INGALLS—Arizona.  
E. L. RICHARDS—San Diego Co.  
R. G. HUSTON—Idaho and Montana.  
GEO. McDOWELL—Santa Clara and Santa Cruz Co's  
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FRANK W. SMITH—Oregon and Wash. Ter.  
A. CALDERWOOD—Napa Co.

**FENCING.**—One of the largest and most unnecessary wastes of forest products is in fencing. "Fencing in" instead of "fencing out" animals should be the object of fences. Such is very generally the case in this State, particularly in its southern portion. The rule should be made general everywhere. It would save a mint of money and conserve immensely our forest products.

## The Pacific Rural Press.

*The Leading Agricultural Home Newspaper  
and standard authority on all branches  
of California Agriculture.*

It is the chief medium for the dissemination of information concerning fruit-growing in California.

It has the fullest and most accurate REPORTS OF HORTICULTURAL MEETINGS, and is the best record of the EXPERIENCE OF INDIVIDUAL FRUIT-GROWERS in all parts of the State.

Its market reports are prepared with care and the greatest reliability possible for the benefit of the producer.

THE PACIFIC RURAL PRESS has more circulation and influence in the Pacific States and Territories than all the other agricultural weeklies in the United States combined. Advertisers can reach nearly all the leading reading farmers through its columns.

A well-known horticulturist who was in attendance upon the meetings of fruit-growers, writes; "The greatest praise that could be bestowed on the RURAL PRESS at the late Fruit-Growers' Convention, and which shows, undoubtedly, the well deserved popularity of that paper, is the fact that almost all the members of that Convention were subscribers to the Press."

It is a Farm and Home Journal of the highest class, pure in tone and well informed on all matters of industrial interest. It is handsomely printed and illustrated. It is a 20-page weekly, and is furnished, postage paid, for \$3 per year in advance. Single copies, 10 cents, prepaid.

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## Inducements to Subscribers.

To favor subscribers to this paper, and to induce new patrons to try our publication, we will furnish, to those who pay fully one year in advance of date, if requested, the following articles (while this notice continues), at the very greatly reduced figures named at the right:

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## The Hay Press Suit.

QUINCY, ILLS., U. S. A., June 24, 1886.  
PACIFIC RURAL PRESS, San Francisco, Cal.  
GENTLEMEN: We take pleasure in informing you that the suit, Dederick vs. Ertel, in the U. S. Circuit Court at Springfield, Ill., has been dismissed by the complainant, and at his costs, 22nd inst. Yours truly,  
GEO. ERTEL & CO.

OUR subscription rates are three dollars a year, in advance. If continued subscriptions are not prepaid, in advance, for any reason, twenty-five cents extra will be charged for each year or fraction of a year. No new names placed on the list without cash in advance. Subscriptions delinquent up to March 1, 1886, will be charged fifty cents per annum up to that date. After that date, at the rate of twenty-five cents per annum.

## PACIFIC COAST WEATHER FOR THE WEEK.

[Furnished for publication in this paper by NELSON GOROM, Sergeant Signal Service Corps, U. S. A.]

DATE.	Portland.				Red Bluff.				Sacramento.				S. Francisco.				Los Angeles.				San Diego.			
	Rain.	Temp.	Wind.	Weather.	Rain.	Temp.	Wind.	Weather.	Rain.	Temp.	Wind.	Weather.	Rain.	Temp.	Wind.	Weather.	Rain.	Temp.	Wind.	Weather.	Rain.	Temp.	Wind.	Weather.
June 23-30.																								
Thursday .....	.00	67	NW	Cy.	.00	93	N	Cl.	.00	80	NW	Cl.	.00	69	W	Cl.	.00	76	SW	Cl.	.00	70	SW	Cy.
Friday .....	.00	71	N	Fr.	.00	90	N	Cl.	.00	81	NW	Cl.	.00	69	SW	Cl.	.00	76	W	Cl.	.00	68	SW	Cy.
Saturday ...	.00	71	S	Cy.	.00	86	S	Cl.	.00	79	S	Cl.	.00	66	W	Cl.	.00	74	SW	Fr.	.00	69	SW	Cl.
Sunday .....	.16	62	NW	LR.	.00	82	S	Cl.	.00	72	SW	Cl.	—	64	SW	Cl.	.00	70	W	Cy.	.00	66	W	Cl.
Monday .....	.09	64	S	Cy.	.00	80	SE	Cl.	.00	73	S	Cl.	.00	61	W	Cl.	.00	80	SW	Cl.	.00	68	W	Cl.
Tuesday .....	.00	68	S	Fr.	.00	83	SW	Cl.	.00	76	SW	Cl.	.00	W	Cl.	.00	82	NW	Cl.	.00	66	W	Cl.	
Wednesday .....	—	54	SW	LR.	.00	80	SE	Cl.	.00	75	S	Cl.	.00	63	W	Cl.	.00	87	SW	Cl.	—	—	—	—
Totals .....	.25				.00				.00				—				.00				.00			

EXPLANATION.—Cl. for clear; Cy., cloudy; Fr., fair; Fy., foggy; — indicates too small to measure. Temperature Wind and weather at 12:00 M. (Pacific Standard time), with amount of rainfall in the preceding 24 hours.

## List of U. S. Patents for Pacific Coast Inventors.

Reported by Dewey & Co., Pioneer Patent Solicitors for Pacific States.

From the official report of U. S. Patents in Dewey & Co.'s Patent Office Library, 252 Market St., S. F.

FOR WEEK ENDING JUNE 22, 1886.

- 344,076.—ROCK DRILL—Brady & Fitzpatrick, Virginia City, Nev.  
343,981.—CABLE RAILWAY—R. F. Bridewell, S. F.  
344,243.—BUREAU—S. J. Bryant, Reno, Nev.  
344,040.—ADVERTISING PUZZLE—L. O. Granger, S. F.  
344,180.—ADDING MACHINE—Edward Halsey, San Jose, Cal.  
344,181.—ARITHMETICAL APPARATUS—Edward Halsey, San Jose, Cal.  
344,182.—TAX CALCULATOR—Edward Halsey, San Jose, Cal.  
343,998.—BOILER TUBE CLEANER—W. H. Keep, Stockton, Cal.  
344,051.—LINIMENT—J. W. Lauer, Mountain View, Cal.  
344,121.—WATER LEVEL INDICATOR—W. S. Mayers, Ft. Apache, A. T.  
344,129.—TWO-WHEELED VEHICLE—Newell & Litten, Fresno, Cal.  
344,004.—QUARTZ BREAKER AND PULVERIZER—E. I. Nichols, S. F.  
344,199.—DEVICE FOR TAPPING CANS—C. E. Quigley, Oakland, Cal.  
344,215.—HOPPLE—J. T. Stoll, Sacramento, Cal.

NOTE.—Copies of U. S. and Foreign Patents furnished by Dewey & Co., in the shortest time possible (by mail or telegraphic order). American and Foreign patents obtained, and general patent business for Pacific Coast inventors transacted with perfect security, at reasonable rates and in the shortest possible time.

## Rural Health Retreat, St. Helena.



At Crystal Springs, near St. Helena, under the above title, is one of the best conducted sanitariums in the United States. Its managers are determined to make it one of the leading and most thoroughly conducted health and pleasure resorts on this coast. It is not designed as a money-making institution, but a pleasant rural home for all worthy classes who seek health, rational amusement and genuine recreation.

We herewith give a good illustration, drawn from photographic views, of the hotel, or main building. Its location commands one of the most lovingly beautiful and "constantly delighting" views to be found in all California. The air is pure and healthful. There are several new and commodious cottages, equally favorably located, connected with the retreat. The aim of the institution is not simply to restore the health of its patrons, but what is often more important, to enable them to retain it and avoid illness in future.

Its situation cannot be surpassed for beautiful scenery and convenience of location from San Francisco. It is on the slope of the Howell mountain range, overlooking Napa valley, and almost overhanging, as it were, the eastern suburbs of St. Helena. Howell mountain has long been reputed as one of the choicest localities in the State for health-recuperating qualities, and is yearly gaining in popularity.

The pure, soft water of Crystal Springs would be a great desideratum in any home. The Retreat is under the management of Elder J. D. Rice, who gives constant, careful and conscientious attention to his duties. He is well supported by faithful and competent assistants.

J. S. Gibbs, medical superintendent, is a graduate from a thorough medical and surgical course in New York city, where he afterward had nine years' practice. He was recently associated with Dr. J. H. Kellogg, superintendent of the Medical and Surgical Sanitarium, at Battle Creek, Mich., said to be the largest institution of the kind at present in the world. Dr. Gibbs has associated with him Dr. W. P. Burke, a graduate from Ann Arbor, Mich., and Cooper, Cal., Medical College.

We advise those wishing further information, who cannot conveniently at once visit this place, to address "Rural Health Retreat, Crystal Springs, St. Helena, Napa county, Cal."

## A Safeguard.

The fatal rapidity with which slight Colds and Coughs frequently develop into the gravest maladies of the throat and lungs, is a consideration which should impel every prudent person to keep at hand, as a household remedy, a bottle of AYER'S CHERRY PECTORAL.

Nothing else gives such immediate relief and works so sure a cure in all affections of this class. That eminent physician, Prof. F. Sweetzer, of the Maine Medical School, Brunswick, Me., says:—

"Medical science has produced no other anodyne expectorant so good as AYER'S CHERRY PECTORAL. It is invaluable for diseases of the throat and lungs."

The same opinion is expressed by the well-known Dr. L. J. Addison, of Chicago, Ill., who says:—

"I have never found, in thirty-five years of continuous study and practice of medicine, any preparation of so great value as AYER'S CHERRY PECTORAL, for treatment of diseases of the throat and lungs. It not only breaks up colds and cures severe coughs, but is more effective than anything else in relieving even the most serious bronchial and pulmonary affections."

## AYER'S Cherry Pectoral

Is not a new claimant for popular confidence, but a medicine which is to-day saving the lives of the third generation who have come into being since it was first offered to the public.

There is not a household in which this invaluable remedy has once been introduced where its use has ever been abandoned, and there is not a person who has ever given it a proper trial for any throat or lung disease susceptible of cure, who has not been made well by it.

AYER'S CHERRY PECTORAL has, in numberless instances, cured obstinate cases of chronic Bronchitis, Laryngitis, and even acute Pneumonia, and has saved many patients in the earlier stages of Pulmonary Consumption. It is a medicine that only requires to be taken in small doses, is pleasant to the taste, and is needed in every house where there are children, as there is nothing so good as AYER'S CHERRY PECTORAL for treatment of Croup and Whooping Cough.

These are all plain facts, which can be verified by anybody, and should be remembered by everybody.

## Ayer's Cherry Pectoral,

PREPARED BY

Dr. J. C. Ayer & Co., Lowell, Mass.  
Sold by all Druggists.

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Real Estate Agents,  
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## Breeders' Directory.

Six lines or less in this Directory at 50c per line per month.

### POULTRY.

JAS. T. BROWN, 18 Georgia St., Los Angeles, Cal. Breeder of Thoroughbred Poultry of the leading varieties. Send for circular and price list.

O. J. ALBEE, Santa Clara, Cal., breeder of Langshans, Partridge Cochins, Pedigreed Scotch Collies, W. C. B. Polish, Wyandottes, B. Leghorns, B. B. R. G. Bantams.

T. D. MORRIS, Sonoma, Cal. Tuolumne and Embden Geese, Bronze and W. Holland Turkeys, and all leading varieties of Thoroughbred Poultry.

CHOICE LAND AND WATER FOWLS for sale at all times of the most popular and profitable varieties. Please inclose stamp for new circular and price list to R. G. Head, Napa, Cal.

D. H. EVERETT, 1616 Larkin St., S. F., importer and breeder of Thoroughbred Langshans and Wyandottes.

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AXFORD INCUBATOR—Best in the world; never beaten in competition; from \$37.50 to \$55.00. Pekin and Rouen Ducks; best in the State; \$7.50 per trio, or \$2.00 each per doz. Eggs, \$3.00 per doz. For particulars address L. P. Clark, Mayfield, Cal.

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W. C. DAMON, Napa, Wyandottes, W. and B. Leghorns, P. Rocks, L. Brahmas, Pekin Ducks.

MRS. M. E. NEWHALL, San Jose. White and Brown Leghorns, Langshans, Plymouth Rocks, Light Brahmas, Pekin Ducks and Bronze Turkeys.

GEO. B. BAYLEY, 1317 Castro St., Oakland, Importer and Breeder of all the best known and most profitable Land and Water Fowls. Publisher of the Pacific Coast Poultryers' Hand Book and Guide. Price 40 cents. Send 2-cent stamp for Illustrated Circular.

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E. C. CLAPP, South Pasadena, Cal. Light Brahmas, Plymouth Rocks and Silver Spangled Hamburgs, Fowls and Eggs. Ex. and P. O. Money Order offices, Pasadena.

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WILLIAM NILES, Los Angeles, Cal. Thoroughbred Poultry, Cattle and Hogs. Write for circular.

COTATE RANCH BREEDING FARM, Page's Station, S. F. & N. P. R. R. P. O., Penn's Grove, Sonoma Co., Cal. Wilfred Page, Manager. Breeders of Short Horn Cattle, English Draft Horses, Spanish Merino Sheep and Berkshire Swine.

THE BEST HERD OF JERSEYS, all A. J. C. registered, is owned by Henry Pierce, San Francisco.

R. J. MERKELEY, Sacramento, breeder of Norman, Percheron Horses and thoroughbred Shorthorn Cattle.

Estate of M. E. BRADLEY, San Jose, Cal., breeder of recorded thoroughbred Shorthorn Cattle and Berkshire Hogs. A choice lot of young stock for sale.

J. R. ROSE, Lakeville, Sonoma Co., Cal., breeder of Thoroughbred Devons, Roadsters and Draft Horses.

GEO. BEMENT, & SON, Redwood City. Ayrshire Cattle, Shorthorn Sheep, Berkshire and Essex Swine.

SETH COOK, Danville, "Cook Farm," Contra Costa Co., breeder of Aberdeen Angus, Galloways and Devons (Registered). Young stock for sale.

H. S. SARGENT, Stockton. Thoroughbred Jersey Cattle, and Poland-China Hogs from imported stock.

### SWINE.

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JOHN RIDER, Sacramento, Cal. Breeder of Thoroughbred Berkshire Swine. My stock of Hogs are all recorded in the American Berkshire Record.

TYLER BEACH, San Jose, Cal., breeder of thoroughbred Berkshires.

I. L. DICKINSON, Lone Oak Farm, Sonoma, Tuolumne Co., Cal., breeder of thoroughbred Essex Hogs. Pigs now ready for sale. Prices reasonable.

### SHEEP AND GOATS.

EASTON MILLS, Lakeville, Sonoma Co., thoroughbred Spanish Merino Sheep. Choice rams for sale.

J. B. HOYT, Bird's Landing, Cal., importer and breeder of Shropshire Sheep; also breeds cross-bred Merino and Shropshire Sheep. Rams for sale.

L. U. SHIPPEE, Stockton, Cal. Importer and breeder of Spanish Merino Sheep, Durham Cattle, Red Duroc and Berkshire Swine. High graded Rams for sale.

KIRKPATRICK & WHITTAKER, Knight's Ferry, Cal., breeders of Merino Sheep. Rams for sale.

### BEES.

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HIRES' IMPROVED ROOT BEER. Packages, 25 cents. Make 5 gallons of a delicious, sparkling and wholesome beverage. Sold by all druggists, or sent by mail on receipt of 25 cents. C. E. HIRES, 48 N. Delaware avenue, Philadelphia, Pa.



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AND WEANERS

For Rearing Stock by Hand.

Both Proved Successful and Indispensable.

Funk's Calf Nipple is just as important for calves as the nursing bottle is for children. The saliva fluid is necessary for proper digestion of the food, and without the Nipple the calf drinks too fast, takes the milk in bulk and causes bloating, scours and indigestion. The Feeder was invented to raise better calves with less trouble. No air swallowed, no fingers chewed, no ears sucked. It teaches the calf to feed from the pail without assistance. The Nipple always connects with the milk and the calf will soon wean itself. Price, 75 cents; post-paid, 85 cts.



## Rice's Patent Calf Weaner,

AND SUCKING-COW MUZZLE,

Prevents Calves and Cows Sucking Themselves or Each Other.

Habits most injurious to the animal and costly to the owner. It is no hindrance to either eating or drinking, does the animal no injury, has been thoroughly tested, is used and endorsed by the best stock raisers in the United States and England, approved of by the Royal Society for the Prevention of Cruelty to Animals, and acknowledged by all to be the best thing ever made for the purpose.

PRICES.—For Calves, 50 cents; post-paid, 55 cents. Yearlings, 75 cents; post-paid, 80 cents. Full-grown animals, \$1.00; post-paid, \$1.12.

## TEBBETS' IMPROVED MILK TUBE,

Has proved an entire success, for the relief and permanent cure of Garget, or stoppage of Milk, or when from any cause the teat cannot be handled in the usual way. Farmers are well aware that cows' teats are frequently injured by being stepped on in the stable, or torn in the pasture; they are also liable to be troubled with cracked teats when first turned out in the Spring, making milking a very painful operation; and injurious experiments are too frequently resorted to, from the result of which many valuable animals are rendered worthless, because their owners have not the means at hand to give the needed relief. The article which we offer is a simple instrument and can be applied by any person. Will quickly give relief and permanent cure in all cases without the slightest injury to the animal. We guarantee them to be made of COIN SILVER. A single tube answers for an entire herd, and is cheap insurance against loss. Price, 75 cents each, post-paid.



## Edson's Cream Tester.

A DAIRYMAN'S PRACTICAL INVENTION.

Consists of a frame holding six glass tubes graduated at the sides of the glass so as to show the per cent of cream in freshly-drawn milk. The frames are substantially made of wood, carefully graduated, and the glasses easily removed for cleaning. Actual tests prove that common or grade cows give equally as good results in cream and butter, when pains have been taken in selection, as Jerseys, Holsteins, or other imported stock, but in order to have common stock do this, they must be bred from deep and rich milkers, the bull as well as the heifer, and the best authorities place more dependence on the bull than on the heifer, thus showing that we should take great care in the selection of cows to raise bulls from. It is calculated that 20 pounds of milk will make one pound of butter, but instances have been known where 12 pounds made one of butter, thus showing that it is not the cow that gives the largest flow of milk that produces the most butter. It should be our aim to get a large flow of very rich milk. How should we do this? By testing our milk, and only keeping and raising stock from cows that give not less than 15 per cent, and it would be better to say 20 per cent of cream. By this method, you would soon have a dairy of cows that would be a pleasure as well as a profit to you. Price of Testers, \$1.00 each; Large Size, \$2.00. ADDRESS

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Using the Benoit Corrugated Rollers.

STILL AT THE FRONT!



This Mill has been in use on this Coast for 5 years, TAKEN THE PREMIUM AT THE STATE FAIR

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Over 200 of them in use in California, Nevada & Oregon. It is the most economical and durable Feed Mill in use. I am sole manufacturer of the Corrugated Roller Mill. The Mills are all ready to mount on wagons.

I thank the public for the kind patronage received thus far, and hope for a continuance of the same.

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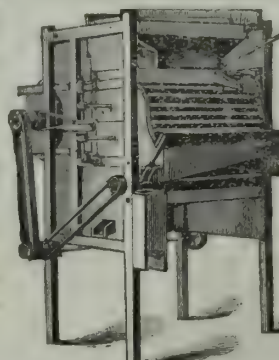
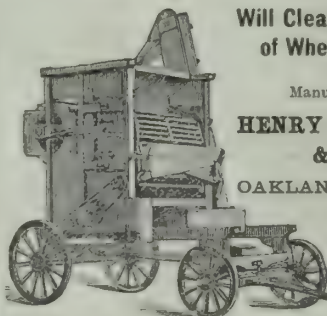
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Will Clean 1600 Bags of Wheat in a day.

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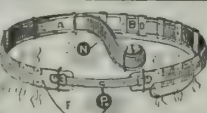
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ELECTRO-MAGNETIC BELT. A galvanic battery, entirely different from all other appliances. It gives an Electric Current with or without a dc. Discharges or Weaknesses of male or female system and permanently cured. Electric Suspensory for non-furnished free of charge. Descriptive circulars, with price list, testimonials, etc., forwarded to any address. MAGNETIC ELASTIC TRUSS COMPANY, 704 Sacramento St., cor. Kearny, San Francisco, Cal.



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Kentucky Jacks and Jennets,

Work Horses and Mules

FOR SALE.

Some of the Stallions were imported from Europe, others from Illinois, and some young ones were bred in California from imported stock. The prices will be less than animals of equal value can be purchased elsewhere.

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From the Celebrated Sheep of Long John Wentworth, Chicago, Ill. Address

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Of Short Horn Cattle and Dairy Cows.

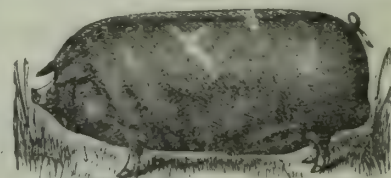
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Breeder of pure-bred Poland China Pigs of the Black Beauty, Black Bass, Bismarck, and other noted families. Imported boars King of Bonny View and Gold Dust at head of the herd. Stock recorded in A. P. C. R. Pigs sold at reasonable prices. Correspondence solicited. Address as above.



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From our Thoroughbred Berkshire Boar and Sow, which we imported from England in 1880. Pigs from Imported Boar and Sow, \$25 each; from Imported Boar and Thoroughbred Sow, \$10 to \$20. Our Imported Pigs are as nice Pigs as there are in the State. Address

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From imported stock direct from England, bred by Russell Swanwick, President Royal Agricultural College Farm, England, from the celebrated STUMPY and SALLIE FAMILIES. Young stock always for sale at lowest possible rates. Address ANDREW SMITH, Redwood, or 218 California St., S. F.

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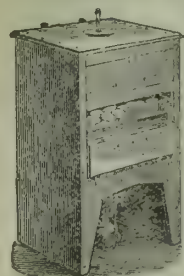
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ANGELL'S LIVER PILLS cure rheumatism and headache.



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## THE PACIFIC INCUBATOR!



Awarded the Gold Medal at the State Fair, Sacramento, and at the Mechanics' Institute Fair of 1885 as the best machine made. It will hatch any kind of Eggs better than a Hen.

Send Stamp for Illustrated Circular to GEORGE B. BAYLEY, Manufacturer, 1317 Castro St., Oakland, Cal.

N. B.—A large line of Poultry Appliances, such as Wire Netting, Bone Mills, Chopping Machines, etc., for sale at the lowest rates. The Pacific Coast Poultryers' Hand Book and Guide; price 40c.



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## SHEEP AND SHEEPWASH.

## ITALIAN SHEEP WASH.

EXTRACT OF TOBACCO.

Free from Poison.



Cures thoroughly the SCAB OF THE SHEEP. The BEST remedy known. Costs less than 1 cent per head for dipping. Reliable testimonials at our office. For particulars apply to

CHAS DUISENBERG & CO., Sole Agents, No. 314 Sacramento Street, San Francisco.



Calvert's Carbolic SHEEP WASH \$2 per Gallon.

After dipping the Sheep, is useful for preserving wet hides, destroying the vine pest, and for wheat dressings and disinfecting purposes, etc. T. W. JACKSON, S. F., Sole Agent for Pacific Coast.

## THOROUGHbred SPANISH MERINO SHEEP.

Have taken the First Premiums at the State Fair for the last three years.



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## THOROUGHbred SPANISH MERINO SHEEP.



200 HEAD OF RAMS.

Bred from Importations from the leading registered flocks of Vermont, offered at prices reduced to suit the times. The finest lot of Rams on the Pacific Coast. Ewes in lots to suit. E. W. WOOLSEY & SON, Fulton, Sonoma Co., Cal.

## LITTLE'S CHEMICAL SHEEP DIP.

Price Reduced to \$1.25 PER GALLON.



Twenty gallons of fluid mixed with cold water will make 1,200 gallons of Dip. It is superior to all Dips and Dressings for Scab in Sheep; is certain in effect; is easily mixed, and is applied in a cold state. Unlike sulphur or tobacco, or other poisonous Dips, it increases the growth of the wool, stimulates the fleece, and greatly adds to the yield. It destroys all vermin. It is efficacious for almost every disease (internal and external) sheep are subject to.

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## 40 head SPANISH MERINO BUCKS



Bred by Mr. J. H. Stoddard. Sired by his Imported Vermont Registered Buck, and out of his premium flock of breeding ewes.

TERMS REASONABLE.

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RAILROAD MEN, FARMERS AND VITICULTURISTS HAVE, by practical experience, found that the JUDSON POWDER especially, is the best adapted to REMOVE STUMPS AND TREES.

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In most instances, Giant Powder, or any other "High Explosive," is too quick, and ordinary Blasting Powder not strong enough.

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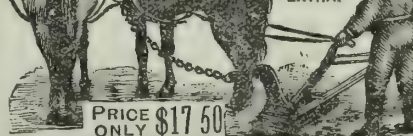
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At Sacramento, Sept. 6th to 18th.

TWO WEEKS.

The Attention of the Farming Community of this State is particularly called to the Liberal Awards, and advantages offered for

COUNTY EXHIBITS.

The importance of an exhibit made by separate counties, showing the productive qualities of the various sections of our State, has become more apparent each year since the system was inaugurated by this Board. Recognizing the interest made manifest in the past by both the public and the exhibitors, through whose energy and enterprise valuable agricultural lands have been brought to the notice of the world, and counties with small populations have increased in a manifold degree, by reason of the producer having come forward with his products that were of such quality as to enable him to meet all competitors, the Board have deemed it proper to increase the premiums in this Department, and to that end have appropriated \$2000 to be distributed among the various counties making displays under the following provisions:

To those who may have charge of the exhibits, we would call their attention to the fact that these awards will be made for the most extensive, perfect, and varied exhibit of Farm Products (exclusive of live stock) exhibited as a County Production. Thus it will be seen that it is to be wholly devoted to the products of the farms located in the county where the exhibit is made from, and does not include manufactured goods of any kind or character except those grown and raised in the county from whence the display comes.

For the best display, as per explanation above, First premium of \$500, cash. The remaining exhibits shall receive premiums in proportion to their excellence, as compared with that receiving the First Premium. Competition to be between counties only. That is to say, that the entire exhibit made by one county must compete against the entire exhibit of another county. The premium awarded to each county exhibit will be paid to the committee in charge of said exhibit.

The State Board of Agriculture earnestly desires the hearty co-operation of the various subordinate Granges throughout the State, in making this exhibition of California's products a success, whereby the varied products of different localities may be fully shown. We would ask the appointment of a committee from the Grange in each county to call upon and urge the patrons to make a display representing their respective counties.

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## S. F. MARKET REPORT

NOTE.—Our quotations are for Wednesday, not Saturday the date which the paper bears.

## Weekly Market Review.

## DOMESTIC PRODUCE, ETC.

SAN FRANCISCO, June 30, 1886.

Trade is dull. The approach of the National holiday and the general disposition to wait until conditions of supply and demand in different crops disclose themselves more clearly, naturally tends to make things quiet. It is not yet settled that there will be such an immense amount of wheat in the world as buyers would have it believed. Our latest mail advices bring the wheat review of Mr. H. Kain Jackson in the London *Farmer* of June 7, in which he says:

It is not yet at all an assured fact that the beginning of a new cereal year will find the world weighted with a superabundance of wheat. America is likely to exceed her yield of 1885 by ten million quarters, but the yields of England and the continent are by no means secure. Even in Southern Europe a fair July is needed, and in France and Germany a fair July is needed. The English harvest will not be safe till August is past, and the present aspect cannot be said to promise an average crop. In India there has been a good yield, but the crop was needed badly by the inhabitants of India itself, as well as by the shippers at the ports. At Lahore, before harvest, prices had risen to 24s per quarter, which with railway and freight charges, estimated at 18s per quarter, equal 42s on the English exchange. This price showed clearly that wheat reserves were used up. We must again caution our readers against being too much depressed by those who have wheat to buy or bags to sell. The disposition in either case is to exalt the probable aggregate of wheat and define values accordingly. The latest by cable from abroad is the following:

LIVERPOOL, June 30.—WHEAT—Steady, California spot lots, 6s 4d to 6s 7d; off coast, 32s@32s 6d; just shipped, 33s; nearly due, 32s 6d; cargoes off coast, firm; on passage, quiet but steady; Mark Lane wheat and Maize, quiet; English country markets, quiet; French, firm; wheat and flour in Paris, quiet.

## Foreign Review.

LONDON, June 28.—The *Mark Lane Express* in its review of the British grain trade for the past week says: The welcome summer weather has had a marked effect on crops, but it came too late to save a large proportion of the cereals. The outlook, except for the best wheat districts, has been very discouraging. Trade has been in favor of buyers. Sales of English wheat during the week were 37,795 quarters at 31s 1d, against 34,746 quarters at 32s 8d during the corresponding period of last year. In flour, trade is exceedingly dull. Foreign wheats have favored buyers. Foreign flour is cheaper, especially American. Twenty-seven cargoes of wheat arrived, 7 were sold, 3 withdrawn, and 14 remained, including 9 of American. In trade forward there is no inquiry. At to-day's market wheat was dull and 6d lower. Flour was dull and 6d lower.

## London Wool Sales.

LONDON, June 28.—There was an average attendance at the wool sales to-day. Prices were firm.

## New York Wheat Market.

NEW YORK, June 27.—The close was heavy at bottom figures, with losses of 1/4 of a cent for July at 84 cents and August at 84 1/2 cents; 1/2 of a cent for September at 84 1/2 cents; October at 85 1/2 cents; November at 86 1/2 cents; and January at 88 1/2 cents, and 3/8 of a cent for December at 87 1/2 cents.

## Eastern Wool Markets.

NEW YORK, June 27.—The market continues about the same as a week ago. The caution and apparent indifference of a portion of the trade, as well as a large number of manufacturers, remains a noticeable feature, although within a day or two signs of increasing interest among actual consumers have been noticeable, and attempts to depreciate the improvement fail rather flat in the face of the large movements of supplies and fuller rates obtained at all points. Among the sales were 2000 pounds of spring California at 21 cents. In the Boston market the buying of manufacturers has been but little if any larger than for the two previous weeks. Among the sales were 2000 pounds of Territory at 23 to 24 cents. In the Philadelphia market firmness was well sustained, with some slight advances. Among the sales were 10,000 pounds of scoured California at 50 to 57 cents.

## New York Hop Market.

NEW YORK, June 27.—The market remains strong and is fairly active. Interior reports continue to speak of the presence of vermin to an extent that seriously threatens the crop. There is a probability that strictly choice goods might realize 12 cents cash, but 100 bales of very good quality actually sold at 11 cents; Pacific coast crop of 1885, common to choice, 5 1/2 to 10 cents.

## Local Markets.

BAGS—The syndicate prices are still nominally as follows: Calcutta Wheat, spot, 10c; buyer June, 10 1/4c; buyer July, 10 1/2c. Potato Gunnies, nominal; Wool Bags, 29@32c. The market is quiet, however, and as bags are offered outside the ring for 9c, the corner is not working very actively.

BARLEY—Our quotations show a reduction from last week. The market is quiet. Call sales have been made as follows: Buyer '86, after August 1st—100, 83 1/4c. Seller '86—100, 77 1/4c. Seller '86—200, 78 1/4c; 200, 78 1/2c; 200, 78 3/4c; 100, 78 1/2c; 100, 78 3/4c; 300, 79c.

BEANS—Beans are doing better, and an advance has come in nearly all kinds but Limas, which are nominal. Dried peas are lower all around.

CORN—The market is still running on western corn, there being no California in sight. Prices are unchanged.

DAIRY PRODUCE—An improvement has come in both butter and cheese, as noted below.

EGGS—Eggs have sharply advanced several cents per dozen. California eggs are very scarce, and Utah and Western by rail are bringing high prices.

FEED—Bran is \$1 lower per ton. Hay is quiet and in good supply, though extra choice lots sell high. Quotable as follows: Alfalfa, 56@59; barley, 56@58; oat, 57@59; wheat, 59@12 1/2 ton; extra choice, do, 53@14.

FRUIT—Descriptive notes are given below.

HOPS—Hops are showing more life, and dealers report contracts for coming crop at 9 to 10c per lb. This is no price, and growers should not be misled by early contracts for single bales made to influence values. The great reduction in crop should make hops valuable this year.

OATS—Oats are abundant and quiet at unchanged prices.

ONIONS—Onions are doing better this week, owing to light supplies.

POTATOES—Potatoes have improved during the last few days, and good lots are selling well.

PROVISIONS—Lard is reported weaker. Bacon and hams are firm and in good shape. Our list shows an advance of 1/4c per lb. on all grades of hams.

POULTRY AND GAME—Turkeys have the lead this week at an advance. Other fowls are lower.

VEGETABLES—Descriptive notes will be found below.

WHEAT—Wheat is quiet and expectant. Ruling rates are lower than at our last report, as shown in our list. Call sales have been made as follows: Buyer season—300, 1.27 1/2; Buyer '86—300, 1.24 1/2; 200, 1.24 1/2; 300, 1.24 1/2. Seller '86—400, 1.17 1/2. Buyer '86—300, 1.24 1/2. Seller '86—100, 1.17 1/2.

WOOL—The improvement continues and the world's markets are all promising. Fuller notes will be found below.

[COMMUNICATED.]

## Market Information.

## Livestock.

The market has a stronger tone but no higher for beef cattle. The offerings are not liberal for this market. Heavy purchases are reported in the interior on speculation and for shipment to the East. An attempt was made to advance mutton, with success in Oakland, but in this city there is no advance although some butchers report having paid half a cent advance for wethers. The market would be higher the next two months were it not the fear that a large firm's killing 30,000 head of sheep within that time will keep the market down, as the firm, so we are informed, is not disposed to advance the price. In hogs an attempt was made to establish an advance, but free offerings and an inactive demand tend to keep prices down. The market for horses is quiet, with no urgent demand reported in any quarter. The demand for matched horses, for general use, is fair at from \$400 to \$600 a span. Quite a number of medium size work horses were sold the past week at from \$100 to \$150 each.

Lambs closed strong, with an advance likely to take place the last of the week.

The following are to-day's meat prices: Beef—Stall fed 6 1/4@7c lb; grass fed, extra, 6 1/4@6 1/2c; first quality, 5 1/2@6c; second, 5@5 1/2c; third, 4 1/2@4 3/4c. Calves, small, 7 1/2@8 1/2c; larger, 6@6 1/2c lb. Mutton—Ewes, 4@4 1/2c; wethers, 4 1/2@5c. Lamb—Spring, 5 1/2@6c lb. Pork—Live hogs on foot, 4@4 1/2c for both grain and dairy fed; 2 1/2@2 3/4c for soft; dressed, 6@7c for hard, and 4@5c for soft. Grass-fed stock sold on foot, gross weight, at one-half the price they fetch dressed; stall-fed, on foot, fetch one-third less than they sell at dressed.

## Bags.

The demand is reported to be less than it was claimed would be. Several reasons are assigned; viz., farmers are slow to make purchases, believing the prices asked are too exorbitant and that values are apt to rule lower in the months of July and August. It is reported that bags are offering on this market from unexpected quarters which disturbs the pool. Sales have been made of Calcuttas as low as 8 1/2 cts cash in round lots. The bag pool is endeavoring in all manner of ways to keep prices up and dispose of their holdings at a big profit.

## Dairy Product.

Butter has ruled steady and firm throughout the week, with choice to extra choice grades fetching an advance on top quotations. Outside or distant orders are light, owing to the very low (lower than ever before known) price ruling at the West for creameries, allowing many sections heretofore supplied by this market to draw supplies from Chicago.

Cheese has been and continues very weak under heavy supplies and a strong selling pressure.

Turkeys advanced last Friday fully one to two cents a pound. As receipts are still light, prices will probably not go lower.

Hens, roosters, broilers, ducks and geese ruled barely steady up to Tuesday, when they all weakened off. The consumption is very light, not more than one-third of what it was last year at this time.

Poultry closed strong to-day, with sales of some choice fat hens at \$7.50 and even \$8.00 a dozen.

## Cereals.

The English wheat market sold 6d per quarter lower for cargoes off coast and nearly due, and 2d per cental lower for spot. The decline was not unexpected and was discounted before it took place by buyers in this market.

The local wheat market ruled weak up to Monday, when an improved tone set in, in sympathy with a better feeling abroad. Sellers in our market do not appear disposed to press sales, thereby keeping values fairly steady with an advance paid at times by buyers to meet an urgent want.

Barley has ruled weak and inactive in this market, but in the interior higher prices have been and are still paid than here. Heavy purchases are reported to have been made for New York, and western account. The grade wanted is from 45 up. Old brewing barley is very scarce with higher prices paid.

Letters received the past few days from points on the west side of the San Joaquin, and from different places in Colusa, Sutter, Butte and Yolo counties, report much more damage to crops by the hot winds than had been estimated. It is safe to say that the crop of the State has been damaged all of 10 per cent and may reach 15. It now looks as if this

State's surplus for export the season of 1886-7 will not be much more than the exportable surplus of 1885-6. The yield will be more this year, but the carry-over of old wheat and flour will be about 225,000 tons less.

The consumption of barley is very heavy, all of one-half more than last year at this time. So that although we have a larger crop, yet the increased consumption will offset the increased yield.

Oats are in light stock, which with light supplies keep prices steady.

Private cables from Liverpool, received to-day, give the wheat market strong, with an advancing tendency. Our market is strong with \$1.22 1/2 bid this afternoon for No 1 shipping.

## Vegetables.

As indicated in last week's report, both potatoes and onions are stronger, with an advance of 10 to 15 cts obtainable.

Asparagus and rhubarb are hardly worth quoting, owing to very light receipts. The same can be said of peas.

String beans have been a drag, with very low prices ruling. The canners are still buying. Yesterday, the market was cleaned up on green peppers at an average price of 8 cts per pound.

Cabbages are still in active demand for shipping, causing the gardens to be kept well cleaned of all desirable heads.

## Fruits.

Apricots have continued in heavy receipts, but prices were maintained with an advance obtainable, owing to heavy shipping, local and canning demands. On Monday over 8000 boxes of apricots were received, yet they sold at a better figure than on Saturday.

Plums are coming in more freely, with the quality beginning to show an improvement. Prices ruled steady.

Apples have been advancing, with astracans sold to-day at \$1.75@2.00 a box and \$2.25 asked.

Peaches jumped up to \$1.65 a basket for choice on wharf, but since fell back, with \$1.10 the top to-day.

Pears are coming in more freely, but the quality being poor, they do not attract attention. Choice will go as high as \$2 to \$2.50 a box for Bartlett's.

Currents have sold for more money. Large, well-conditioned have sold up to \$3.50 a chest with a quick demand. The range was \$2.25 to \$3.50.

Raspberries, strawberries and blackberries have moved off freely, but at lower figures, with canners buying. Receipts have been more liberal of raspberries and blackberries.

Oranges are lower and very weak. Common Los Angeles are hard to sell at over \$2.25.

Limes are strong, owing to the pool not offering on the market only enough to meet the demand.

## Wool.

The market is again higher, with heavy sales reported at the advance. All of 1 to 1 1/4 cents advance is obtainable on last week's prices. This advance was fully set forth in the *RURAL PRESS* early in the season, and if growers sold at low prices they can only blame themselves. Several clips of medium to fine wools, fair length, clean and healthy, sold at over 24 cents, with some reported at over 25 cents per pound.

## Miscellaneous.

The tonnage-movement compares with last year at this date as follows:

	1886.	1885.
On the way.....	305,637	20,861
In port, disengaged.....	31,731	93,858
In port, engaged.....	43,900	19,288
Totals.....	381,268	311,007

The above gives a carrying capacity as follows: 1886, 615,028 short tons; 1885, 497,711 short tons. Increase over last year, 117,317 short tons.

Hops are very strong, with 11 cents freely bid for future delivery; but growers are not contracting, as crop advices at the East and in Europe are unfavorable.

Choice to extra choice hay continues to rule very strong, with some sales afloat at \$13.50 per ton—jobbed out at an advance. The market at the close to-day was weaker under freer offerings.

Hams and bacon are very strong, with another advance obtainable. The stock is light and demand active.

Bran and middlings, under heavy receipts, are weak and lower.

San Francisco, June 30, 1886.

J. E. F.

## Complimentary Samples.

Persons receiving this paper marked are requested to examine its contents, terms of subscription, and give it their own patronage, and, as far as practicable, aid in circulating the journal, and making its value more widely known to others, and extending its influence in the cause it faithfully serves. Subscription rate, \$3 a year. Extra copies mailed for 10 cents, if ordered soon enough. If already a subscriber please show the paper to others.

## Domestic Produce.

WEDNESDAY, June 30, 1886.

BEANS AND PEAS		Peanuts		13 @ 41	
Bayo, ctd.....	1 20 @ 1 25	Filberts	3 @ 14		
Butter.....	1 25 @ 1 50	POTATOES.			
Castor.....	4 00 @ —	New ctd.....	@ —		
Peas.....	1 65 @ 1 75	Hubbard.....	@ —		
Red.....	1 05 @ 1 15	Early Rose.....	50 @ 90		
Pink.....	1 05 @ 1 15	Cutty Cove.....	@ —		
Large White.....	3 00 @ —	Jersey Blues.....	@ —		
Small White.....	1 65 @ 1 75	Petaluma.....	@ —		
Lima.....	2 00 @ 2 25	Tonales.....	@ —		
Field Peas, bly eye 1 50 @ —		River reds.....	@ —		
do green.....	1 00 @ 1 12 1/2	Humboldt.....	@ —		
do Niles.....	1 25 @ —	do Kidney.....	@ —		
BROOM CORN		Chile.....	90 @ 1 00		
Southern.....	3 @ 3 1/2	do Oregon.....	@ —		
Northern.....	4 @ 6	do Peoria.....	60 @ 90		
CHICKORY		Salt Lake.....	@ —		
California.....	4 @ 4 1/2	POULTRY AND GAME.			
German.....	6 @ 7	Hens, doz.....	5 50 @ 6 50		
DAIRY PRODUCE, ETC.		Roosters.....	5 00 @ 8 50		
Butter.....	15 @ 18	Broilers.....	2 50 @ 5 00		
Cal fresh roll, lb.....	15 @ 18	Ducks, tame.....	3 50 @ 5 50		
do Fancy brand.....	19 @ 20	do Mallard.....	@ —		
Pickle roll.....	20 @ 21	do Spring.....	@ —		
Fat, new.....	13 @ 19	Geese, pair.....	1 25 @ 1 50		
Eastern.....	10 @ 12 1/2	do Goslings.....	1 00 @ 1 50		
EGGS		Wild Gray, doz.....	@ —		
Cheese, Cal, B.....	6 @ 7 1/2	White.....	@ —		
Eastern style.....	8 @ 12 1/2	Turkeys, B.....	14 @ 19		
HONEY		do Pressed.....	@ —		
Cal, ranch, doz.....	25 @ 27 1/2	Turkey Feathers.....	@ —		
do store.....	20 @ 24	do tail and wing.....	10 @ 20		
Ducks.....	@ —	Snipe, Eng, doz.....	2 50 @ 3 00		
Oregon.....	@ —	do Common.....	1 00 @ 1 25		
Eastern, by ex.....	17 @ 18	Quail.....	@ —		
Pickled here.....	@ —	Rabbits.....	1 00 @ 1 25		
Utah.....	21 @ 22	Hares.....	@ —		
FEED		Venison.....	@ —		
Bran, ton.....	14 00 @ 14 50	PROVISIONS.			
Commeal.....	25 00 @ 26 00	Cal Bacon.....	@ —		
Hay.....	6 00 @ 14 00	Heavy, B.....	8 @ 8 1/2		
Middlings.....	16 00 @ 17 00	Medium.....	8 @ 8 1/2		
Oil Cake Meal.....	26 50 @ 28 50	Light.....	10 1/2 @ 11 1/2		
Straw, bale.....	30 @ 50	Extra Light.....	12 @ 12 1/2		
FLOUR		Lard.....	7 @ 9 1/2		
Extra, City Mills.....	3 75 @ 4 25	Cal Smoked Beef.....	12 @ 12 1/2		
do Country Mills.....	3 60 @ 4 10	Hams, Cal.....	10 1/2 @ 12 1/2		
Superfine.....	2 75 @ 3 00	do Eastern.....	12 @ 13		
GRAIN, ETC.		SEEDS.			
Barley, feed, ctd.....	77 1/2 @ 85	Alfalfa.....	11 @ 11 1/2		
do Brewing.....	1 40 @ 1 60	Canary.....	3 1/2 @ 4		
do new.....	87 1/2 @ 92 1/2	Clover red.....	4 @ 15		
Chevalier.....	1 40 @ 1 65	White.....	45 @ 50		
do Coast.....	1 10 @ 1 30	Cotton.....	20 @ —		
Buckwheat.....	1 05 @ 1 10	Flaxseed.....	24 @ 2 1/2		
Corn, White.....	1 00 @ 1 12 1/2	Hemp.....	5 @ 5 1/2		
Yellow.....	1 00 @ 1 10	Italian Cypress.....	25 @ —		
Small Round.....	1 15 @ —	Perennial.....	25 @ —		
Nebrauka.....	30 @ 1 00	Millet, German.....	10 @ 12		
Oats, choice.....	1 35 @ 1 40	do Common.....	7 @ 10		
do No. 1.....	1 25 @ —	Mustard, white.....	4 1/2 @ 5		
do No. 2.....	1 20 @ 1 22 1/2	Brown.....	24 @ 3 1/2		
do black.....	@ —	Rape.....	1 @ 1 1/2		
do Oregon.....	1 25 @ —	Ky Blue Grass.....	30 @ 25		
Wheat No. 1.....	1 20 @ 1 21 1/2	2d quality.....	18 @ 12 1/2		
do No. 2.....	1 15 @ 1 17 1/2	Sweet V. Grass.....	75 @ —		
Choice milling.....	1 25 @ —	Orchard.....	20 @ 25		
HIDES		Red Top.....	15 @ —		
Dry.....	16 @ 17	Hungarian.....	8 @ 10		
Wet salted.....	14 @ 15 1/2	Le.....	8 @ 10		
HONEY, ETC.		Lawn.....	50 @ 40		
Beehive, B.....	21 @ 23	Mocking.....	10 @ 11		
Honey in comb.....	6 @ 11	Timothy.....	5 1/2 @ —		
Extracted, light.....	3 1/2 @ 3 1/2	TALLOW.			
do dark.....	3 @ 3 1/2	Crude, B.....	3 @ 4		
HOPS		Refined.....	6 @ 6 1/2		
Oregon.....	@ —	WOOL, ETC.			
California.....	7 @ 9	SPRING—1886			
ONIONS		Humboldt.....	21 @ 23		
Red.....	35 @ 60	Mendocino.....	17 @ 20		
Silverskin, new.....	65 @ 85	Sacramento.....	17 @ 20		
NUTS—JOBBER		Free Mountain.....	17 @ 20		
Walnuts, Cal, B.....	7 1/2 @ 9	Nielsen defective.....	@ —		
do Chile.....	7 1/2 @ 9	S Joseph short.....	14 @ 18		
Almonds, dahl.....	6 @ 10	do long.....	13 @ 16		
Soft shell.....	10 @ 12	Cava & F.W.H.I.....	17 @ 19		
Brazil.....	11 @ 12 1/2	do Oregon Eastern.....	20 @ 22		
Pecans.....	10 @ 12 1/2	do valley.....	20 @ 24		
		do Southern Coast.....	14 @ 18		



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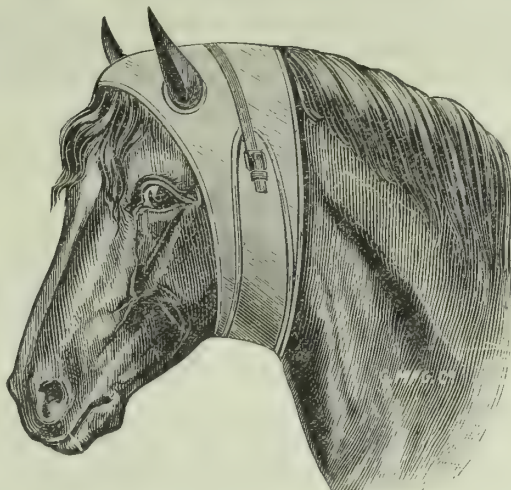
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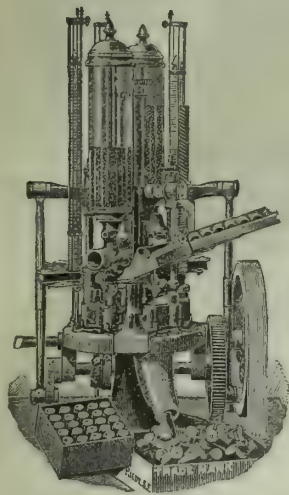
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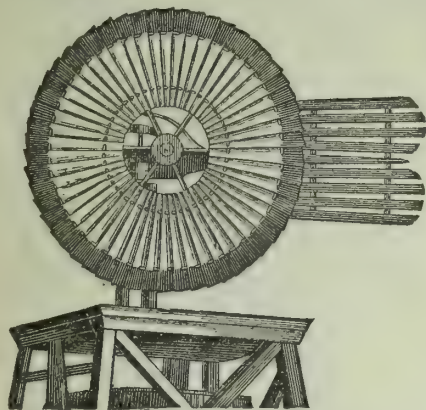
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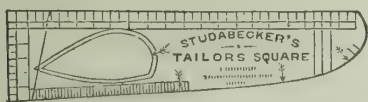
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GEO. LEITE, Secretary.

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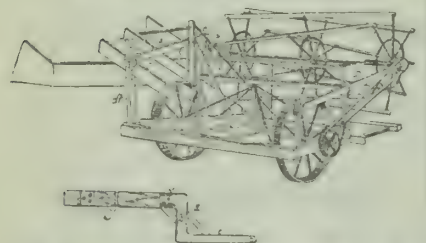
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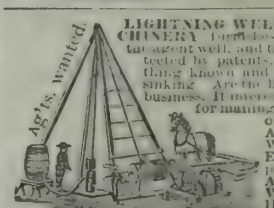
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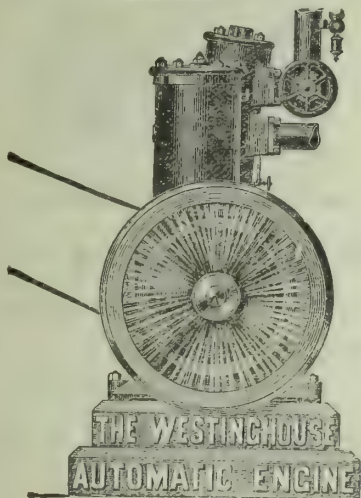
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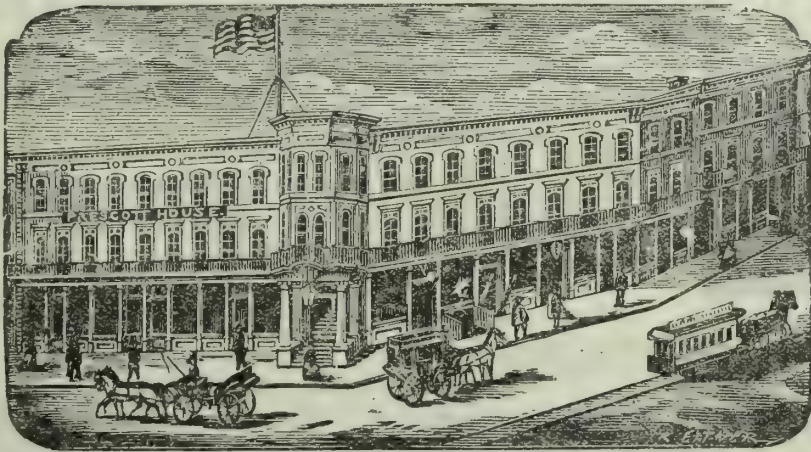


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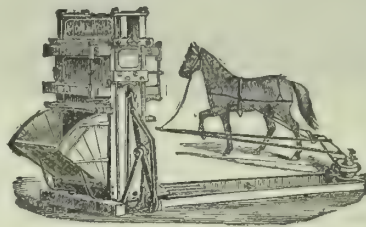


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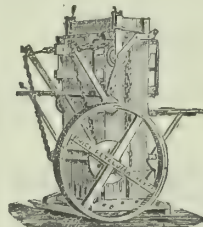
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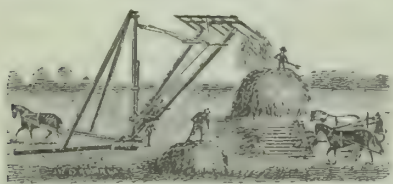
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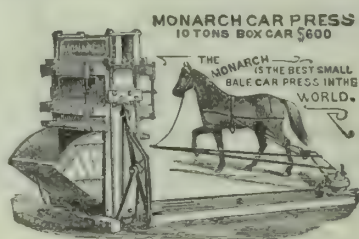


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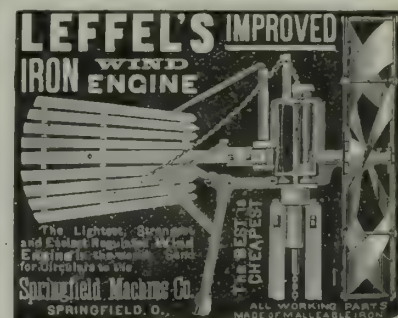
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TWENTY-PAGE EDITION.

Vol. XXXII.—No. 2.]

SAN FRANCISCO, SATURDAY, JULY 10, 1886.

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#### A New Plum.

We give on this page an engraving of a new plum, which is expected to be of much value at the East, and will therefore interest California growers. Whether it would prove of value here, where we can grow so many varieties which do not succeed at the East, and consequently have a much larger test than they have, is of course a question which can only be determined by growing it in comparison with the other kinds we have. As a new candidate for notice in the horticultural world we give it place in our columns.

The Shippers' Pride plum originated in the State of New York, near Lake Ontario, and from what can be learned, it has stood the coldest Eastern winters without injury. The tree is described as an unusually thrifty grower, sometimes making a growth of over eight feet.

Its productiveness seems to be an established fact, the original tree having never failed to produce a good crop since it was old enough to bear, and some seasons so large as to need support to prevent the branches from breaking. The fruit is of large size, it being no uncommon occurrence to find specimens measuring two inches in diameter each way, as it is nearly round; it is what Mr. Charles Downing called a semi-cling, of a handsome dark purple color, excellent for canning, and an unusually good shipper, arriving at its destination in good order, and keeping for a long time in excellent condition. Some specimens, said to be below the average, were sent to the meeting of the American Pomological Society, at Grand Rapids, Mich., last fall, and elicited much commendation from their large size and handsome appearance. The Shippers' Pride ripens at the East from the first to the middle of September. It seems to combine many if not all of the essential qualities of a market plum. The variety has been propagated for sale by H. S. Anderson, of Union Springs, New York. It has apparently secured the favor of the leading Eastern fruit experts. The late Charles Downing said of the plums: "They are large, showy plums and will no doubt sell well in the market. Promises to be valuable for market and canning."

Speaking of new plums, it is interesting to mention an announcement of a new prune from Shasta county, originating in the yard of W. W. Elmore, of Anderson. We find the following description of it in an exchange:

It is a prune of a sweeter taste than the French or German and ripens three months earlier. Mr. Pettygrove, an experienced fruit-raiser, calls it a mongrel, and accounts for it from a French prune and cherry-plum tree being planted in close proximity, and a seed dropping from one of the trees into the ground germinated and burst forth a hybrid, the fruit taking its flavor from the French prune, and early ripening from the cherry plum. This tree has attracted the attention of many fruit men, and Mr. Elmore has refused a handsome sum of money for it. The fruit, which is now ripe, has been sent below for exhibition.

HOW SPARKS MAKES THE SPARKS FLY.—It is telegraphed from Washington that Land Commissioner Sparks has canceled for fraud during June 153 entries and filings, and held for cancellation 127 entries, embracing in all about 40,000 acres of land. He has also recommended criminal proceedings against 32 persons for timber trespass and 15 civil suits to recover \$145,000, the value of timber stolen by them.

DEATH OF A CALIFORNIA CATTLE KING.—Thomas Hildreth, for over 30 years a prominent cattle dealer and mining operator, died June 29th, at his home in San Jose, of gastric hemorrhage. He was a native of Kentucky, but has resided in San Jose with his family for a score of years. His pioneer associates speak of "Uncle Tom" as a whole-souled, generous man, whose passing away they regard with deep sorrow. His hospitable spirit was indicated by the understanding among all who ever had occasion to visit Dunphy & Hildreth's ranches that "everybody is welcome at Tom Hildreth's camp." Though rough in manner

#### Mission Grapes in Texas.

We find in the *Two Republics*, published in El Paso, Texas, an account of the fruit grown there, in which it is said that the best grape they have there for table use is the old Mission grape, introduced by the San Franciscan monks when the Spaniards first came to this country under Coronado. They have of this grape two kinds, one of light, mottled claret color, and one of a deep blue, covered with a beautiful bloom. They are almost black. The skin is quite thin, and they are juicy and luscious beyond any other grape we have ever



A NEW PLUM—THE SHIPPERS' PRIDE.

he was of kindly heart; no one ever applied to him in vain in time of need, and many deeds of kindness and charity are placed to his credit in the record of his life. He had been ailing for some time, and the worry of business complications probably hastened his death, at the age of 68. He leaves a wife and large family of children.

VITICULTURAL STATISTICS.—The directors of the Grape-Growers' and Wine-Makers' Association have decided to attempt the preparation of a directory which shall include all in the grape industry, and the statistics of their acreage and production. After a general discussion upon the subject, at a meeting in this city on Tuesday, it was resolved to instruct the secretary, Mr. Rixford, to communicate with F. W. Morse, of the State Viticultural Commission, to ascertain just what progress the commission has made in gathering such statistics. Mr. Morse has from many districts full reports, from others partial reports, and from others none at all. It is the intention of the association to co-operate with the commission in gathering the desired information.

tasted, not the least suspicion of the acid taste often found in other varieties. They claim that this is the same as the California Mission grape; but the writer, having eaten them in both places, pronounces the El Paso Mission better on account of warmer soil and to the irrigation water of the Rio Grande, of which he says: "Laden with ammonia it goes on its way, stirring up the sediment and rich decomposed matter; and on its way, passing through belts of gypsum and minerals, it becomes almost a thick paste when at its highest point—during June and July—and it becomes a liquid manure, giving great strength and vigor to the young grape then needing most its fertilizing power."

It is true, we do not have any such sticky streams as that in California; even in slickens times our rivers were hardly as bad as that. The writer says, farther, that this "imparts to the El Paso grape a crispness and juiciness that our California friends can never hope to obtain." That settles it. If there is no use hoping we always give a thing up.

Healdsburg will ship about 2,000,000 pounds of wool this season.

#### Movement Against False Products.

This measure hangs fire in the U. S. Senate and stands a good chance of being smothered. It was telegraphed from Washington on Tuesday that Senator Miller, of New York, who has the bill in charge, would make an effort to bring it up this week but had no idea he would succeed in securing its consideration. Senator Edmunds and others have notified him that there are important constitutional questions involved in the bill and that they will not permit a vote to be reached without at least a week's discussion. As this will be impossible in view of the near approach of adjournment, Senator Miller thinks the friends of the bill will be compelled to wait until the next session of Congress before positive action can be had upon it.

Senator Edmunds' Vermont constituents, who are largely dairymen, have feared his parleying, and wrote him some days ago about what they expected of him. He replied that he did not need to be reminded of his duty to the farming interest, and yet he was getting ready to talk a whole week on the constitutionality of stamping and taxing of bogus butter. Such friends of the farmer are of a sort that has figured too largely in our State and National Legislatures.

It seems that another important measure to California producers is in the same boat with the oleomargarine bill, and that is the enactment to label and tax spurious wines, for which Mr. Wetmore has been laboring at Washington. There is quite a close analogy between the making of bogus butter and bogus wine, and both are full of debasement and abominations. The friends of the genuine product in each case have adopted the same method of attacking the evil, and if Senator Edmunds and his associates have to talk a week on one, they must surely have a week on the other. These questions seem simple enough to common people, and the courts, high and low, have, in the case of oleomargarine at least, pronounced legislation against it to be constitutional. It remains, however, for the microscopic-eyed legislative lawyers to find more in them than outside people can see. It is such things as these that make the people tired.

BOGUS SHORTHORN PEDIGREE.—We have not heard much of late of frauds in shorthorn pedigrees, and we supposed the associations had arranged their safeguards so well that there was little chance for imposition. This is no doubt true, but an occasional intrusion of evil is to be expected in almost any institution. There has been quite a sensation in Detroit, Michigan, over the announcement in the herdbook of the American Shorthorn Breeders' Association that the pedigrees of cattle owned and sold by William B. and Henry Mitchell, prominent private bankers of Detroit, are fraudulent. It is alleged that the Mitchells have furnished false pedigrees of certain shorthorns, the progeny of the cow Airdrie Duchess XI being mentioned. A page of the 30th volume of the American Shorthorn Herdbook just published is devoted to the exposure of the Mitchells, and the pedigrees of many animals owned or sold by them are pronounced fraudulent. A resolution passed by the American Shorthorn Breeders' Association provides that neither of the Mitchells shall ever be allowed to enter another animal on the herdbook of the association. We are not aware that any of the Mitchell stock is on this coast.



## CORRESPONDENCE.

Correspondents are alone responsible for their opinions.

## The Great Central Plateau of the Southwest.

## Its Natural Wealth and Resources.

(Written for the Press by J. G. LEMMON.)

If the reader will examine a late map of the southwestern Territories he will, at a glance, notice a long line of railway running nearly straight across the northern part of Arizona, and extending eastward nearly to the center of New Mexico.

On close inspection this line will be seen to follow along the 35th parallel of north latitude, varying only a few miles north and south of this parallel at any point.

Also it will be seen to span the whole distance between the two great rivers that flow southward out of the Rocky Mountains—the Colorado and Rio Grande—separated on this parallel by just eight degrees of longitude, equaling at this latitude about 50 miles each, making an air-line distance of about 400 miles.

The Railway Guide-book will inform you that the 35th parallel road, despite the sinuosities a railway must make to find the easiest grades, spans this distance by a course of only 560 miles.

The guide-book will also show the newly established town of Needles, on the Colorado river, as the western terminus of this road; also that this town is connected with the farther West by a continuance of the line to Mohave, on the Southern Pacific Railroad from San Francisco to Los Angeles and the southwest.

Also the guide-book will inform you that the larger, more important town of Albuquerque, on the Rio Grande, enjoys the double advantage of being both the eastern terminus of the road described and also of being a central depot of the Atchison, Topeka & Santa Fe road, coming from the northeast on its way down to El Paso and the southwest.

## The Great Central Plateau.

This much the map and guide-book will show, but the most prominent feature of the country is not readily conveyed to the eye by a flat surface like a map. This feature is a high, long and broad plateau occupying this interspace, and over which the railway climbs and descends.

The great plateau is somewhat quadrangular and oblong in shape, the longer diameter being east and west. Its high center remains convex, like a broad sugar loaf, but its sides all around have been abraded and carried away by ages of weathering, the debris conveyed to Southern Arizona and New Mexico and spread over their valleys by the affluents of three great rivers, which almost entirely inclose the plateau.

The Colorado and Rio Grande form the nearly straight west and east boundaries of the plateau respectively, while the grand canyon of the Colorado river, turning abruptly eastward near the northwest corner of Arizona, together with its principal and also deeply-canyoned branch, the San Juan river, bound the irregular northern side. Similarly, but not so deeply, the Gila river, with its affluents, drain the still more irregular southern side.

This plateau is so large and diversified that characteristic names have been applied to the several mesas or benches composing it.

## Mesas and Mountains.

Hualapais and Chino valleys, with the Aubrey and Prescott mesas and a large diversified plain south of them, comprise the western end of the plateau; the San Francisco mesa comprises the great forest on the Arizona divide; east of it, stretching to the continental divide, is the large Colorado mesa with the Moqui and Navajo reservations north and the White mountain reservation south of it; lastly, in Northwestern New Mexico, is the broad continental divide with the Zuni and Mogollon mesa south of that.

The most conspicuous mountain groups rising out of the mesas along the north side of the plateau are, first on the west, the several Hualapais ranges, the Prescott ranges, the Bill Williams group, the San Francisco group with its mountains Agassiz and Humphry over 13,000 feet high—the highest peaks in Arizona—the Sierra Madre on Zuni range on the continental divide, and the San Mateo group, with its Mount Taylor, over 13,000 feet altitude, the loftiest peak in New Mexico.

Another line of groups are the Granite, Superstition, Manizeta, Pinal, White—with its Mounts Thomas and Ord, over 11,000 feet altitude, and the rugged Mogollon mountains remain prominent on the southern slope of the plateau.

## Principal Rivers.

Chief of the rivers originating on this plateau is the Little Colorado, a considerable stream some 250 miles long, which, with its many branches, alternately drains and irrigates the broad central portion between the two divides, cutting for itself at last a deep gorge on the north side through which it debouches into the main Colorado just at the head of the Grand canyon.

Similarly, but on a smaller scale, the Salt river disports itself on the south-central part of the plateau and then empties into the Gila above the Big Bend. Bill Williams and Rio Puerco

are minor streams on the western and eastern ends respectively, each contributing largely to the wealth of the plateau.

## Towns and Settlements.

Several important towns, including the capital, Prescott, are situated on this plateau. The capital and Mineral Park are on the western slope, the former about 50 miles south of the A. & P. R. R., the latter 20 miles north of it.

Similarly situated, on the eastern slope, are St. Johns and the other Mormon settlements, all on the Little Colorado and its branches.

A dozen new and promising towns have sprung up along the line of the railway. Beginning at the west, Kingman is the depot for Mineral Park, Peach Spring for tourists, to the Grand canyon of the Colorado, Ash Fork for Prescott. Williams is an important mountain town. Flagstaff is at a higher elevation than any other town on the plateau, 7000 feet in the great pine forest near the base of the lofty Mt. Agassiz. Winslow is the depot for some of the Mormon settlements, Holbrook for St. Johns and other Mormon settlements, together with several other important and growing towns; Wingate, for the port of that name, and the ancient Indian town of Zuni, while McCarty's station is the radiating point to several Indian pueblos and Mexican towns near the Rio Grande.

A half-dozen military posts have long been established on the plateau, including Fort Whipple near Prescott, the headquarters of the department commander.

## Atlantic &amp; Pacific Railway.

The long, nearly straight thoroughfare described as traversing this plateau from end to end, is the lately constructed and superbly-equipped middle division of the Atlantic & Pacific or Thirty-fifth Parallel railway, in praise of which, and the scenery it reveals, together with the natural wealth and resources it unfolds, much has been written of late, and deservedly, too, for it is one of the most interesting and important routes thus far projected on this continent.

This results from its traversing a region studded with more extreme, diverse, beautiful, grand, curious, wonderful, important and valuable objects than can be combined by a road of like extent through any other part of the globe. And this region is not alone to be penetrated by this road, for already two important feeders have been surveyed, one across the western end of the plateau reaching down southward to Prescott, and thence to Phoenix, in the rich valley of the Salt river, continuing on across the Gila river to connect with the grand trunk of the Southern Pacific at Maricopa; the other traversing the middle portion from Flagstaff through the length of the great forest to Globe City, and making another connection with the Southern Pacific at Wilcox.

Each of the foregoing adjectives applied to the region traversed by the A. & P. R. R. could be substantiated by pages of detailed description, but the requirements of journalism demand of the note-taker brevity and point.

## Extremes and Diversities.

Exceeding diversity results from the great difference of altitude of the several parts of this plateau. Taken as a whole the plateau is inclined on its bed so that its western end is depressed to nearly sea level at the Colorado river, while its center rises to over 7000 feet at two points—the Arizona summit and the Continental divide—descending to about 5000 feet at the eastern end resting on the Rio Grande; and all this extreme of elevation is under the semi-tropic parallel of 35 degrees, thus insuring the widest diversity of flora and fauna.

The low Colorado valley, the hottest region within the limits of the United States, with its burning desert sands yielding their peculiar thorny flora of cacti, yucca and agave, under which lurk noxious reptiles and above which swarm stinging insects, contrasts very strongly with the elevated and delightfully cool great central crown with its gently undulating valleys and hills, all clothed with a wealth of pine, oak and juniper forests and carpeted with beautiful flowers and nutritious grasses, upon which feed graceful quadrupeds and above which float lovely song-birds; while rising here and there from out the evergreen forests like icebergs on the billowy sea, several isolated groups of bald peaks ascend from 12,000 to 13,000 feet in height, so lofty, indeed, as to retain perpetual snow in their northern canyons, once the track of grinding glaciers.

## Beautiful and Grand Scenery.

Most beautiful are the flowers, shrubs and trees; the canyons, water-courses and valleys; the groves, meadows and vistas revealed by this road; while the extensive forests, noble mountains and bristling peaks attain the magnitude of grandeur. Awe-inspiring sublimity reaches its climax on this continent in the Grand canyon of the Colorado, near the great southern bend of which, at Peach Spring, this railroad fortunately passes. This canyon is over 200 miles long. Its walls are from 4000 to 6000 feet high, and irregularly cleft from top to bottom by side canyons that leave segments of rock between them, fashioned into magnificent pyramidal, castellated mountains, zoned about with horizontal, parti-colored strata, from river-washed base to cloud-wreathed summit.

## Curious and Wonderful Objects.

Very wonderful are the roomy, white-furnished limestone caves recently discovered near

Peach Spring and Ash Fork, while still larger and more wonderful ones have been found in the White mountains; the latter abounding in ancient pottery, burial urns, weapons and utensils of curious design and unknown origin.

On the plateau near Chiquita, Colorado, the former traveler over the plains suddenly found himself, without warning, on the very verge of the famous Canyon Diablo, a deep rift in the earth's surface 30 miles long, 222 deep and only 540 feet across, channeled by a deep stream ages ago. This frightful gorge is now spanned by a much-admired iron bridge, over which all trains pass slowly to allow passengers time to gaze into its awful depths.

Most wonderful and puzzling is the petrified forest near Holbrook, trees of which have been measured that were three to four feet in diameter. The cracks and cavities of these trees are filled with masses of lovely polygonal crystals of many hues, being the residue of the silica which was taken up in solution by these trees during a series of dry seasons, ages ago, and thus deposited, after which the celluloid tissue of the heart-wood was filled to repletion, and the trees became solid stone. A company has been incorporated in San Francisco to obtain and manufacture tons of these petrifications into jewelry and all sorts of fancy as well as useful articles.

## Interesting Aborigines.

Most interesting to tourists and important to naturalists are the persons, habits, occupations, surroundings and traditions of the aborigines, many tribes of which are located on this plateau.

These Indian tribes present all degrees of physical condition and mental culture, from the squalid, beggarly Hualapais, huddled under the junipers of the western slope, who hesitate at nothing degrading and criminal, to the high-spirited, stock-raising Navaho, roaming over the upper mesas; or the still more advanced and Christianized, agricultural Pueblo Indians, dwelling in excellent stone houses of extremely ancient origin on the eastern slope.

The Indian topic is so very interesting that the temptation is strong to enlarge upon it at this time, but such amplification may be indulged, perhaps, in a subsequent paper.

## Salubrity of the Climate.

The high elevation of the plateau, the mildness of the summer's heat and the winter's cold, the absence of hot winds and piercing blasts, the presence of balsam-producing trees in the forests, the purity of the mountain springs and streams, all combine to make the sanitary conditions exceedingly good.

Already the region has become a resort for invalids seeking health, and persons afflicted with chills and fever elsewhere lose all symptoms of the malady soon after arriving on the plateau. No malarial districts, even of small extent, have been detected on it, and their presence is believed to be impossible.

Rheumatic and nervous disorders are infrequent, while pulmonary and bilious complaints never originate on the plateau.

The few physicians that strive to make a living here have very large circuits and each has some other business—the sale of drugs, the raising of stock, etc.—connected with his profession. They declare that their practice consists almost entirely of surgery and obstetrics.

## Great Wealth of the Plateau.

Finally, the economic values of the objects developed and brought into commercial relations with other parts of the Union by this new railway are simply past computation.

First may be mentioned the saving of time—and time is often of more worth than money to the tradesman or traveler—insured by a direct thoroughfare between the East and West which is absolutely unmenaced by snow-blockades in winter or sandstorms and washouts in summer. The real wealth of this Mesopotamia region is but fairly discoverable now, not yet fully developed. It consists mainly of several rich mines comprising nearly all the precious metals, already putting out carloads of bullion and hundreds of prospects more or less developed in all the mountain ranges of the plateau; of vast coal fields supposed to be the largest in the world, underlying the north-central part of the plateau, extending also into Utah, while southward they are crossed by the railway at Gallup, where five thick strata crop out and are extensively worked; of wide forests of pine, cedar, fir, juniper, oak, ash and other timber trees, among which already many saw-mills and factories are established, using improved machinery and employing hundreds of workmen; lastly, and perhaps chiefly, of stock-raising, beef-producing and wool-growing facilities, prosecuted for hundreds of years by the pastoral Indians and now being seized upon and improved by the dominant white races.

## Unexcelled Grazing Lands.

It is believed that no other country in the world is possessed of such wealth of grazing lands as are found on this plateau. Nutritious grasses, thick, and often two and three feet high, abound in the valleys and amid the trees of the great forest, while shorter and more tufted, but just as rich and abundant, clothe all the other portions of the plateau at lower levels, especially in the broad juniper belt, which entirely surrounds the great forest, and which, in fact, composes the greater part of the plateau.

## Seeming Drawbacks.

To the traveler on the railway or the thoughtless observer anywhere, there seem to be two

serious drawbacks to the superior excellence of this plateau as a grazing country. One is the presence of *Malpais* rock over large portions; the other is the scarcity of water over most of it. Both these facts, however, are found to be really great advantages to stock-raising and fattening.

*Malpais*—"bad land" or "bad country" in Spanish—is a black or various colored lava, hard and porous, which is found shattered at the surface, and strewn over large areas of the plateau, especially at the center, where, perhaps, it originated in the San Francisco and neighboring mountains. Its presence prevents animals from stampeding or running great distances, but does not hinder slower progress anywhere, especially in the numerous valleys, where it is partially or wholly covered with alluvium.

Large stock-raisers of many years' experience declare that they would not have the *malpais* removed from their ranges for any consideration, for it keeps their animals quietly at home, thus greatly favoring fattening and increase.

The wild, long-bodied and long-legged animals from Texas and similar smooth plains have been made so by the habit of running and stampeding to which they have been subjected all their lives. Brought upon this plateau, their offspring in a few generations become tame and gentle, with short legs, thick bodies and deep chests, while every circumstance favors milk-yielding and fattening processes.

## The Water Supply.

While it is well known that springs and so-called "tanks" or sink-holes in stream-beds are everywhere dispersed at convenient intervals—and of these more can be readily developed by intelligent effort in many places—yet there is at present a comparative scarcity of water.

This scarcity serves a similar purpose as the *malpais*, in keeping animals quietly at home, and hence it greatly diminishes, or entirely obviates, the expenses of herding. An instance was cited to the writer where a stock-raiser in the region easily cares for over 1000 head without assistance.

Stockmen find that one herder can care for five times as many animals in such regions as where water is so abundantly and equally distributed, for the herder has only to visit the watering places for his stock instead of searching over the whole country.

Still, there are certain districts lying idle because they are entirely destitute of water except in winter and midsummer. In these localities enterprising natives are boring artesian wells, and the day is not far distant when the construction of reservoirs in favorable gulches, or the converting of certain canyons and valleys into lakes, will be found a profitable investment of capital.

## The Mild Winters.

As a climax to this matchless array of stock-raising and fattening facilities it only remains to mention the highly favoring, mild, open winters.

All the domestic animals, including sheep, require no special care or provision in winter as regards either food or shelter. At the approach of the first storms the animals not already favorably located roam off into the juniper belt, to feed upon the hitherto untouched grasses, coming back or being driven back in the spring, fat and ready-for market, with seldom the loss of over one per cent.

Let Eastern farmers who have to build barns and then toil three or four months of each year to fill them with hay, then toil another three or four months to feed the hay out to stock, in a freezing atmosphere, let them learn of this glorious outlook on the great central plateau of the Southwest, where millions upon millions of acres of these grazing lands lie all unoccupied and inviting Anglo-saxon enterprise.

Flagstaff, Arizona, June 2, 1886.

## A Nook in Tulare.

EDITORS PRESS:—As you solicit information from all parts of California, I will give you a few notes from this isolated nook in her vast domains. We feel somewhat at a loss how to name this community. It is often designated as Cottonwood, Stone Corral or Cricketville. Now, to settle the matter, or add confusion, I propose to call it Butte Cove, as there are three noted Buttes in the southern part of the valley, standing like sentinels in the level plain. They were spoken of by General Fremont as the Pilot Knobs. I think where we have such noted landmarks we should not be at a loss for a name.

The valley is a cove in the mountains, about 12 miles northeast of Visalia. The soil is quite varied. Near the mountains is what we call dry bog—an intensified adobe, not separating in large chunks like adobe, but crumbling up into fine particles. It is much softer when thoroughly dry than at any other time, and very productive. Quite a large portion of the valley is a sedimentary deposit, caused by the overflow of Dry creek. Between this and the bog land is a red soil, a clayey loam, well adapted to fruit or vines. I think it is the best fig land in the State. This was one of the first places in the southern country where the growing of the cereals was attempted outside of a few moist spots along the rivers, and most of the land has been constantly utilized for that purpose ever since. The valley nestles close up against the high mountains, and consequently gets more rain than the lands out in



the open plain; hence crops are reasonably sure, failures occurring only in excessively dry years. Besides, the heavy northers that are sometimes so trying to crops in the open are shut off by the spurs of the mountain on the north. The land has, as a general thing, been very slovenly cultivated. Most of it is held in large tracts. Fielden Bacon owns about 4000 acres, and there are many other large holders. Much of the dry-bog land has never been plowed, and yet has been yielding from fair to enormous crops most of the time for the last 12 years. Sometimes a cultivator or a harrow is run over it to cover the seed.

The district is but sparsely settled, and little has been done in the way of improvement. We have one store and postoffice, and one flourishing school. The country is deserving of a better fate, as the soil is good, the climate healthful and the scenery unsurpassed. The mountains begin to rise on the eastern side of the valley. For several miles the elevation is a wavy, undulating slope, then more abrupt, presenting huge cliffs and gorges, still rising, rising, till the glacial heights reach the summit of our great Mount Whitney, whose icy brow, reflecting the genial rays of Southern California's sun, crowns her with a sheen of golden glory.

Though so little has been done to develop the latent resources of our valley, still it is not without a demonstration of its great possibilities. Mr. S. Z. Curtis has laid the foundation for as fine a farm as can be found anywhere. His alfalfa fields equal the best. The yield of his fruit trees and vines is abundant and of an excellent quality. He grows plenty of fine strawberries and blackberries to meet the demands of a large ranch where sometimes as many as 20 or 30 men are employed, besides supplying the wants of his neighbors. But most to be admired is his young orange grove, just coming into bearing and producing very fine oranges.

Mr. Baird, also, is planting a large orchard, among which are many orange trees, and several others are beginning such improvements as will make their places more home-like. Good water can be had in any part of the valley at from 6 to 15 feet, and in great abundance. An item worthy of mention is a fig tree standing alone on as dry a spot as can be found in the valley, growing luxuriantly and producing two crops of fine figs each year.

Thus, with such demonstrations of the possibilities at hand, we look forward to the near future when a great change will be produced—when our vast grain-field will be divided up into small holdings and a more diversified system of husbandry will take its place. With such a change we have room for a large and prosperous settlement. The east branch of the 76 canal covers most of the valley, and the Victor colony's canal may be extended to cover it all. Lands are yet cheap and offer good opportunities for home-seekers.

The surveying corps of the Giant Forest R. R. Co. were through the valley last month laying out their road. C. TALBOT.  
Churchill, Tulare Co., Cal.

## POULTRY YARD.

### Poultry and Eggs.

The immense proportions, says the *Mercantile and Exchange Advocate*, to which the poultry and egg product of this country has grown, are at this period worthy of the attention of all who are interested in the food products of the world.

In giving attention to the production of poultry and eggs, it is well to remark the fact, that the entire production is intended for consumption as human food.

And as human food it is of interest to observe that both poultry and eggs are considered food of the highest order.

Having observed that the entire production of poultry and eggs is intended for human food and that of the highest order, the next thing for consideration is whether or not the value and quantity of these poultry products are worthy of any special attention. Possibly some of those elegant speculators in cotton or wheat who imagine that the bare thought given to the value of the eggs or fowls they eat on their tables would disgrace their profession as dealers in the great cotton or wheat products, would open their eyes wide if told that the poultry and egg crop of the United States exceeds in actual value the cotton crop per year by about \$130,000,000, and the wheat crop by over \$50,000,000.

The poultry and egg products of the past year from June 1, 1885, to June 1, 1886, can be placed at the enormous sum of \$563,000,000 with a confident feeling that this estimate, based upon comparative calculations, is not far from being an approximate valuation as near as can be arrived at. Realizing the immense value attached to these products, is it foreign to American ideas that so important an interest on the list of human food products should receive that attention which it is entitled to?

### "Cornpone" for Chicks.

EDITORS PRESS:—Allow me to say to Mrs. E. J. Squires, of Redwood City, that had she fed her incubator-hatched chicks with "cornpone," instead of dry bread, bran, middlings and oatmeal, she would not have lost any

chicks from bowel troubles. I have not been in California very long, but have so far been quite successful in raising chicks. Mix the cornmeal with milk, either sour or sweet, and *bake till done*; and, instead of sweet milk, give them all the water they will drink and keep the vessels clean and replenish them every two or three hours. On this diet, occasionally adding a little meat in the corn-pone (any odd scraps that would perhaps go to the slop-pail), your chicks will thrive, as do the Virginia picaninies on hog and hominy.

KATE MILLIKAN.

Sutter Creek, Amador Co.

## HORTICULTURE.

### On the Santa Clara Foothills.

EDITORS PRESS:—Bordering the eastern side of the Santa Clara valley, in the first foothills, we find a belt of country adapted to the growth and maturity of a great many different kinds of products; fruits, grapes, grain, grass, etc. The climate, as in most portions of our State, is very enjoyable, and health remarkably good. We believe there may be few places in California which more freely admit of the exercise of taste and caprice in the choice of kinds and varieties of plants to be cultivated.

In driving from place to place it would be hard to select special ones to be mentioned in preference to others, as each has its distinguishing merits with reference to beauty of sunny, happy locations for buildings, the water supply and many minor facilities that might be mentioned. Perhaps within this range, however, we find no greater number of good things at one place than we do on the grounds of Dr. A. E. Mintie, of San Francisco, situated about five miles east of San Jose. Enjoying the refreshment afforded by fine shade and good water, we would here pause and look over the place with Mr. N. H. Brundridge, who, with his amiable family, has lived here for the past three years. That which follows is taken from personal observation, together with remarks of Mr. B. founded on his experience.

In this place we have 84 acres orchard and vineyard. The orchard consists principally of Moorpark apricots and French prunes, between 700 and 800 Silver prunes, a few German and other varieties of the prune, and all do remarkably well. Mr. B. informs us that in opposition to the rule in California, the Moorpark apricot is here a success, and generally bears good crops. The trees are well loaded this season. Paper-shell almonds here generally produce good crops season after season. We have some very fine specimens of the English walnut, three of which, now some 10 or 12 years old, were, we understand, planted by the editor of the *RURAL PRESS*. These are remarkably vigorous and now in full bearing. Others, younger, are doing as well.

### Citrus Fruits.

Of orange trees, about a dozen of various kinds, mostly in bearing, are generally in good condition. One of the Navel variety is growing here but not yet in bearing. Of three lemon trees we will particularly mention one of the Lisbon variety, age unknown, supposed to be 10 or 12 years, about 16 feet high, trunk about six inches in diameter at ground, the top beautifully proportioned and spreading. This tree is now "a sight to behold," covered with lemons from the smallest size with bloom just dropped, and up through all stages to the large, ripe and ready for use, and still with an ample supply of young buds and blooms coming on. Mr. B. informs us that this tree is ever thus throughout every day of the year, covered with flowers and fruit in all the various stages of development. In 1884 he kept an account and gathered from this single tree over 100 dozens of lemons in the 12 months. Last year he thinks it was just as full, but no account was kept. This year its productiveness seems as great as ever. This is a remarkably fine-looking tree, and although so burdened with fruit, seems vigorous and still growing. Think of being able to walk out and pluck ripe fruit off of the same tree every day of the year! Mr. M. considers the fruit better for pies and lemonade than the famous Sicily. This is undoubtedly a very profitable variety for at least this locality. The particular conditions of this place may have much to do with the growth and bearing of the Lisbon, yet the facts here mentioned should lead us to experiment with this variety in various parts of California, where the lemon may be profitably grown. Dr. Babb of this neighborhood grows the Sicily lemon, and the prospect seems hopeful of the future.

### Orchard and Vineyard.

Of pears, the Bartlett and the Winter Nelis are the principal varieties, both bearing full and regular crops every year. We understand that pears generally are successfully cultivated in this neighborhood.

Of peaches, the Lemon cling, the Seller cling and the Early Crawford are among the best, and bear well every year since Mr. B.'s residence. Of cherries, the Black Tartarian and Oxheart are the principal varieties grown on this place, and bear well. Wild birds generally get a full share of them.

Orchard trees are 20 feet apart, and Mr. B. utilizes the center of the spaces between rows

running east and west by planting with two rows of Egyptian corn three feet apart. The growing corn is, in summer time, considered of great benefit to the trees, as the shade in heat of day falling on the trunks, protects them from the direct rays of the sun. Last year, in part of the orchard, he used Yellow Dutton corn in the same way. He makes fodder of the corn.

Figs do remarkably well, growing thriftily and bearing large crops.

Of grapes, there are 25 acres, consisting of Zinfandel, Charbono, Cabernet Sauvignon, Black Hamburg, White Chasselas, Muscat and Muscatelle. Crops have never yet failed with Mr. B., and the flavor is excellent.

Up on the hillside, above the houses and barns, a living, natural fountain, during the year, furnishes all the water necessary for the dwelling-house, stables and whatever of irrigation may be needed for flower and kitchen gardens. The orchards and vineyards need no irrigation, as they grow and mature their fruit to a better advantage without it.

### Pisciculture.

A small artificial pond constructed a few feet below the spring is continually supplied with pure, fresh water from the spring by means of iron pipes. This pond is well stocked with carp. A few hundred yards below the house, another and a larger pond has been constructed—large enough for slight boat rowing, and designed to be shaded by a grove of eucalyptus, already planted for that purpose. This will furnish a most delightful retreat for friends, visitors and young people who may wish to take a little time from the cares and toils of life and enjoy society under most charming influences.

Mr. B. expects soon to remove the carp to this lower pond and stock the upper with mountain trout. This arrangement of ponds to be stocked with fish affords a suggestion that might be utilized by a great many persons living on this coast similarly situated, and supplied with an abundance of water for the purpose. In the use of such ponds there need be no loss of water worthy of mention, as the water merely passes through without injury for irrigation purposes. Under favorable conditions, ponds may be constructed during leisure times at no very considerable outlay, and much enjoyment may be afforded families in giving whatever attention to the fish that might be necessary as well as in the consumption of the very fine, wholesome and nutritious food thus to be supplied the table. McD.

Santa Clara Co.

## THE APIARY.

### Sundry Matters.

EDITORS PRESS:—Why is honey not used more in the place of sugar? Even in bee-keepers' families I have seen sugar on the table daily, when honey might have taken its place just as well. During the 16 years in which I have been in the bee business I do not remember of having bought a single pound of sugar for my own use. I use honey as sweetening for my tea and coffee, for stewed fruit, and anywhere else where sweetening is required. If a good article of honey is used, having no strong or pronounced flavor, one can soon become accustomed to it and never miss the sugar. At the present low price for extracted honey it ought to be used in every bee-keeper's house, if only as a matter of economy and to save the expense of sugar.

### Comb Honey vs. Extracted Honey.

Eastern honey dealers complain of not sufficient comb honey in one-pound sections being produced in California. The two-pound California section is not liked. Comb honey in one-pound sections finds a ready sale at fair prices, and will bear the expense of shipment, while extracted honey hangs on the hands of the producer or, if sent to market, hardly pays for the work of extracting. By recent correspondence with a commission dealer in San Francisco I have found that extracted honey, put up in small cans for the retail trade, would not net me the cost of the cans, though I guaranteed the honey to be produced and put up by myself, and to be strictly pure. In view of these facts I am turning my attention to the production of comb honey, and am now melting up hundreds of extracting combs for which I have no further use. The extracted honey, of which I have several tons on hand, with no prospect of sale, is an expense to me in the way of taxes, and only serves as (rather expensive) ballast for my house in this windy locality.

### Heddon's New Hive.

James Heddon, of Dowagiac, Mich., has lately introduced to the bee-keeping public a new hive, which is claimed to have superior advantages over any other hive in existence. The main feature is that the brood chamber is divided horizontally into two equal parts, each having a set of shallow, fixed frames. The frames are held in place by thumb-screws, and the outside cases are interchangeable and reversible. The principal object of this arrangement is to facilitate manipulation by handling hives instead of frames, and thereby save time, which is quite a consideration in a large apiary. To succeed with the hive, a particular system of management must be followed. This is clearly laid down in Mr. Heddon's new book,

which can be obtained from the principal supply dealers.

### Artificial Fertilization.

Among other researches, Professor McLain of the U. S. Apicultural Station, Aurora, Ill., has recently made some valuable experiments upon the artificial fertilization of queen bees. While he claims to have succeeded so far, yet, as a careful experimenter and writer, he wants further time for more extended tests, before placing positive rules and proofs before the public. In the hands of an experienced queen-breeder the operation may prove a success and be of undoubted value, but it is not likely that the ordinary bee-keeper, who works for honey alone, will devote the time and care to this subject which seem to be essential to its accomplishment.

### Foul Brood.

Robert Sproule, of Dublin, Ireland, gives, in the June list number of *Gleanings*, a new process of disinfecting foul-broody hives by steam. The steam is generated from a mixture of carbolic acid and water, and under a low pressure forced into the hive, permeating every part, and, as he claims, thoroughly disinfecting it. The apparatus required is simple and cheap. As the article is too lengthy to be reproduced here, any one interested in the subject is referred to the above number of *Gleanings*, which also gives a very good cut of the disinfecting apparatus and a hive under treatment.

WM. MUTH-RASMUSSEN.

Independence, Cal.

### Honey—Past and Prospective.

EDITORS PRESS:—Last season's crop of honey in this market was well cleaned up by shipments during the freight war to the East. As the season has closed and we are entered on a new one, the following statistics will be of interest. The number of cases received in this market last year compare by months for six years past as follows:

	1885.	1884.	1883.	1882.	1881.	1880.
January...	6,095	88	605	176	1,768	295
February...	1,664	167	393	68	989	22
March.....	2,375	144	34	420	334	128
April.....	1,195	250	200	64	771	44
May.....	889	254	287	213	121	737
June.....	862	690	631	669	202	2,952
July.....	925	2,047	948	1,053	662	2,848
August....	1,185	4,009	2,151	2,613	833	4,883
September.	1,409	6,887	3,177	3,592	1,428	7,027
October....	2,518	10,208	2,446	2,750	1,661	3,322
November..	2,298	5,140	1,253	1,068	998	2,160
December..	2,957	4,381	1,679	1,153	901	2,404
Total.....	23,372	34,265	13,804	14,409	10,668	26,782

The above is the more interesting in going to show the months in which receipts are the largest, and also their fluctuating character. The following statistics of the exports, taken in connection with the receipts, are of peculiar interest, for they show the character of the trade:

Year.	By sea from San Francisco.		By rail from S. F. and Interior.	
	Cases.	Lbs.	Cases.	Lbs.
1885.....	12,151	32,550	1,313	290
1884.....	13,094	167,320	2,352	000
1883.....	6,663	266,400		
1882.....	3,612	527,680		
1881.....	8,849	62,700	378,370	
1880.....	7,890	150,806	861,050	

Receipts in barrels and kegs have been as follows for five years past:

	Bbls.	Kegs	Bbls.	Kegs
1885.....	62	1882.....	291	23
1884.....	485	1881.....	456	84
1883.....	3	1880.....	1,156	126

From January 1, 1886, to June 1st, receipts at this port have been 3867 cases.

There is considerable discussion among dealers regarding the quantity of last year's crop. This is due chiefly to the large quantity of honey received that was carried over from the 1884 crop. As near as can be ascertained, last year's crop was not much, if any, over 1,250,000 pounds, against, in round numbers, 9,000,000 pounds in 1884. Although the crop last year was light, yet prices ruled low owing to the large carry-over from 1884. The prices ruled last season (1885-86) about as follows: Extracted, 3½@5½ cents; very few parcels reached the higher figure. For comb, prices showed a wide range owing to large differences in quality; the range was from 6@14 cents.

This season's crop is estimated at about 5,000,000 pounds and comes in on a bare market with us, but this is offset by liberal stocks at the East and also abroad. Notwithstanding stocks in the demand markets are reported large, yet from all that can be ascertained this season's crop can be worked off to good advantage, as the quality is superior to the crop of 1885-86. The only difficulty in the way of obtaining good prices is a strong selling pressure, and it is the fear of this that restricts large operators and shippers to actual requirements. If a selling pressure sets in, prices must recede, as buyers will take all on the market at figures that will allow a good speculative margin against all possible declines and long holdings before marketed for consumption. J. R. F.

San Francisco.

BEESWAX.—Beeswax is nothing more than the voluntary excretion of the honey bee, like perspiration from the human body. To save time and to enable them to devote all their energies to honest gathering, apiarians now provide these bees with artificial comb, which the latter as readily undertake to fill as though constructed by themselves.



## PATRONS OF HUSBANDRY.

Correspondence on Grange principles and work and reports of transactions of subordinate Granges are respectfully solicited for this department.

## Sonoma Grange Exhibit.

In the report of the last meeting of the Fruit and Grape Growers' Association of Sonoma county, we find the following items:

Mr. McDonald reported, as one of the committee appointed to solicit a donation from the Board of Supervisors toward assisting the Grange to make a display of the products of Sonoma county at the coming fair, that the Supervisors had refused the appeal on the ground that there was no law by which such a donation could be made.

Mr. McDonald commented strongly on the action of the board in the premises, saying that he supposed the supervisors all over the State were controlled by one law, and could not understand how the supervisors of Fresno and Los Angeles counties were able to find such a law when our board could not. He also urged the necessity of making a good display this year.

Mr. Whittaker stated the Grange had already taken steps toward its fall display, and had appointed committees and perfected other arrangements. But the Grange would need all the help that could be got to make a complete exhibit, and if no help was received from individuals, financially, this year would probably be the last year the Grange would undertake to make a creditable exhibit of the county's products. Mr. Whittaker also spoke of the great benefit such a display will be to the county, stating that when Sonoma county made her first exhibit at the State Fair he could have wheeled the balance of her agricultural display from other parts of the State all over the county on a wheelbarrow.

Col. McDonald then stated that Messrs. W. D. Pridham, John Adams, M. L. McDonald and J. H. Drummond had been appointed Commissioners of Sonoma county for the Mechanics' Fair.

Mr. Trowbridge thought that the supervisors were governed by the result of Tulare and Fresno counties, donation, viz: being enjoined by the district-attorneys of those counties from making such appropriations.

## Grange Life and Work.

Bro. J. W. Lang writes for the Grange Bulletin the following appeal to Grange effort:

That which costs but little is really worth but little, and does us but little good. In the Grange we shall receive but little benefit, if we are of little use in it. The most active are the most rewarded. Neglect of duty breeds indifference and does not bring satisfaction. The Patron at heart will renew his strength often by living contact with the Grange and association with the brethren. They who bear the burdens grow still more able to bear; they who take active parts are benefited by the offer.

The true object of life is to be a whole, a noble, a true man or woman; to be useful and fill an honorable place in the procession of life. An honest man is the noblest work of God. A true Patron is not only an honest but an earnest man; a man of use and a man of action. Within our gates there are great opportunities; around our altars there are sacred things; in our ranks are the best of men and women. More are coming and there is ample room for more to come. In Maine there are 64,000 farms. On each there is a farmer and farmer's wife, a possible 128,000 Patrons. If there are on each a son and daughter above 14 years of age, there is yet another possible 128,000 Patrons, or the grand aggregate of 256,000 eligible to membership in our Order. Of these only a small portion—only the pioneers, so to speak—are yet within our gates. Thirteen thousand Patrons to-day form but the advance guard of what might be the great host in the near future. Is not this thought enough to nerve to action every Patron in Maine, to stir the blood and fire the brain with true and well-directed zeal?

Every man and woman has the birthright to use their God-given powers to the best of their ability. It is their duty to raise their condition in life by every laudable means. There is no lack of brains in our ranks, it is only lack of culture and development. The Grange opens the door to a better way and a more enjoyable life. It presents us opportunities we cannot afford to neglect. Happy ought they to be who have sought and gained admission within the gates. To make any farm pay it must be worked. So in the Grange, to make the most of it and of ourselves, we must work. It is work, well directed effort, that tells. The idler will bring home no sheaves at night. The indolent will not prosper. The energetic and the industrious secure the reward, and the hand of the diligent shall bear rule. Opportunities neglected are opportunities lost. We should improve the hour and work while the day lasts.

The true object of the true Patron's life then is to elevate and to educate by the earnest action of each and every member of our Order. Line upon line, precept upon precept, here a little and there a little. There is not one-half of us Patrons that really know the beauties and sublimities of our ritual. Few are familiar with

or appreciative of the grand "Declaration of Principles" of our Order. How very few are really well-posted Patrons in our unwritten work and organic law. To be a good member means to be thoroughly imbued with the spirit of the Grange. It is one thing to be a member of the Order, and another to be a Patron at heart. What grand old nursing fathers and mothers we have had in the Order. How it doeth the heart good, like a medicine, to meet them anywhere, to feel their strong, earnest hearty grasp of the hand; to hear their familiar voices and cheerful tones; to feel the power and inspiration of their presence! With Burns we can truly say:

"That man shall flourish like the trees  
Which by the streamlets grow;  
The fruitful top is spread on high  
And firm the roots below."

"To make a happy fireside chime  
To weans and wife;  
That's the true pathos, and sublime  
Of human life."

Burns sang those sweetest songs of his while following his plow. He drew inspiration from the sod and developed his poetical genius amid the actualities of the farm. Statesmen, philosophers, scientists, jurists, authors, all have recognized the claims of agriculture, and that genius is freshest and will be embalmed longest in the hearts of the people that has the most of nature and the essentials of natural beauty in it. Time will carry longest on its tablets the memory of the truest benefactors of the human family.

At St. Helena Grange, last Saturday, the lecturer, Sister Storey, proposed for discussion the question: "What shall be done with members who forget it is Grange Day?" Quite a lively interest was taken in the debate, some advocating fining absentees, others imposing upon them the penalty of writing an essay; but all agreed that the best plan to induce members to be thoughtful would be to make the meetings so interesting that all members would be sure to remember Grange Day. For the next meeting the Lecturer calls for quotations about men from each member; also ideas from all present on the subject of "Trees and Tree Planting." We think it would be a wise provision for all Granges to have some subject for discussion announced in advance for each meeting.

TEMESCAL GRANGE will hold a harvest feast on Saturday, July 17th, in the hall in I. O. O. F. building, corner of Franklin and Eleventh streets, at 10 o'clock A. M. All Patrons are cordially invited.—NELLIE G. BABCOCK, Secretary.

At the next literary exercises of Sacramento Grange, Mr. D. Lubin will deliver an address on "How to Perpetuate this Republic."

## The First Watermelon.

Judge George A. Nourse remembered the *Expositor* office this morning with the first watermelon of the season, raised on his ranch just east of the city limits.—*Fresno Expositor*, June 30.

A number of crates of watermelons, grown on the ranch of John Spicer, in Yolo county, four miles above the city, were shipped East yesterday. These are the first heard of in this State this season. Spicer has ten acres of melons. As Georgia and other Southern States market great quantities of melons in Northern States before this date, the California melons are not sent so far East.—*Sacramento Bee*, June 30.

F. M. Slater, manager of Rowell, Reed & Pelton's fruit farm, brought to the *Express* office and presented us with the first watermelon of the season, on Wednesday, June 30th. This is the first melon Mr. Slater picked, and the first one ripe, and we thank him for his kindness in presenting us the first. He made a shipment to the San Francisco market to-day. This beats all previous records for early watermelons that we know of.—*Winters Express*.

Which was the earliest?

GAMBLERS FINED.—The movement against pool-sellers in the Eastern States is becoming expensive to the racing associations, which seem to assume the burden of their fines. A dispatch states that the 10 bookmakers arrested for selling pools at Monmouth Park, New Jersey, were fined \$100 each by Judge Walling on July 1st. Counsel for 37 other pool-sellers indicted entered a plea of *non vult contendere*, and arranged that the same sentence be inflicted. The fines and costs of the 47 men amounted to over \$6000, the Monmouth Park Association paying the same.

FOUND.—A souvenir pocket barometer recently lost by one of the publishers of this paper while on a visit to the celebrated petrified forest, near Calistoga, Cal., was found by Miss S. B. Staples, of St. Helena, and duly restored to the owner in a manner worthy of the grateful acknowledgment herewith rendered.

NAPA VALLEY has rarely, if ever, been clothed with so much beauty, at this time of the year, as at present. The vineyards and orchards are looking fine and promising very fair crops. The town of St. Helena is more brisk in a business way than during last season. The whole valley seems prosperous.

## AGRICULTURAL NOTES.

## CALIFORNIA.

## Alameda.

BEETS AND BEET SUGAR.—*Country Merchant*, July 2: From Mr. E. H. Dyer, general manager of the Standard Sugar Refinery at Alameda, we learn that the prospects of beet sugar are encouraging this season. The acreage in beets this year is about 800 acres, which, from present prospects, will, it is thought, average 20 tons to the acre, or an aggregate of 16,000 tons. This is sufficient for a run of about 200 days, with the present working capacity of the factory. The yield of sugar from beets in good condition is about 10 per cent, and assuming the crop to be what indications promise, this will give 3,600,000 pounds of refined white sugar. On this basis, it would require only 50,000 acres of sugar beets to produce a quantity of sugar equal to the imports from the Hawaiian Islands this year, viz., 100,000 tons, which it is thought is about the quantity that will be received from that source. Mr. Dyer thinks the Standard Refinery will start up about the middle of August, and after the campaign is finished it is in contemplation to begin active work in the construction of a new factory, the plans for which are now being perfected. The main building of the new factory is to be 195x84 feet, 2½ stories in height, with a tower in the center 52x32 feet, with a height of 25 feet above the main building. The capacity of the new works will be 300 tons of beets daily, or in refined sugar 60,000 pounds. It is proposed to introduce all the latest improvements in the way of machinery, the plans for which are taken principally from France and Germany, in addition to Mr. Edward F. Dyer's patent for refining, which has proved so valuable in the old factory.

A GLEANER.—*Irving Reporter*, June 26: Inventions will never cease. The latest we have noticed is a gleaner and binder at the shop of Mr. Crowell. It is intended to rake a field after the reaper and gather up and bind the scattered grain. A description of it cannot be well given, and one must see it to know what it is like.

## Contra Costa.

HORSE THIEVES.—*Plateney Gazette*, July 3: Thirteen head of horses and mules belonging to different parties were stolen from Round Valley Tuesday night. No trace of the stolen animals could be found. It has been only two weeks since several head of cattle were driven away from the same valley and they have not yet been found. Round Valley has always been a bonanza for outside horse and cattle thieves.

## Fresno.

AN EXPLODED CYLINDER.—*Republican*, July 2: On Monday afternoon J. D. Reyburn was operating a combined machine in a wheat field about 12 miles east of town, when the horses drawing it were frightened by a hog running out of the grain. The horses started to run, thus increasing the speed of the separator to such an extent that the cylinder exploded, bursting into small pieces. Luckily, no one was injured by the flying bits of metal. Mr. Reyburn was compelled to go to Stockton for a new cylinder, and went down the same night.

THE BEST YIELD.—The apricot crop is unusually light throughout the State this year, but some enormous yields have been reported for individual trees in different sections. Vacaville had the boss tree until last Saturday, when a Fresno colonist came to the front. The Vacaville tree yielded, this season, 1127 pounds of fruit, which cannot be equalled in any other portion of the State outside of the Fresno colonies. Mr. R. S. Voegler, of Cherry avenue, Central Colony, has a tree that yielded 1149 pounds of apricots this year, and they were picked and weighed by responsible parties. At the ruling price of two and a half cents per pound, the fruit from this one tree was worth \$28.72. One hundred and six trees like that one upon an acre of land would be worth more than any 160 acres of grain land in the State.

PROPER PRUNING OF MUSCATS.—*Republican*, July 2: There now seems to be no more doubt about the Chaintre system of pruning being the proper one for the muscats. For this system one long branch is carried from each vine and the end of it tied to a short stake by the next vine. This long branch is then trimmed with spurs, just as the head of a grapevine generally. We will give one instance illustrating the great advantage of this system of pruning. In the muscat vineyard of Prof. Braly, near Fresno, some three or four-year-old vines have this season been put in Chaintre, while the majority immediately around are trimmed to heads in the usual way. The Chaintre pruned vines are now literally loaded with grapes, while those trimmed to heads have very few. In the Chaintre system the canes are not staked high, but run on or near the ground. Accordingly the old way of planting, 8x8, will not do, as it would hardly allow sufficient space for plowing and hauling. We think 6x10 or 12x5 would be proper—at least that is the distance we should select in our own vineyard. But if our vines were already set 8x8, we would not hesitate to put them in Chaintre. The advantages of the system are: 1st, larger crops; 2d, immunity from black knot; 3d, protection from sun-scalding; 4th, better circulation of air.

## Humboldt.

SHEARING.—Garberville Cor. *Ferndale Enterprise*: Most all the sheep in this locality have been sheared; in fact, I believe that all the sheep in this township have been sheared with the exception of two ranches—G. F. Connick's and the sheep on the estate of Alex Robertson, Jr. Sheep sheared very well this spring, averaging about four pounds to the sheep on almost every ranch, and at a few ranches averaged over four pounds.

SHORTHORNS PAT.—We have frequently alluded in the columns of this paper to the fact that it pays to raise thoroughbred stock, even on a small scale. The climate, soil and general conditions prevailing in Humboldt county admirably fit it for the production of the best results in livestock. Our low lands keep green the year round without irrigation, producing the very best natural grasses, and when clover is well seeded, two crops can be cut every year and green feed produced for pasturage six months beside on the same land, by a judicious system of fencing. In this way a few acres will keep quite a herd of thoroughbreds. As an evidence of how well thoroughbred shorthorns sell, we will only have to refer to the sale of the yearling bull "Daniel Webster Second," made last week for \$200 by S. S. Lovren, who owns a grass farm on Mad river. The purchaser was William Forbes of Eel River Island. The price received for this yearling was greater than the profit of nine out of ten of the farmers, most of whom work hard almost every day raising cereals or potatoes, only to find at the end of the year that they have scarcely been able to make both ends meet. Quality, not quantity, is the true secret of profit. A few acres will keep a sufficient number of thoroughbreds to admit of the sale of several head each year, while the product of the mothers in the way of butter and cheese will pay living expenses. As we said before, few farmers net as much as the price of this one yearling, and still they will continue to plod and plow instead of turning their attention to the propagation of thoroughbred livestock. What is said of shorthorns holds good with reference to every class of livestock. We hope to live to see the time when our rich, moist land will only be used to grow grass for feeding the best breeds of livestock.

## Inyo.

UNWELCOME FLOCKS.—*Inyo Independent*: The sheep plague is again upon us in full force. During the past week or two tens of thousands have swarmed into the valley, running everywhere and eating up every green thing not inclosed. Around Big Pine the nuisance is particularly annoying; every mouthful of outside pasturage is being eaten. It is very hard on the settlers that these sheep men should be allowed to bring their flocks into the valley, not only eating up but destroying the pasture, yet not paying one cent of taxes in the county.

## Kern.

ARTESIAN WELLS.—G. A. Raymond, in *San Francisco Bulletin*, July 7: As the well was sunk by men in my employ and by my method, I can give you the actual facts. The well is 415 feet deep and the water all comes from a single flow at the bottom. The casing has an inside diameter of 5½ inches, and the steady flow of water measures 54 inches from the top of casing to the top of the water as it begins to fall back to the ground. Roughly estimated, but well within bounds, the daily flow is over 2,000,000 gallons, sufficient to irrigate from 700 to 1000 acres of land. The water is of the finest quality and unexcelled for all purposes, a peculiarity of the artesian water in the greater part of this belt. The well was not bored by the usual method—in fact, was not bored at all, but was drilled by steam power in a manner much similar to the method employed in drilling oil wells in Pennsylvania and elsewhere. While this is certainly an extraordinary well, there are in Kern county, within a distance of from two to seven miles in various directions from this well, nine other flowing wells of capacities ranging from 1,000,000 to 1,500,000 gallons daily. Besides those, within the same district, within a limit of say 12 miles square, are just 18 other wells that flow from 500,000 to 800,000 gallons daily. It is a well-settled fact, beyond dispute, that this section of Kern county has not only the largest artesian flowing well in the State, but further, has nine other wells that are unequaled in capacity by any others on the coast.

## Lake.

GROWTH OF HOLSTEIN CALF.—*Lakeport Democrat*, July 2: A. G. Platt's Holstein calf was six months old Wednesday, and he brought him to town to weigh him and had the satisfaction of seeing him tip the scales at 441 pounds. At three months old he weighed 247½ pounds. Thus it will be seen that the gain has been about 2½ pounds a day for the last three months, while from its birth the average gain per day has been two pounds. The calf has been running in the pasture and has had nothing but grazing to live on for the last two months. This is a remarkable weight for a calf six months old. Of the ordinary stock of cattle there are not many animals at 18 months old that will beat this weight.

## Los Angeles.

CANTELOUPES.—*Times*, June 29: The *Times* was presented yesterday with some ripe canteloupes, which are rather scarce yet in Southern California at this time of the year. Only one



or two, so far, have been seen in the market. The specimens now at this office were received from J. G. McCallum, of 131 Main street, whose son raised them on his ranch at Palm Valley, four miles south of Seven Palms station, on the Southern Pacific Railroad. The climate of Palm Valley is an exceptional one, some fruits ripening there as much as two months earlier than in any other part of the State. Palm Valley has been reveling in ripe cantaloupes for the last three weeks.

**THE COTTONY CUSHION SCALE.**—Some weeks ago the city council appointed a special committee—Messrs. Breed, Willard and Stearns—to see if the fruit pest inspectors had earned their salaries. The committee has been investigating the matter very carefully, and commends the inspectors for their faithful work, but finds that they have been unable to compete with the scale-bug, which the committee finds is much more numerous than it was last year. The concluding portion of the committee's report follows: If there is any way of destroying these pests we would urge the necessity of taking up arms at once and moving in a body against them. With this end in view, we would recommend, first, that the city attorney draft an ordinance to amend an ordinance governing this matter, in such a way as will enable the inspectors to not only compel the owners of infected trees to commence to clean them, but to prosecute their work to an actual finish. Second, that the police commissioners be requested to appoint sufficient inspectors to do the work thoroughly, and afterward to see that they do it. Third, that the supervisors be requested to appoint more inspectors, and in order to prevent confusion and promote harmony among the inspectors we would suggest that the board of police commissioners and the county board of horticultural commissioners consult together in regard to the districts assigned to the different inspectors.

**COUNTY POMOLOGICAL MEETING.**—Pomona Times, July 3: The Los Angeles Pomological Society met at Anaheim on the 1st inst., and it was quite royally received by the good people of that place; in fact, Anaheim "beat the record" in the way of hospitality and local enthusiasm. Creiger's hall was beautifully decorated with rare flowers and plants, prominent among which was the magnolia bloom, which filled the hall with its sweet-smelling odors. As this is the season of the year in which but little fruit is ripe, the display of fruits was limited, but of oranges, lemons and apricots the display was good. The society was called to order at 2 o'clock P. M., by the president, H. Hamilton; the other officers all being present. The address of welcome, by R. Melrose, of the Anaheim Gazette, was given in that whole-souled style characteristic of genuine good feeling. The address of the president was good, and well received. The music of the Anaheim Cornet Band was excellent, and all enjoyed it. The essays of Mr. Robert McPherson and Mr. Langenberger were excellent, and the discussions interesting. Mrs. Parker also read an essay on market gardening, which was well received. Upon the whole the program was one of the most interesting the society has enjoyed. But the principal feature was a big supper, which was served in the Town hall at 6 o'clock. The accommodation was ample and the provision abundant for both visitors and home folks. All visitors went away well satisfied, and were better pleased with Anaheim than they were before. And another leading feature was a visit to the palatial residence of Mr. Langenberger, after the close of the evening session, by all the prominent members of the society, where an hour or two was spent very pleasantly in sampling the various kinds of wines and enjoying the splendid music furnished by his estimable wife and daughter.

**RABBITS.**—Lancaster News: Jack and cottontail rabbits were, perhaps, never before so numerous as they appear now in this valley. In the neighborhood of grain fields and young orchards and vineyards they are doing a great deal of damage, demonstrating the folly of planting trees or vines without protection by proper fences. There is opportunity for those who enjoy shooting these rodents to make wonderful records of their destructive ability, and in the cool, fresh air of the mornings and evenings, when this game is numerous abroad, enjoy not only the sport but rare health-giving exercise. The city sportsmen who are pining for this sort of pleasure would do well to spend a week or two in this valley, taking care, however, not to mistake antelope and deer or wild horses for rabbits. They are also very fat, especially in the neighborhood of the grain fields, and excellent eating for those who are fond of this kind of flesh. It has been suggested that a rabbit canning factory might be started here with a promise of profit. These quadrupeds have eaten up 40,000 young forest trees for a citizen of Los Angeles, who will take stock in such a cannery.

**PAVILION TO BE BUILT.**—Times, July 2: The Board of Directors of the Sixth District Agricultural Association held a meeting yesterday for the transaction of general business. It was voted that the members of the board procure an eligible situation and proceed to erect a pavilion in the city of Los Angeles. A building about 100 by 150 feet in general dimensions is in contemplation.

Napa.

**SILK CULTURE.**—St. Helena Star: Miss Jane Dodd had the cocoonery at the ranch of Put Robson, near Oakville, this year. She produced

65 pounds of cocoons by the permission to use leaves from the mulberry trees on the Bourn ranch and that of Mr. Weeks. One more contribution to the silk product of Napa valley, which is only in its infancy. We hope to have the pleasure next year of recording many other names of ladies engaged in so important an enterprise.

Sacramento.

**BANANAS.**—Record-Union, July 3: On the grounds of S. H. Gerrish, 1517 G street, in this city, are bananas ripening and being plucked for table use. This is a new class of fruit to be grown in the Sacramento valley, but there is no doubt that the hardy variety of banana grown by Mr. Gerrish can be successfully cultivated here. A specimen of the fruit taken from Mr. Gerrish's plants was sent to this office yesterday. It is of good size, and affords incontestable evidence of the semi-tropical nature of our climate and its certainty of adaptation to the citrus fruits, which are much more hardy. The banana plants grown by Mr. Gerrish have had no protection whatever during the winter season, so-called, and needed none.

San Bernardino.

**FRENCH PRUNES, ETC.**—At Etiwanda, on the Cucamonga slope, says the Press and Horticulturist, A. R. Martin has a 30-acre orchard and vineyard, planted three years ago last spring. His vineyard is carrying all the fruit it ought to, and he recently declined a bona fide offer of \$1000 for his crop of raisin grapes on 10 acres, and we think he did well to not sell. His apricots are young and of course doing but little as yet. It is an off year for deciduous fruits generally, but his peach orchard, mostly of the Golden Cling variety, look very fine, as does also his pear orchard, mostly Bartlett. His French prune orchard although young is making a good showing of fruit, and we believe that this fruit, now being tried in Southern California for the first time, will be, in many localities, one of our leading crops. His young orange and lemon orchards are thrifty but not large enough.

San Diego.

**GREAT IRRIGATION ENTERPRISE.**—Work has commenced on the new reservoir at San Jacinto, San Diego county. The dam will be an immense affair, 250 feet long and 121 feet high. The reservoir will hold 7,000,000,000 gallons and will furnish a flow of 6000 miner's inches for 100 days, which, at the rate of one inch per ten acres, will irrigate 6000 acres of land. The work will cost a quarter of a million.

San Joaquin.

**CASTOR BEANS.**—Sentinel: Mr. James Talmadge, near Lodi, is developing a new industry and showing that his live oak land is capable of producing something besides wheat and barley. He has planted out this season between 30 and 40 acres of castor beans. They are growing finely and promise a fine yield. Mr. Talmadge estimates the yield at from 1500 to 2000 pounds per acre, and at the usual price, four cents, will net him at least \$50 per acre.

Santa Barbara.

**STOCK SHOW.**—Santa Maria Times, June 26: For several weeks past there has been a growing feeling among the owners of stock that some organization should be effected for the purpose of holding a stock fair in this valley this fall. This object was effected last Saturday afternoon, when a number of our citizens met at the Metropolitan hotel and accomplished an organization by electing G. W. Lewis president and M. Thornburg secretary. J. J. Holloway, H. Stowell and W. S. Lierly were appointed a committee on by-laws and order of business, and H. Stowell, T. C. Nance, Dr. Lucas, J. J. Brookshire and Thos. Saulsbury were chosen a committee on program, to which he chairman was added.

Shasta.

**A NATURAL ICEHOUSE.**—Fall River Mail: Sixteen miles from Fall river mills is a remarkable natural ice cave, where unlimited quantities of ice can be packed at all seasons of the year. The opening to this icy cavern is said to be large enough for a two-horse wagon to drive in and load up. Great banks of ice lie heaped up on all sides, and rainbow-hued stalactites hang glittering from the dripping roof. Stupendous stalagmitic ice formations stretch back far out of sight, and frequently, as rays of light are caught by the prismatic icicles dependent from the roof, a wonderfully beautiful effect is produced. The cavern has never been explored, and there is no knowing how extensive this subterranean refrigerator may be. Whenever the people of this valley want ice for any purpose, they visit the cave and get all they want, and there is always plenty left.

Sierra.

**ARTESIAN WELLS.**—Reno Gazette: Although there are over a hundred wells in Sierra Valley, they all continue to flow steadily. In one or two instances neighboring wells seem to have struck the same body of water and cut each other off partially, but the general answer is that numbers do not seem to affect the flow, although there is a difference in different seasons of the year. The farmers are considering the idea of screwing on a cap so as to shut in the flow and save waste, but they are all afraid it will spoil their wells and dare not try it. There are five machines in the valley now, and each one puts down a well a week. Walter Ede has bought a machine of his own and says

he is going to put down 50 wells in a row in his pasture. They will be 200 feet apart, with an irrigating ditch as far as the water will run. John McNair has a fine well, the deepest in the valley. It is over a thousand feet, and it was put down 600 feet in one day, or an inch a minute. Mr. Wittie says the wells will irrigate a great deal more ground than was expected. By careful usage his well wets 25 acres of ground, and he says he would not take \$2000 for it. Most people imagine the flowing well is a new thing in the valley, but it is not so. A little well bored with a hand-auger in 1863 or 1864, by Ebright, on the farm now owned by W. A. Robbins, still flows a small stream, and another was bored about the same time on the H. P. Robbins ranch. W. A. Robbins now has a machine of his own that goes through rocky ground and is putting down his own wells.

Solano.

**FRUIT NOTES.**—Judicion, July 3: The town is full of fruit buyers. We understand that three cents per pound has been offered some of our orchardists for entire crops of peaches. The balance of the apricot crop has been sold for prices far above the expectation of the most sanguine. The fruit shipments on Monday last reached the enormous aggregate of 225,030 pounds. On Tuesday the amount exceeded 231,000 pounds. What will it be a couple of years hence?

Sonoma.

**HESSIAN FLY.**—Petaluma Courier: The Hessian fly has done considerable damage to wheat and barley between Petaluma and the coast. Orton Hubbel, H. P. McCleave, Henry Hall and other prominent farmers in that section, estimate the loss by this pest at from one-half to a quarter of the crops. The late-sown grain is damaged the most.

**WOOL.**—Democrat: The price paid for wool at Healdsburg is 21½ to 22 cents, which prices have been paid for the last few lots that been sold. There is but little remaining unsold.

Stanislaus.

**HARVESTER BURNED.**—Modesto News, July 2: The combined Houser harvester of J. J. Crosseley was burned in Turlock at an early hour Tuesday morning. The machine was valued at \$2200. The fire was caused, undoubtedly, by an incendiary, as the machine was stopped the night before in a bunch of green weeds. The above precaution is all that prevented the field taking fire. The harvester was insured in one of the companies represented by I. L. Grainger for \$1500.

Tehama.

**HORTICULTURAL SOCIETY.**—People's Cause: George Stoll has obtained a number of signatures to a call for a meeting on the 10th of July for the purpose of organizing a horticultural society. A meeting will be held Saturday, the 10th day of July, 1886, at 8 P. M., at the courthouse in Red Bluff, at the time and place to meet for organization.

Tulare.

**BERRY'S LOCOMOTIVE HARVESTER.**—Visalia Times, July 1: Mr. G. S. Berry, of Lewis Creek, is now working a locomotive harvester of his own devising, which is undoubtedly destined to cause a complete revolution in existing methods of grain husbandry. For five years past Mr. Berry has interested himself in the invention of some machine which would do harvest work better than the various implements with which, thus far, farmers have been compelled to gather their crops. But it was not until a few months ago that he discovered the principle by means of which he is now swiftly and inexpensively harvesting his wheat. He occupied himself last winter in perfecting his invention, and it was not until the early part of last week that he was ready to test its efficiency in the field. A week ago last Tuesday he set the machinery in motion, and it worked better than even he had anticipated. It has been running steadily from that day to this. On Tuesday morning Mr. E. Jacob, accompanied by the Times reporter and two gentlemen from Contra Costa county, rode out to Mr. Berry's ranch. The locomotive harvester was running over the field at the rate of a mile and a half an hour. The cumbersome machinery presented a novel appearance as it glided over the ground and turned sharp corners in perfect obedience to its inventor, who sat on a platform and directed its movements by turning a wheel and screw. Shortly after the reporter's arrival on the scene the engine stopped to take on water, and the inquisitive scribe had a good opportunity to examine the details of its construction. It consisted of three distinct parts. In the center was the motive power, comprising a boiler with a Rice straw-burner, a traction locomotive, and a small engine to operate the different parts of the machine. On the right-hand side, facing forward, was a Young separator, connected with the locomotive by knuckle joints, and held in position by one large wheel. On the left-hand side was a Benicia header with a 22-foot knife. The whole thing is so adjusted that friction is reduced to the minimum, and the harvester moves over the ground with very little jolting. It will be readily understood that the machine, consisting as it does of three distinct parts, each of which has some independence of motion, is remarkably well adapted to rough ground, and can move over hog-wallow land with but little jarring. The machine furnishes itself with fuel,

and the fireman, by means of a simple appliance, uses the straw when he needs it, and when the tender is full, lets it discharge itself on the ground. The smoke-stack is unusually high, and the exhaust is so free that there is scarcely any danger of fire. Mr. Berry has arranged a contrivance by which the grain is thrown from the header into the separator without loss, and he claims that his harvester threshes wheat with less waste than does the stationary threshing machine. The crew of the machine consists of six men. There is an engineer, a fireman, a steerer, a header-tender, a separator-tender and a sack-sewer. A seventh man is employed to haul water for the boiler. Mr. Berry says that he can harvest 50 acres of grain per day with his new invention. He is now working on his own land, and as soon as he finishes that he will proceed to cut and thresh 2600 acres of grain on the ranch of E. Jacob at the 18-mile house. Mr. Jacob, who is a good judge of the merits of farming machinery, is enthusiastic about Mr. Berry's invention, and proclaims it to be a perfect success.

**TWO DAYS' HARVESTING.**—Tulare Times: On Thursday and Friday of last week, Thomas Hayes, who has a large ranch near Goshen, headed, threshed and sacked 374 acres of grain. Five headers, ten header wagons and a separator of his own invention were employed in the work, which began at 7 o'clock each morning and lasted until sundown.

**HARVEST WAGES.**—Delta, July 1: The enormous grain crop in this county the present season has necessarily developed an unprecedented demand for harvesters, both skilled and unskilled, and laborers in almost any number can readily find employment in the grain fields at good wages during the next three months. The wages paid are as follows: Engineers and tenders of separators get \$4 per day; forkers, from \$3 to \$3.50 per day; common laborers, \$2 to \$2.50 per day. The days are long, but the work is not severe, with the improved machinery now so universally employed, and the men seem to rather enjoy themselves.

Yolo.

**FRUIT DRYING.**—Winters Express: On Tuesday last we visited the apricot-drying works of E. Russell Morris, and saw a scene of bustle and activity that is rarely seen in our town. About 45 men, women, boys and girls are engaged in the work of cutting, spreading, sulphuring and laying out to dry. The women and girls employed average, in wages, about a dollar a day, and some of the boys and younger ones from 75 cents to a dollar a day. This industry has been a great feature for Winters, and has proven that our boys and girls, when given a show, will work, and that well.

Yuba.

**LEMON.**—The largest lemon ever grown in the Sacramento valley was picked the other day from a tree of the Marysville Notre Dame. It measures 12½ by 15 inches, and weighs one pound and eight ounces.

NEVADA.

**A SHEEP MAN'S BAD LUCK.**—Reno Gazette: Monday a sheep man on the road from Mason valley to California camped near Hank Martin's ranch in Carson valley. The Genoa Courier says he had a band of 3000 sheep and during the night 112 of them died. Tuesday 238 died, making a total of 350. The dead animals were scattered along the road for a distance of three or four miles. The sheep acted like they were poisoned and it is supposed that they fed upon something poisonous that they found in the sagebrush. The owner went out yesterday with a team and a half dozen Indians to haul the dead animals out of the road. The remainder of the band is now in the vicinity of the Walley Springs and is believed to be all right. Perhaps some cattle man had been salting the range as an antidote for blackleg.

WASHINGTON.

**NEW GOOSEBERRY.**—The Payallup Fruit Growers' Association held its alternate meeting at Sumner, on Saturday, the 12th inst., a short session only being held; President W. J. Bowman in the chair. J. M. Ogle, of the Payallup nursery, presented for inspection a branch of his famous new gooseberry. The limb was literally crowded with very large berries, of a beautiful, smooth, transparent and healthy skin, and their freedom from mold, mildew, blight or any disease whatever, elicited the admiration of all present. This new candidate for public favor has been noticed and its merits discussed at several former meetings, and Mr. Ogle was asked its name. He said he had not named it as yet, and requested that, as the subject was under discussion, and having a sample before it, the association relieve him of that delicate task. The request was agreed to and the chair announced that nominations were now in order. Mr. Warren Wood was appointed teller, and after a spirited contest it was decided to christen the new gooseberry Payallup Mammoth. J. M. Ogle states that he has this new gooseberry growing beside the English varieties Crown Bob, White Smith and Champion, and while the Payallup Mammoth was wholly free from the diseases of the three English varieties, the Crown Bob and White Smith had prematurely dropped most of their fruit and the Champion had not escaped. Without doubt those who are seeking a first-class gooseberry will find it in the Payallup Mammoth.





## Patchwork.

[Written by ELLA KIRK JELLIFF.]

A little maiden lowly seated  
Beside her mother's feet  
Looks up with face all flushed and heated—  
A face demure and sweet.

A tiny basket placed beside her  
Is full of patches bright;  
With nicest care she sorts them over,  
Dividing dark from light.

Then neatly joins them one by one,  
With stitches finely made,  
And strives to keep the pattern true  
As piece to piece is laid.

And after many, many days  
She views her work complete,  
And smiles as on the bed she lays  
The patchwork quilt so neat.

O little maiden, lowly seated  
Beside your mother's feet,  
Look up, your fair face flushed and heated,  
Your smile confiding, sweet;

And learn from older lips to know  
How full of thoughts your heart,  
And how, like patches which you've sewn,  
They need the finest art

To cull the brightest and the best,  
And weave them into deeds  
To make you strong and brave and good,  
And fit to meet life's needs.

New York, June 21, 1886.

## Traveling by Team.

[Written for RURAL PRESS by DAGMAR MARIAGER.]

Twenty miles from Purgatory to King's Ferry, along the banks of the Arkansas river, with a tolerable road. Not a very long drive, but the greaseboard had to be brought into service before starting, and the mules' joints, too, had to be oiled by means of the curry-comb; and so, with these and other detentions, we were late in getting under way. Then, again, taking an hour's halt at noon we were late getting into our evening camp, driving up beside King's barn just at dusk.

Another hour, too, had flown as hours can fly only when thoroughly enjoyed. To our happy surprise we had met a little train from the South, in which we found two of our old acquaintances of the Northwest. Strange how friends, rovers of the sparsely settled plains and mountains, will sometimes bolt into each other's presence in the most isolated crannies of the earth. We had driven a mile or two along a gully which in its serpentine course continually cut our road short to the vision. In one of my noisy moods, I was fairly making the rocks ring. I was about to enter upon the fourth and last of "Tycho Brahe's Farewell," a Danish song, while the wagon wheels rattled along over the imbedded rocks, and the pots and pans clattered in the mess-box behind, when a noise ahead and apart from that made by our own two teams, attracted my attention.

"Train coming!" shouted Ida, looking back at me from under the cover of the wagon ahead. I was silent at once, and seemingly innocent of having anything in common with the coyotes that gathered on the promontories at night to give their minstrelsy to the world at large.

A moment later a mule's head formed a silhouette against a bank a hundred yards ahead of us, and the rest of its body gradually came forth in the picture, which kept up its progressive change until three teams were in sight, with their human attendants. The latter stared at us a moment, then two of the men, as if moved by one impulse, shouted:

"Great heavens! How did you three petticoats ever get in here?"

"By way of Purgatory, of course," said Mrs. B., laughing heartily; "where you two rolling stones are heading for, and will probably camp to-night."

One of them, a little partial to me, said he had heard and recognized my voice before we were visible, and my song, seemingly coming from the rocky point that intervened between us, though he was an infidel, had so strangely moved him as to almost convert him to spiritualism against all the armor of his will; and there he found me in all the reality of flesh and blood, with their accompaniments.

The usual gossip of the state of the trade, etc., from the north and south was exchanged. They were from Cimmaron, a New Mexican mining camp, which was trying hard to attract an exodus of scattered ramblers on nothing. Where were we bound for? "Central Texas, to return with a herd of cattle." "Whew-w-w!" Then their hats went up, and the rocks that heaved up in gave back considerable of a shout, and a storm of questions followed.

"Do you two ladies really expect to get

through to Texas alive?" "Why didn't you leave Ida behind, and save her poor little scalp?" "How are you going to make it over the bluffs from King's Ferry to Trinidad—no water, no wood, no nothing but an ugly twisted-up road?" "How do you propose to pull up and let yourselves down the Baton mountains?" "The greasers will gobble your mules while you are eating supper some evening, and that'll be the last of them, and that, too, before you reach Maxwell's ranch." "If the Indians do spare you until you reach the Jornada del Muerta desert, you'll die for water crossing that," etc. Then followed a chat, in which each joined to the confusion of the other. We couldn't talk fast enough, and at last we drove on again, regretting a hundred things we had left unsaid.

The day had been clear and pleasant for the month of January, until near night, when the horizon became hazy and the sky gray, obscuring our day-clock—the sun. The evening was sharp enough for our enjoyment of our campfire, and our hot supper comforting as usual. The lateness of the hour made us delay purchases, probable sales, and the exchange of queries that usually took place as we passed travelers' stations, until morning, excepting the hay Ida bought of the stableman for the two span of mules to grind at during the night, as they stood tied to the outside wheels of our wagons, stationed parallel with each other, and with just enough room between them for our couch. We had no room under our wagon covers for ourselves and blankets in a horizontal position, being pretty well loaded up with the remains of what had lately been a flourishing business, three-fourths of which was a restaurant and the other fourth a general mercantile department. These things were promises of high freight in the direction we were going. They were to leave us by piecemeal on the roadside—one station needed this uncommandable article in its out-of-the-world location, and the next needed that, and we found farther along that we had calculated well. But had our wagon-boxes been empty we should have made our bed just the same on the naked ground, with the sky, in whatever mood, our expansive coverlet. Our wagons would at night have made us the helpless prey of enemies, in case of attack, while the open, low location gave us many securities. Objects are seen and movements noted much more readily, while one's own location is less a certainty to the prowling foe. Indeed, it is a ticklish business, as the average frontier Jehu expresses it, for a two or four-footed enemy to steal into the camp of even one traveler, whose bed is on the bare earth, and whose ears, eyes and wits keep guard, while he sleeps as pleasantly as only one can sleep who the while breathes the refreshing rural breezes as they wind their way over hills, dales and streams from the mountains in the background of the picture he never ceases to enjoy.

The evening meal over, the mules blanketed and given their good-night pat on the neck, and we retired, our usual alertness slumbering with us, for were we not as safe there alone as we should have been with a regiment of soldiers at our command?

"Hello, fellows! Time to get up! Better dig out if you can—got a rousing fire inside."

The words were distinct enough, and near us too, yet they seemed to penetrate an unusual number of blankets, or something else. We awoke to find ourselves warm and comfortable enough, but something, though not heavy enough to distress us, held us in place. We made an effort, however, to "dig out," as the voice advised, and found the task somewhat difficult. We were buried under two feet of snow. The stranger located us by a slight undulation on the snow's surface, and began work for our relief with gloved hands, his only tools. Up to the moment his greeting had been treated with silence, but when our blonde and brunette queens met his eye as he delved into the fluffy white mass, and we arose to shake the snow from our necks and sleeves, he looked as if he had "unearthed" something he hadn't bargained for. Our dismay was mutual.

The snow sufficiently out of our bangs and eyes to take a look around, we discovered that our friend was as young and handsome as he was gallant, and one of the two proprietors of the station. He stood abashed a moment and then exclaimed:

"Good gracious! This is a surprise! I didn't suppose there was a lady this minute nearer than Fort Lyon. But where are the gents, may I ask?"

"We are paddling our own wheeled canoes, sir," said Mrs. B. "Ida, where are you? Ida!" turning to the grave which had all tumbled in again. "Mister, will you help us, please?" and with our triple efforts, Ida, who slept at the foot, was dragged out, feet foremost, from the end of the bed we had occupied.

The gentleman would hear to nothing else, so he took Ida in his arms and started for the station, while we waded on behind and left our mules for the stableman's care and the shelter of the buildings. We were soon convinced that women were not always necessary to clean and orderly and home-like housekeeping, nor to the culinary department. The biscuits, coffee and other good but simple things we enjoyed from the dining table, made our mouths water for more when, a hundred miles farther along, we lost our way at midnight in a blinding storm and had neither habitation nor man to offer us rescue. Dinnerless and supperless we were goaded on to continue the drive into the night, having been refused water by the very uncouth-looking bearded animal keeping the station by

which we intended to pass the night; and we never ate other than hot bread, so had nothing on hand on which to lunch.

We "laid over" at King's Ferry three days, waiting for the mail express to break the road, in the meantime enjoying the hospitality and entertainment of the two landlords, who, unlike the average station-keeper along our route, refused payment on our departure, saying we had involuntarily given them a most agreeable pleasure. We frequently thought of them with sincere gratitude, as we journeyed on, and something our hero said to me the evening before leaving somehow entered into my day-dreams for awhile after with a pleasurable kind of regret. My friend and I had not yet entered far upon our grand mission—things couldn't now be changed, and what it was he said I don't propose to tell.

## "Personal Liberty."

The discussion of the merits and demerits of the liquor traffic is a very one-sided one. Excepting the few sheets published specially in the interest of the trade to circulate among the dealers and drinkers, I have never known a newspaper to advocate the liquor traffic as a public benefit. In such papers of general circulation as have invited discussion and published severe criticisms of the business, I have never yet seen any attempt at defense on the grounds of general usefulness.

We have to depend on the official organs of the trade to learn what argument or advice they offer to their friends. What is there offered as argument often partakes largely of the nature of exhortation urging to united protection of interest. The revenue plan is sometimes used in the only safe way they can use it, which is by a passing furtive allusion calculated to impress the superficial observer with the idea that the revenue is so much clear gain to the country. They make no reference to certain facts which underlie and surround this revenue offering. While the average annual revenue is less than \$54,000,000 the value of material destroyed in manufacture is nearly twice that; the direct cost to consumers fifteen times that, and the indirect cost to the country as much more.

The time of the 180,000 liquor-dealers, worse than wasted, would, if usefully employed, be worth more than the revenue; and allowing the business of each of these dealers to result in waste of time of two other men as loafers, there would be another waste double the value of the revenue. Medical authorities place the annual loss of effective labor through insanity and idiocy, caused by drink, at over \$200,000,000. A moderate estimate of the accounts of the traffic show instead of a gain of \$54,000,000 a loss of over \$130,000,000; and if human life is any consideration, except financially, we might call attention to the fact that, as the work of these 180,000 dealers, we have annually 100,000 drunkards' deaths, from which it would appear that on an average each dealer "kills his man" every 22 months.

But what are all these considerations when brought in contact with a dealer's greed, a drinker's appetite, the liquor revenue, and "personal liberty"? The personal liberty plea is urged with more emphasis than the revenue plea. It is the great shield of protection against all argument. Now there must be reality in that. Personal liberty is a sacred right. We cannot restrain a man from serving his God in his own way without an abridgment of personal liberty. We cannot prevent men from selling or drinking liquor without interfering with personal liberty; cannot hinder a man from killing himself or his neighbor with whiskey or a shot-gun without curtailing personal liberty; cannot prevent his taking his neighbor's property by midnight theft or daylight robbery without restraint of personal liberty.

All men love liberty. Our forefathers fought for it. The criminal overtaken by the officer of the law fights for it when he dares, and runs for it when he gets a chance. It is precious. Reformers advocate it warmly; liquor dealers rely on it; highwaymen, pirates, thieves and pickpockets live by it. It is a great blessing; Satan practices it and loves it, and verily couldn't do without it, especially in business of a questionable kind. Give us personal liberty!—*Thought-ograph in People's Cause.*

INTERIOR TEMPERATURE OF THE EARTH.—The London Times, referring to the deep shaft being sunk near Schladebach by the German Government, with the special object of obtaining reliable data concerning the rate of the earth's increased temperature toward the interior, concludes, from all that has thus far been developed, that the earth's crust cannot be more than about one-ninetieth of its radius. It seems that the plan pursued has been to ascertain the temperature at successive stages by means of a special thermometer, the principle of construction being that as the heat increases the mercury will expand so as to flow over the lip of an open tube, the difference of the overflowing giving the rate of increase of the temperature. At the depth of 1392 metres the temperature indicated 49 degrees Centigrade, or 120 degrees Fahr. If the temperature increases regularly at this rate, the boiling point of water ought to be reached at a depth of 3000 metres, or nearly two miles, and at 45 miles the heat would be that at which platinum melts.

## A Motherly Lecture for the "Girl of Twenty."

[Written for RURAL PRESS by WOMAN OF 4-.]

Having been a constant and attentive reader of your valuable paper for years, I therefore read and was much interested in "Rural Home Notes" Nos. 1 and 2 by "A Girl of Twenty." With the first I was wholly pleased, but a little sorrowful to feel that the writer could see so clearly into the way of life, and yet be only 20 years of age. For, to me, it seems when the mental vision is so clear the capacity for mental suffering must be correspondingly large, and that, without years of care and sorrow to teach us patience and endurance, is always to be deplored.

Next came article No. 2, which I read also, and which made me wish I knew the writer or, at least, her address, so that I might write direct to her, for I have a few little weak criticisms to pass upon No. 2, which, if given publicly through the columns of the RURAL, and shorn of the little "my dears," and "if I were you's," which I should naturally put in if I were speaking or writing directly to her, must necessarily make them sound harsh and unfriendly.

After reading No. 2 I seemed to feel a little out of humor with myself; at least I thought it was myself, yet in a short time I began to attribute it to the piece I had been reading. So I sat down and carefully re-read it, and I thought it must be like a little jarring sound that once troubled our piano. I thought there was some foreign substance lodged upon one of the strings, yet on looking I could find nothing. Then I called a tuner, and he, after a thorough examination, could find nothing; yet the jar remained. Then we moved the piano, and lo! the annoyance was gone; and we found the noise was made by the vibration of some note upon the gas fixture below the floor, which was again transmitted to the piano by some telephonic process, and seemed to emanate from it. So then I concluded the jar was not in the piece, but in my feelings or elsewhere. But after a little more time I began to form my little weak criticisms, and here they begin: No. 2 was amusing and instructive, but lacked the spirit of sweetness which pervaded No. 1, and in its stead a combative, self-assertive spirit prevails, which detracts considerably from the harmony and interest of her writing.

Why older people do not like to hear young people preach, or moralize, is because it is not natural. It is like "fruit out of season," and the young mind capable of it is apt, like the "fruit," to mature imperfectly. The suggestion of a sermon which grew out of the wet wood, and poor fire she had to wrestle with was good, and if she meets any in her "life's great furnace-tending," I hope it will be after age and experience have given her "patience" and "endurance" as a reserve store of kindlings, of a quality that will burn until the moisture of the "wet wood" has all been eliminated, and the whole be united in one fine flame, the glow and warmth of which shall spread brightness and cheerfulness on all around.

Then she speaks of how easily she is amused in the country, in a way which seems to consider it meritorious when it is only a matter of congratulation, that, as her lot is cast in the country, she should have the talent for observing and a capacity to enjoy those things. But the talent of her "friend's" acquaintance for observing the color of the hair and eyes of her gentleman friends (she should not say nor quote the color of every "pair of pants," for she sacrifices elegance of diction to force of expression, a very doubtful gain at best, and something no lady writer should do,) is not to be decried nor depreciated. Suppose she was an artist, a painter of portraits, then the faculty would be invaluable to her. Or, if a man and was a detective, then it would be considered a positive talent.

We are not all made alike, and it is a good thing we are not, or what a monotonous world this would be. I have a friend who cannot bear to hear the wild dove coo, yet paints beautiful pictures, while I, who dearly love to hear the wild dove's song, care very little for pictures, except those painted on the changeless hills and vales and mountains.

And now I must touch upon the much-derided novel-reading which she, in common with many others, seems to hold in such fine scorn. All novels, even the poorest, are nothing more nor less than heart histories written mostly by close students of human nature. And as young girls—to be natural—live more in the affections and emotions than the intellect, they therefore are attracted to the reading which portrays most vividly those sentiments.

If the "Girl of Twenty" was a woman of 40 or 45, as I am, she would see no merit in a child of 11 asking, "Who is the author?" but would rather she would ask, "Where's my jump-ropes?" or "Where's my skates?" or see her riding bareback—and it may be bareheaded—around the field on good old Kate or Nell.

Now, in conclusion, I would say to her, cultivate earnestly charity of thought and expression, for with her capacity for comparing and observing she is in danger of growing sarcastic and acrid in disposition, and thus lay up much unhappiness for herself and do little good beside. To quote from her beloved Tennyson, "He never had a kindly heart, nor cared to better his own kind, who first wrote sarcasm, with no pity in it."

San Francisco.



## How Different People Regard Nature.

[Translated for RURAL PRESS from the German of HANS CHRISTIAN ANDERSEN by PROF. GRANVILLE F. FOSTER.]

Note that the moon is supposed by Andersen to be relating to him the story.

"Along the seaside stretched a magnificent forest of pine and beech trees, so cool and so fragrant. Hundreds of nightingales visited it every spring. Close thereto lay the ocean—the ever-restless and changeable ocean—and between them ran the high road. One carriage after another rolled by. I followed them not. My eye rested alone with pleasure upon a single point. Here lay a huge mass of stones, known in Northern Europe as a giant's grave. Brambles and white thorns grew up between the stones. Here was indeed poetry in nature, but how think you it affected those who traveled by? I will tell you what I saw and heard last evening and you may judge for yourself. First came two wealthy landed proprietors. 'These trees are large and fine,' said one of them. 'Each would furnish ten loads of firewood,' answered the other. 'The coming winter promises to be a severe one; last year we received \$14 a cord for just such wood—' and they rode on. 'The road here is a wretched, miserable one,' remarked another traveler. 'Yes, therefore are these cursed trees in fault,' replied his fellow-traveler. 'Here is no circulation of air, no breath of wind; breezes can reach this spot alone from the sea,' and forth their carriage rolled. And now comes the stagecoach. All the passengers therein are asleep. The postilion blows his horn, but his only thought was: 'How capably I blow this horn; how grandly it echoes through the forest! Its sound must please those who ride within.' Just then came along two 'jolly fellows' galloping on horseback. Youth and champagne quicken their blood, thought I. They observed with a smile the moss-covered hill and the dense forest. 'Here would be a grand place to take Christine, the miller's daughter, for a stroll,' said one of them, and forth they went.

"'Twas a beautiful evening. The very air was loaded with the perfume of flowers and odoriferous shrubs; every breath of air slumbered. The ocean, like a sea of glass, seemed to be a part of the heaven overhead, which spanned the deep valley. A chaise appears; six persons therein; four asleep; the fifth busy in his thoughts, admiring his fashionable summer coat, which fitted him so neatly; the sixth turns toward the coachman and inquires whether there is anything of the curious and remarkable to be observed in yonder heap of stones. 'No,' answered the coachman, 'it is nothing but a heap of stones. There is, however, something remarkable about this forest.' 'And what is that?' 'This I will proceed at once to tell you. Observe how in winter, when the snow is very deep and has obliterated everything, and no pathway can be seen, how these trees might serve me as signs; for by them I can so guide my horses that I am in no danger of driving into the sea; hence you see these trees are remarkable.' Next came a landscape painter. His eye sparkled. He spoke not a word, only whistled. The nightingales burst forth in song, pouring out on the evening air their sweetest and mellowest of notes, drowning entirely his voice. 'Confound this noise!' cried he, and then set to work to examine with his critical eye all the colors and tints in the landscape. Blue, lilac, dark brown. Capital! What a fine picture it will make! Whistling a march from Rossini, he sets about seizing upon the scene, until the picture is so well executed that it reflects the landscape as a mirror does the image of an object. At length comes a poor girl for a few moments' rest; she seats herself upon the giant's grave, her head by her side. She bends her fair, pale countenance attentively toward the forest; her very eyes sparkle with pleasure, she turns toward the sea, looks at the bending heavens above; she clasps her hands in delight, unconsciously repeating the 'Lord's prayer.' She may not have been able fully to analyze the feelings that thrilled her soul, but I venture to assert that years afterward that picture of beauty and loveliness which Nature presented to her gaze that evening floats before her memory, far fairer, far truer, than that which the painter was able to place upon canvas, with all his knowledge and skill, with all his nice discrimination as to colors and tints. She had caught the true secret of beauty. She recognized the spirit of God through the veil of nature. My brains followed her until the morning glow kissed her forehead."

Sunol Glen, Cal.

## YOUNG FOLKS' COLUMN.

## Jack and the Birds.

[Written for the RURAL PRESS.]

Jack is a black cat that lives in the city. The other morning, while sprinkling the lawn in front of the house, I noticed Jack going across the street. As I had previously sprinkled there, it was quite muddy in some places, and Jack being a very dainty cat, did not wish to wet his feet, so he took particular pains to go away round the mud on the dry ground. After crossing the street Jack went under a vacant house on that side.

Pretty soon I heard a great commotion among about a dozen English sparrows which were flying around in front of the house under which Jack had run. They seemed to be diving down at something back of the front fence.

Presently Jack came out from behind the fence with a sparrow in his mouth. The bird was squawking as loud as its little lungs would allow. The other birds were after Jack, but he was determined to hold on to his prize.

He came running across the street as fast as his legs could carry him right through the mud which a few minutes before he had been so careful to avoid. As he came through the front gate he ran under the sprinkler and got soaking wet.

He then ran under a rosebush to get away from the birds, but they kept at him until he let the bird which he had in his mouth go.

When the birds had flown away he came out

by. They sprang at the wolf and killed him. You may be sure the little boys thanked the men over and over again. The men went with them till they came out of the forest, then, after thanking the men, Willie and James took their leave and went on their journey homeward. When they reached home their mother was very glad to see them. She told them that she had been worrying about them all the while they were gone. Then they told their mother of their narrow escape, and she kissed them and thanked God for saving her two little boys from the cruel jaws of a wild beast.

Sacramento.

## What He Loses.

EDITORS PRESS:—"If a man worked for \$1.25 per day and paying 50 cents per day for board, should lose a day and pay for his board, how much would he be the loser?" I answer, \$1.25. If a man works for \$1.25 a day and loses a day, he loses \$1.25, for he has got to pay 50 cents whether he works or not.

Redding, Shasta Co.

## GOOD HEALTH.

## Interesting to Beer-drinkers.

A Petaluma correspondent of a cotemporary writes on the subject of beer-drinking and beer manufacture as follows: To begin with, there is not one quart of the manufacture of our breweries in this State that ever reaches the dignified state of beer. The patrons and the

the case may be. Then it becomes capable of imparting whatever benefits a stimulant may be capable of accomplishing, if any. But experience teaches that no stimulant is of any benefit except in actual indisposition, and under the same intelligent guidance that other therapeutic agents are prescribed.

Petaluma, June 15th.

## DOMESTIC ECONOMY.

ENGLISH RHUBARB JAM.—For each pound of rhubarb allow the rind and juice of one small lemon, four bitter almonds, blanched and chopped very fine, and three-quarters of a pound of sugar. If preferred, a few drops of bitter almond essence may be used instead of the chopped almonds. Peel the rhubarb and cut it in pieces an inch long; put the rhubarb and sugar in a deep dish and let both remain 24 hours. Boil the rhubarb and sugar, the finely-minced lemon rind and the almonds until it thickens and then add the lemon juice. Let the jam boil up gain and put in glasses or jars.

WELSH CUSTARDS.—One cup of dry, grated cheese, four eggs, one cup of milk, one teaspoonful of butter, two teaspoonfuls of prepared flour mixed with the milk, bit of soda the size of a pea, half teaspoonful of salt, and a pinch of cayenne. Heat the milk, stirring in the soda, butter, salt and pepper, with the flour wet with a little milk, and pour it scalding hot on the eggs, beaten light in a bowl; add the cheese, beat up for a minute, pour into buttered custard cups and bake in a brisk oven for about twenty minutes. They should be puffy and lightly browned. Serve instantly in the cups, as they soon fall; pass the wafers with them.

FRIED WHOLE POTATOES.—Peel them and boil in salted water; do not let them boil until they are soft. Beat one egg, and have ready some fine cracker crumbs; roll the potato in the egg, and then in the cracker, and fry in butter until a light brown, turning frequently, that the color may be uniform; or the potatoes may be dropped into hot lard. In this case, a cloth should be laid over a plate and the potatoes should be drained for a moment in this before sending them to the table.

TENDERLOIN OF PORK.—The pork should be rubbed with butter and broiled on a hot gridiron. Garnish with slices of lemon and serve with sauce Robert. The sauce is made in this way: Mince an onion fine and fry it brown in butter; add half a cup of vinegar

and half a cup of hot water or stock; boil a few minutes and strain; now add a teaspoonful of brown flour and one of mustard, seasoning with half a teaspoonful of salt and a little white pepper. Boil until it thickens.

DATE SAUCE.—Date sauce, which is very nice with bread puddings, is made by stewing dates in just enough water to cover them; let them simmer for three-quarters of an hour, then if the dates are soft rub them through a colander, beat it until it is light; add water if it is needed to thin it, let it come to a boil. If you have saved the juice of fruit when canning it, use this instead of water to thin the sauce. The juice of currants is especially appetizing.

DELICATE PUFFS.—Stir into half a pint of sifted flour, to which a saltspoonful of salt has been added, one gill of milk. Beat the white of an egg to a stiff froth. Mix the well-beaten yolk with a gill of milk and stir into the batter; add the white of egg and bake in muffin pans in a quick oven.

CLAM BROTH.—Mince 24 hard-shell clams and simmer them for half an hour in a saucepan with a pint of hot water or clam juice, a piece of butter half the size of an egg and a few grains of cayenne pepper. At the end of this time add half a pint of scalded milk and strain before serving.

CARAWAY BISCUIT.—One pound of crushed white sugar, four eggs, one teaspoonful of salt, the rind of one lemon, caraway seed, one pound of flour. Stir all these ingredients well together for one hour, adding the flour last and then forming into cakes.

VEAL TOAST.—One cup of chopped veal, one cup of hot water, one tablespoonful of butter, one teaspoonful of salt and a slight sprinkling of pepper; place on the stove and when quite hot pour over buttered toast.



THE PUZZLED PUSSIES—IT LIVES, IT MOVES! WHAT CAN IT BE?

from under the bush and sat down on the walk with a very thoughtful expression on his face, as much as to say, "Here I am all wet, my feet muddy, and my bird gone. I wonder how it all happened."

San Francisco.

[Jack was undoubtedly filled with wonder and disgust over his experience. Cats as well as people have surprises and things which they cannot understand. We would like to have had a picture of Jack when he came out from under the rosebush, but there was no photographer there to get it. We have, however, a pretty cat picture for our young folks, and we give it on this page.

—EDS. PRESS.]

## A Narrow Escape.

[Written for RURAL PRESS by DOLLY BROOKS, aged 13 years.]

Willie and James Thorn were two little boys nine and ten years of age. James was the older. They were very good boys, and always obeyed their mother, for their father was now dead, and Mrs. Thorn had to work very hard to earn money enough to buy something to eat. She went out most every day to sew for people. One day James and Willie were sent in the forest by their mother to get some wood, for there was none in the house. Our two little boys had to walk quite a distance before they reached the beginning of the forest. They walked through the forest very bravely, not fearing any wild beasts at all. When they had picked up all the wood they could carry they turned for home. But, lo! out sprang a hungry wolf. What were the poor little boys to do? James took hold of Willie's hand and started to run, but the wolf would soon have caught up with them and killed them had it not been for two men who had probably been cutting wood near

manufacturers alike are in too big a hurry for that. It is all drank as sour mash. Let us explain.

Fermentation is the work of an infusorial cryptogam or bacteria. These little creatures make our alcohol in a struggle for existence. They are so small that billions of them occupy a space of half an inch, and in point of multiplication one will develop a million in 24 hours, while one hour is their average life. You must understand that they are a sexless animal. Should the beer-drinker, as a preliminary measure, place his delicate, foamy luxury under a magnifying power of eight or ten thousand diameters he would perhaps postpone the enjoyment of his delicacy to some future time. A vat of barley, undisturbed, might remain until it rotted and it would produce no beer. But stir it up and force the bacteria down in the fluid where they cannot obtain a sufficiency of oxygen upon which to live, they take the sugar and manufacture alcohol from it, and from the alcohol they can abstract enough oxygen to support life.

This is fermentation; but the fermentative process is only in its incipency before all the stuff is drank. The foam on your glass of mash is cryptogamic. Drink it, and you convert your stomach into a vat for the fermentative process. The temperature of the stomach being favorable to their healthiest existence, fermentation continues, developing and disengaging a gas, bloating, weakening and relaxing the intestinal tract; impairing the digestive process, developing an alarming quantity of abnormal fat, weakening all the vital organs, and, finally, with an aldermanic corporeity, the victim steps down and out. And this is a subject that some medical men treat with levity. Thus far, we have not discussed beer, ale, or porter—simply the primary or elementary principle, sour mash.

When this mash has been bottled or barreled from two years and nine months to three years it becomes beer, ale or porter, as





A. T. DEWEY.

W. B. EWER.

Published by DEWEY &amp; CO.

Office, 252 Market St., N. E. cor. Front St., S. F.  
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Drafts for this paper in the name of the firm.

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A. T. DEWEY. W. B. EWER. G. H. STRONG.

## SAN FRANCISCO:

Saturday, July 10, 1886.

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## The Week.

The week has been badly broken up by the  
three national holidays for the celebration, and  
the cessation from business, which was the most  
marked feature of this year's observance, ex-  
tended from Friday night until Tuesday morn-  
ing. It was quite a welcome relief to the  
older people, but a severe tax upon the bad  
small boy to spread one day's firecrackers over  
three days' time, and just as hard for the good  
small boy to have the explosives on hand and  
not let them off on Sunday. However, every  
one survived the strain and returned with re-  
freshed vigor to ordinary work on Tuesday  
morning. The Fourth throughout the State  
was rather quiet this year, the greatest celebra-  
tion being at Monterey, where National and  
State patriotism and traditions were pleasantly  
commingled. In the city and country there  
are many thoughts turned toward the grand  
event of next month, the G. A. R. Encamp-  
ment. In the city and suburban towns great  
efforts are being made to perfectly arrange  
accommodations for the thousands who are  
coming. After that event will come the fairs,  
the political conventions, the election, the  
Legislature—surely the coming months will not  
be dull.

## The Hop Outlook.

We cautioned our readers in our Market Re-  
view last week against reports that "new hops  
were being contracted for at 10c per pound." Buyers  
seemed to think that they might catch  
some growers at low-water mark by circulating  
such reports in the daily papers, but we im-  
agine they found few growers eager to contract  
hops ahead for less than the cost of production.  
The folly of such reports is seen from the fact  
that before the close of the week the buyers  
advanced their contract figures to 15@16c per  
pound, and probably found few ready to sell at  
those figures.

We do not believe, as a rule, in holding on to  
produce too long, but when rates are below the  
cost of production, and especially after a pro-  
longed depression, there are nine chances to one  
that values will advance. There is in all pro-  
duce a tendency toward the normal price, and  
sooner or later it is reached, and perhaps by  
reaction, the market value is carried much  
above it. This is notably the case with hops,  
which, of all agricultural produce, show the  
widest fluctuation from year to year.

Even if there were no reports of disaster to  
growing hops, we should expect a notable im-  
provement in values this year. The acreage  
has been greatly reduced by neglect and by  
plowing up, because of the ruinous experience  
of the last few years. The threatening condi-  
tion of the labor supply last spring, which hap-  
pily has not been realized to the extent pre-  
dicted by the agitators, together with the low  
prices prevailing, led many California hop-  
growers to abandon their fields. In the other  
parts of the United States the low prices ac-  
complished the same result as they invariably  
do. Besides this fact, there comes now the  
report of a most sad condition in the great hop  
districts of New York, as described in the fol-  
lowing dispatch from New York city, dated  
July 6th:

Reports from Otsego, Montgomery and Scho-  
harie counties hop vineyards say that the vines  
are covered with vermin from the top of the  
strings to the bottom of the poles. The honey  
dew is also found wherever the vermin are, and  
this is fully as detrimental. The appearance of  
vermin on the hop vines in the early part of  
July leaves no hope for a crop, and unless some  
sudden and unforeseen change occurs there will  
be few hops to harvest. The leaves attacked  
curl and dry up, and where the hops attempt to  
burr the vine is entirely consumed. Mold fol-  
lows in the hops before they mature, and those  
that do weather this difficulty are lacking in  
lupuline substance. While four to seven cents  
was paid for 1885 hops two weeks ago, 12 and  
15 cents are now offered, and as high as 18  
cents has been paid for old hops during the  
past week.

Another important hop district of New York  
is covered by the following dispatch, describing  
much the same state of affairs as regards the  
growing crop:

Dispatches from special correspondents of the  
*Sentinel* in Otsego county report that the hop  
vines generally throughout that section are cov-  
ered with lice from the bottom of the strings to  
the top of the poles. Honey dew is also found  
wherever the lice are, and this is fully as bad as  
the vermin. The extensive appearance of lice  
in June leaves no hope for the crop, and unless  
some sudden and unforeseen change shall occur,  
there will be no hops to harvest. The leaves  
attacked by the lice curl up and dry, and mold  
follows in the hops before they mature. Reports  
from southern Oneida and Madison counties  
are also to the effect that lice are so numerous  
as to threaten the total destruction of the hop  
crop.

It seems to us that growers can expect  
to realize something this year to com-  
pensate them for the disappointments of the  
last two years; and though we never advise any  
one to refuse a very good thing, we think there  
are good chances to do much better than figures  
which buyers are now talking.

**CHEAP OCEAN FREIGHTS.**—We hardly won-  
der that the English wheat-grower complains  
when foreign wheat is brought across the ocean  
for less than he can move his across his little  
island to market. The *Mark Lane Express*  
says: "When wheat is taken for ballast, who  
can foresee the course of the trade? This has  
been done, even at a premium, from U. S. At-  
lantic ports; and now it is stated that 700 tons  
of Australian wheat have been brought here as  
ballast from an Australian port, for the nomi-  
nal sum of £1, while 6d. per qr. is thought a  
very high freight rate of steamers direct." Seven  
hundred tons of wheat from Australia to  
England for \$5, or less than two-thirds of a cent  
per ton!

## The Coming Fairs.

We have prepared our usual list of coming  
agricultural fairs for the convenience of exhib-  
itors and fair-goers. The prospects for this  
year's exhibitions are, on the whole, excellent,  
and much interest is manifested in preparing  
the leading exhibits. At least two new pavil-  
ions have been finished already—one at Marys-  
ville and one at San Jose—and there may be  
others which we do not now remember. Los  
Angeles is preparing for the erection of a grand  
pavilion, and it is certainly greatly needed.

A number of counties are preparing for the  
county displays at the State and Mechanics'  
Institute Fairs. There are also special efforts  
being made to show produce in San Francisco  
during the Grand Army Encampment. Sonoma  
will be well represented, and Fresno has accom-  
plished an organization for this purpose and ap-  
pointed committees on nearly everything under  
the sun, including a committee to bring down  
a section of a big tree large enough to make a  
pavilion to hold the whole county display.  
Such an undertaking would never be forgotten,  
and would be talked about the world over.

This year's State Fair promises to be un-  
usually good. The directors have shown rather  
a better appreciation of the true producing in-  
terests of the State, and perhaps if there should  
be given a rousing good show of all kinds of  
farm products, the wisdom of making the fairs  
more thoroughly agricultural would become ap-  
parent. Let all who have something good  
send to E. F. Smith, Secretary, at Sacra-  
mento, for the premium list and rules for  
exhibitions, and then do what they can to  
help fill the beautiful building with a dis-  
play which will be true to the greatness  
and resources of the State. As we have fre-  
quently noticed, the county exhibits from sev-  
eral counties will be large and varied, and will  
be worth a journey across a State to examine.

The other fairs in the several counties and  
districts are worthy of local attention, and if  
the district does itself justice interesting mate-  
rial enough will come forward to equip a State  
fair in almost any other State in the Union.  
We have prepared a schedule of the fairs to be  
held in this State this year. The list is not  
complete and if the officers of any fair which  
is omitted will send us the data we will com-  
plete and republish the table from time to time  
until the fairs occur.

Bench Show of S. F. Kennel Club, San Francisco,  
July 27th to 31st.  
Bay District Association, San Francisco, Aug.  
7th to 14th.  
Third District—Butte, Tehama and Colusa coun-  
ties—Chico, Aug. 17th to 23d.  
Fourth District—Sonoma, Marin, Solano and  
Napa counties—Petaluma, Aug. 23d to 28th.  
Seventeenth District—Nevada and Placer coun-  
ties—Glenbrook Park, Aug. 24th to 28th.  
Mechanics' Institute Fair, San Francisco, opens  
Aug. 24th.  
Golden Gate Fair, Oakland, Aug. 30th to  
Sept. 4th.  
Thirteenth District—Sacramento, Yolo, Yuba and  
Sutter counties—Marysville, August 31st to Septem-  
ber 4th.  
Eighth District—El Dorado, Amador, Alpine and  
Mono counties—Placerville, August 31st to Sep-  
tember 4th.  
State Agricultural Society, Sacramento, Septem-  
ber 6th to 18th.  
Oregon State Agricultural Society, Salem, Sep-  
tember 13th to 18th.  
Eleventh District—Plumas, Lassen, Sierra and  
Modoc counties—Greenville, September 20th to 24th.  
Second District—San Joaquin, Calaveras, Tuol-  
umne, Stanislaus, Merced, Mariposa, Fresno, Tu-  
lare and Kern counties—Stockton, Sept. 21st to 25th.  
Ninth District—Del Norte and Humboldt coun-  
ties—Rohnerville, Sept. 21st to 24th.  
Fifth District—San Mateo and Santa Clara coun-  
ties—San Jose, Sept. 27th to Oct. 2d.  
Seventh District—Monterey, Santa Cruz, San Be-  
nito and San Luis Obispo counties—Salinas City,  
Sept. 28th to Oct. 2d.  
Tenth District—Siskiyou, Trinity and Shasta  
counties—Yreka, Sept. 29th to Oct. 2d.  
Nevada State Fair, Reno, Oct. 4th to 9th.  
Sixth District—Los Angeles, Santa Barbara, Ven-  
tura, San Diego, San Bernardino and Inyo coun-  
ties—Los Angeles, Oct. 11th to 16th.  
Santa Barbara Agricultural, October.

**FREIGHT ON FRESNO RAISINS.**—We notice in  
an exchange that Fresno raisin-growers are  
agry because to get their raisins East they  
have to pay \$60 per car local freight to Stock-  
ton in order to get the benefit of overland rates,  
because Stockton is a terminal point and Fresno  
is not. This terminal point business is often a  
great wrong to producers. If there must be  
terminal points, let them be fixed according to  
the produce prevailing in each locality. Fresno  
should certainly be a terminal point on raisins,  
if it is necessary to have any terminals at  
all. This charging local rates to gain a chance  
to pay through rates is wrong.

## Harvest Notes.

The grain-growers of the Sacramento valley  
have been disappointed this summer, for the  
wheat crop is almost everywhere coming short  
of what was looked for early in the season.  
Considerable threshing has been done in Sutter,  
and the *Farmer* reckons that not more than  
half an average will be harvested in that  
county. Reports from various sections of Butte  
agree that the yield at best is only medium,  
and accounts from Solano are equally disap-  
pointing. In Colusa soon after the recent  
norther, an estimate placing the damage to the  
crops at \$2,000,000 was deemed extravagant,  
but last week's *Sun* declares that the loss in  
that county, those two days, was 4,000,000  
bushels of wheat. "We would," he says, "have  
had 11,000,000 bushels. Now 7,000,000 is a  
large estimate of what we will have to sell.  
The loss to the white wheats has averaged from  
60 to 70 per cent, and to the club not less than  
an average of 15 per cent, and some say 20 per  
cent. From every one who was cutting before  
the wind we hear of a vast difference in grain  
cut before and after the wind. There are sacks  
to sell on all sides by people who have pur-  
chased too many. As a rule, men have never  
purchased enough sacks, but now every one  
who bought before the wind, and some who  
bought after, but who did not appreciate the  
full extent of the damage, have sacks to sell.  
The damage was fully as great in Butte, Teha-  
ma, Yolo, part of Sutter and part of Solano.  
We think its influence must have extended  
further south, but people are loth to admit such  
serious damage. It must bring down the price  
of bags."

In the coast counties south of the bay, too,  
we observe that the quantity and quality  
of the wheat fails to meet the hopes of the  
farmers.

The San Joaquin valley seems to have suffer-  
ed less by the winds, as only slight injuries are  
reported.

The barley harvest is turning out fairly, and  
very heavy and plump grain is being secured.  
The late hay regions are turning out well.  
Fruit is being found rather short, and buyers  
for canning and shipping are scouring the State  
for their favorite kinds. Grapes are still look-  
ing very well, and promise a most bountiful  
yield.

Reports of the honey crop so far are rather  
conflicting, but it is apparent that early esti-  
mates were too high. Though some most ex-  
cellent yields are reported, there are many  
others which are disappointing.

**LIVELY LOS ANGELES.**—Los Angeles is ap-  
parently surprising even her most enthusiastic  
advocates by the buoyancy of her real estate  
market. Milton Thomas, of that city, in a  
business letter to this office, throws in the fol-  
lowing interesting statements: "There is a boom  
in Los Angeles real estate values which is won-  
derfully unexpected. At this season of the  
year we usually have a dull time, but the reverse  
is the case, and real estate has advanced 25 to  
50 per cent during the last 60 days. On Fort  
street property has advanced 100 to 200 per  
cent within the last 30 days. The advance  
seems to be healthy, and most purchasers are  
paying down for their purchases." Of agri-  
cultural produce, Mr. Thomas reports field  
crops good, pears a failure, apples almost a fail-  
ure, apricots light, peaches one-quarter of a  
crop, English walnuts light, grapes good and  
the prospect that the next orange crop will be  
light.

**INDIAN WHEAT.**—The exports of Indian  
wheat for the last 10 years, as given in *Dorn-  
busch's List*, will give the reader an idea of the  
quick increase of production. The figures rep-  
resent cents of wheat:

1876-7.....	5,587,000	1881-2.....	19,901,000
1877-8.....	6,373,000	1882-3.....	14,194,000
1878-9.....	1,057,000	1883-4.....	20,956,000
1879-0.....	2,202,000	1884-5.....	15,831,000
1880-1.....	7,444,000	1885-6.....	21,061,000

It is stated that this enormous growth in the  
export of wheat, which is comparatively a new  
trade in India, is the result almost entirely of  
the extension of railways into regions from  
which it was formerly impossible profitably to  
move this cereal for shipment to foreign coun-  
tries. It has been accomplished, too, in the  
face of seriously growing competition in Europe,  
on the part of American, Australian, and River  
Plate wheat producers.



## Murderous Millet.

There is great diversity of opinion in this State concerning the worth or worthlessness of "Evergreen Millet" or "Johnson Grass," or almost any number of aliases which *Sorghum Halapense* sails under. It has been grown in nearly every part of the State from roots distributed by the College of Agriculture or obtained from other sources, and the opinions concerning it are almost as varied as the growers are numerous. A report on forage plants in California which will be issued from the University this fall will show quite fully the record of the plant in this State, and it will be much as has been already indicated by the letters from growers which have appeared in the columns of the *RURAL*.

The plant has proved of value in some cases, and a fearful nuisance in others. Although it has refused to grow in many locations, it has shown itself so persistent in others that it has become a great pest and has encroached upon cultivated land much to the sorrow of the owners. One grower of the plant who would like to see its shadow grow less is Dr. E. N. Foote, of Lockeford, San Joaquin county. He early discerned its quality, but not, unfortunately, until he got it into his ground. His heart warmed to it a little when its roots proved capable of sustaining his hogs when the grasshoppers removed the other vegetation, but now we imagine he has come again to hate it for its shameful aggressiveness. He made the attempt to work it out by cultivating the ground with hoed crops, but the more it is hacked and torn asunder the more it grows, the hoeing merely serving to distribute its roots, each joint of which has in it the full outfit for an independent plant. We imagine the doctor's indignation found forcible words when he saw the remarkable case of vegetable vivisection which we illustrate on this page. He sent us the case and there are so many interested more or less in the deeds of the grass that we had the engraving made. It represents with great accuracy an Early Rose potato, which a root of the millet found in its way and transfixed in the manner shown. On digging the potatoes the spud was thrown up with its murderous stiletto still in the wound. We imagine the doctor will consider potato growing as a poor cure for millet unless he can find a hard-shell variety warranted millet proof. He probably has no desire to grow his potatoes strung along on millet roots like beads on a necklace.

No doubt Dr. Foote is in the field now for a sure cure for millet, and we should not be surprised to find others of our readers in a similar state of mind. Perhaps others can report successful experience in eradicating the plant. If so we would be glad to hear from them. We hope that the plant will not have to be placed alongside of morning-glory as a standing problem in weed murdering.

By the way, we notice that the last issue received of the *Mark Lane Express* has a first-class puff for the plant copied from an Australian paper, and asks: What is this "Johnson grass?" Perhaps our contemporary can get a little light from this paragraph. It may be a good thing in some places, but be very sure not to get it where you do not wish to have it stay.

## Decision on Purity of Milk.

A legal reader of the *RURAL* calls our attention to the following Rhode Island decision, recently handed down, as follows:

## Constitutional Law—Statute Defining Adulteration.

A statute forbidding the sale of adulterated milk provided: "In all prosecutions under this act, if the milk shall be shown upon analysis to contain more than 88 per cent of watery fluids or to contain less than 12 per cent of milk solids, or less than two and one-half per cent of milk fats, it shall be deemed for the purpose of this act to be adulterated." Held, that the provisions were constitutional: *State vs. Groves*, 15 R. I.

The standard set by statute is exceedingly low; ordinary milk, half-skimmed, would thus pass, so no one could complain that it could be unreasonable, except, perhaps, to the consumer. The point of interest in the decision is, of course, in the affirmation of the constitutionality of acts regulating adulteration, and this is what producers of genuine dairy goods are insisting upon. The legal aspects of the claim are getting very satisfactory.

## In San Geronio Pass.

Highland Home, one of the most beautiful and favorably situated health and pleasure resorts of Southern California, is located about 80 miles east of Los Angeles, in the San Geronio pass, San Bernardino county, and about three miles northeast of San Geronio station, on the S. P. R. R.

San Geronio Heights, where the hotel is situated, is about 500 feet above the railroad depot, but the ascent is so gradual that persons do not notice the elevation until they reach their destination and look back over the broad fields stretching away for miles at their feet. The home is owned by the San Geronio Land and Water Co., composed of Messrs. A. H. Judson, D. R. Risley, and E. B. Millar, of Los Angeles. It is built on the site of an old stage station, on

and various other parts of the place where it is needed.

The company own in all about 1800 acres of land, 1400 of which is a rich, sandy loam and is under cultivation. The land yields an abundant harvest under proper cultivation, and the trees and vines which have already been set out look thrifty and well.

Extensive ornamental grounds are being laid out around the hotel in accordance with plans drawn by Mr. A. H. Judson. Outside of the above grounds there have been set out 20 acres of olive trees, 41 acres of vineyard and several acres of apples, pears and peaches. The elevation of the hotel is 3000 feet above the sea level.

The climate is probably almost, if not quite, unsurpassed in the United States for persons suffering with consumption and kindred dis-

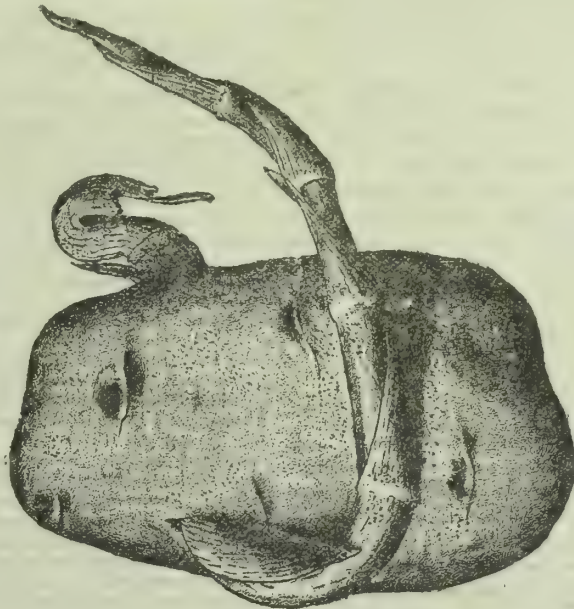


HIGHLAND HOME, IN SAN GORONIO PASS.

the route to Arizona, contains all the modern conveniences, and a representative of the *PRESS* who was recently there assures us that under the management of its genial host and hostess, Mr. and Mrs. P. D. Grimes, is a home in fact as well as name. The site chosen was a particularly happy one, lying as it does at the mouth of the lovely canyon of Glen Eyrie and at the base of the foothills of the San Bernardino

eases. On account of its altitude and the close proximity of this locality to the great Mojave desert the air is very dry and highly charged with ozone. Another favorable point is freedom from fogs. A fog is rarely ever seen here, and then only for a short time.

It is a part of the company's plan to furnish places for permanent residence to those who wish to make San Geronio Heights their home.



EARLY ROSE POTATO PIERCED BY ROOT OF EVERGREEN MILLET.

mountains. Spurs from the hills project on either side, giving protection from the wind. In front, the eye looks out over a gently descending slope of some 18,000 acres of fine grain land under cultivation across to the mountains, on the other side of the pass. To the southeast, that grand old mountain, San Jacinto, lifts its snowy head, the top of which tradition says, as mentioned by Helen Hunt in her "Ramona," no one can reach and live. From the hills back of the hotel can be seen the three principal peaks of the San Bernardino mountains—Baldy, San Bernardino and San Jacinto. The canyon of Glen Eyrie, through which runs an ever-living stream of mountain water, as pure as crystal, is about a mile long and through it are thickly scattered large trees of various kinds, making a charming retreat for invalids and those who enjoy wild, picturesque scenery.

The stream of water in the canyon furnishes an abundant and never-failing supply of pure water for the hotel and for irrigation. Water from this stream is conveyed by pipe to a large reservoir, and thence the water is taken by other pipes to a smaller reservoir to the hotel

They have accordingly subdivided a large portion of the tract into lots ranging from one to ten acres.

VACATION.—As the year has closed at the State University, Professor Hilgard has retired for a change of work, which is said to be as good as a rest, to his farm in the lower part of Alameda county. We trust that a few weeks' tussle with weeds and adobe will prove a valuable tonic to him. Work in the University laboratories will be for the most part stopped during the vacation, and matters which can be postponed should be presented when they reopen in September. Matters of pressing importance, such as visitations of plant diseases or insect pests or practical points on which information is needed immediately, may be sent as usual and will be handled as well as possible under the circumstances.

FRUIT TREES AND VINES.—The estimated number of fruit trees in this State is as follows: Total number of trees, 8,000,000, divided as follows: apple, 2,700,000; peach, 1,200,000; pear, 500,000; plum and prune, 600,000; cherry, 400,000; apricot, 500,000; orange, 1,600,000; lime and lemon, 500,000; grape vines in bearing condition, 70,000 acres.

## State Horticultural Society.

The State Horticultural Society met in this city on June 26th, Judge W. C. Blackwood, of Haywards, in the chair. Mr. Gustav Eisen, of Fresno, was proposed for membership.

## Peeled Figs.

The following letter was read:

ROME, ITALY, April 15, 1886.  
Mr. E. J. Wickson, Secretary of California State Horticultural Society: I send you by mail a small sample of Italian figs of the better sort, as found on the hotel table. Perhaps the members of the society may be interested in examining them, as the fig seems to be the coming fruit in California. If not dried up in transit, they should be found very delicate, just the thing for a dessert dish. Sig. Siemoni, Inspector of Forests, tells me that these are of the variety called "Fico Dottato," which is largely cultivated, particularly in Tuscany, and that they were peeled before drying. The peasants are very skillful in peeling them, with their fingers only. The figs are then dried in the sun, upon a roof or other convenient place, sometimes being protected from dust and insects by spreading a thin cloth over them. The film of white sugar on the specimens is the grape-sugar, which is natural to the fruit, and is brought to the surface in drying. Great quantities of figs are cured without peeling, and are eaten within the realm to take the place of, or supplement, breadstuffs. Large shipments are also made to foreign countries, and particularly to Germany. In Germany the poorer qualities are largely used as a substitute for coffee, being cut in small pieces, dried, and treated as coffee usually is, but needing no sweetening. These peeled figs sell in large lots at 30 to 40 centimes per kilogram, or between 3 and 4 cents per pound, with rather a short supply. The unpeeled grades are cheaper. Our landlord, who formerly owned an estate in Tuscany, says that the "Fico Dottato" is a large green fruit, and that the greater part of the crop is eaten fresh. The "Verdini" are smaller, and are dried with skins on. The "San Pieri" are the first to ripen—about the last of June—and are eaten fresh. The names for varieties of figs vary so much in different parts of Italy that our importers of trees will probably get hold of the same thing with several synonyms.  
C. H. DWINELLE.

The figs sent by Mr. Dwinelle had been long delayed by the mails, and had become so tough and dry that their good points could not be perceived. His description was, however, heard with interest.

## Memorial Resolutions.

Mr. W. G. Klee, from the committee, submitted the following:

It is with feelings of deep regret and sorrow that we learn of the sudden death of our late member, Mr. G. N. Milco, stricken down in the prime of his life. His death is a sad loss to the State and to the horticulturist especially. A native of Dalmatia, a country with a climate in many respects similar to California, he saw the vast opportunities the Golden State offered for the introduction of the plants and fruits of Southern Europe, and not a few are the valuable acquisitions for which we must thank him. But it is especially through the introduction of the Dalmatian insect-powder plant that this State will remember him. To his untiring energy it is due that its culture and the manufacture of the buhach was made a success, and the establishment of a new and permanent industry added to the State. It is such undertakings which add wealth to a State, and such examples as his are worthy of the highest praise. In the death of Mr. Milco the State Horticultural Society has lost a most valuable member not to be replaced. As horticulturists we extend our deepest sympathy and condolence to the bereaved family.—W. G. KLEE, JAMES SHINN, Committee.

The resolutions were adopted and the secretary instructed to send copies to the family of the deceased and spread the same upon the minutes of the society.

## New Horticultural Commissioner.

Senator DeLong, from the committee appointed to interview the Governor regarding the appointment of Horticultural Commissioners, reported that a special committee had interviewed the Governor, and the result was the appointment of W. M. Williams on the State Board of Horticulture in place of G. N. Milco of Stockton, deceased, as requested by the society at its last meeting.

## Discussion on Apple Growing.

The discussion on apple growing was opened by Senator DeLong, of Marin county. He thought the discussion naturally divided itself into the ground in which trees should be planted, selection of varieties best to plant, then planting, cultivation and pruning, the best ways to fight fungus, insect pests which attack the body of the tree and the leaves, and those which attack the fruit.

Land for an apple orchard should be rich as possible and free from adobe. It should lie so as to secure good drainage, or be well drained artificially. There should be no standing water to injure the roots or to interfere with thorough cultivation, for the land should be so that it can be worked early, and not be lumpy, but thoroughly pulverized.

In selecting varieties for an apple orchard for market fruit he would take but five or six varieties, and for commercial purposes he would



plant no apple ripening before the end of August. The very early apples have to compete with summer fruits, and generally get the worst of it. Perhaps in certain localities a few early apples will pay.

For an early apple, then, in his experience, he would consider the Gravenstein early enough and would plant no Astracan or Early Harvest. He considered the four best varieties for keeping and shipping to be as follows: Yellow Newtown pippin, Esopus Spitzenberg, White Winter Pearmain and Winesap. The last-named apple, he said, according to his observation, produced and kept well if grown on unirrigated ground, and would stand shipping around the world. He mentioned the Tewkesbury Winter Blush as keeping to June 1st.

In planting out an apple orchard, Mr. DeLong would plant out apple trees 36 feet apart, on the equilateral or quincunx plan and between them place shorter lived trees, apricot, cherry and peach. This will yield some pay for the cultivation until the apple trees need all the ground. The apples, as a rule, will not bear a paying crop until they are seven years of age, while the other fruits will bear in four years, and the trees will not interfere until the apples are 15 years of age. He thought that growing stone fruits on the ground between the trees would not seriously exhaust the ground for the seed fruit like the apple.

Speaking of the insects which infest the apple, he mentioned first the scale insect, which he said could be destroyed by alkaline washes. Sunburn, sap-suck and borers he considered as serious evils as could happen to an apple tree. In getting out a borer he always cut below him. The red spider could be easily killed with weak whale-oil soap, but the red spider's egg will stand almost any kind of application. The canker worm or measuring worm can be obviated by a printer's ink band which traps the wingless moth on her trip up the tree. The caterpillars he fought by placing around the trees bands covered with rancid grease mixed with lard to keep it soft, and then swashed the caterpillars which congregated below the bands. He fought them this way several years until the ichneumon fly came and destroyed them. As for the codlin moth, he was still on the lookout for a perfect cure. He had saved part of his crop with the bands. The 12-spotted diabrotica which eats into the fruit is a hard pest, to handle. Mr. DeLong mentioned also certain fungoid diseases of the leaf which had never done him much harm as yet, and which he had not attempted to fight. Others had reported considerable injury by them.

Speaking in general terms Mr. DeLong said the apple business was a good one if one raises good apples, but the production of inferior is unprofitable. He believed the cooler valley and certain elevated lands best suited to the apple. He thought it quite important that to produce good-keeping apples they should not be irrigated. He considered the Yellow Newtown Pippin the best keeper. He finds the Winesap a good shipper, but affected by a dry rot which is objectionable but does not seem to injure the flavor of the unaffected part of the apple. Picking apples for shipment should be done just when the seeds begin to blacken and when the fruit yields to pressure. If left on until fully ripe, and the seeds all black, it will not keep.

Being asked concerning the shipment of apples to Australia, he said he chose apples fit to pick in September. As to varieties which are rather uncertain to ship such a distance, he mentioned the Gravenstein, the Pennock, and Roxbury Russets as sometimes good and sometimes bad. Of the russets he had 500 boxes go through well one year and 400 spoil the next year.

#### Mr. Williamson's Remarks.

Robert Williamson, of Penryn, being called upon, stated that he agreed with Mr. DeLong in regard to selecting soil and situation for an apple orchard and also in his advice to plant apples far apart and other trees between. Varieties of apple must be selected according to locality and diversity of climate, etc. No one can prescribe the same for all situations, but he thought that in each locality five or six kinds which do best there are enough varieties to plant. He considered early and fall apples profitable in the Sacramento valley and on the foothills up as high as Colfax. In this district it is not possible to raise the best keeping apples; Mock's Late Keeper, Esopus Spitzen-

berg, Ben Davis and Winesap keep best of all, but not well. A profitable apple in the Sacramento valley is the White Astracan, which can be shipped early as far east as Omaha. Alexander, Skinner's seedling and Gravenstein also do well for this trade, the first two being best. He said that in the third week in June his firm paid as high as \$1.40 in Marysville for White Astracan to ship East. They have paid from \$1 to \$1.50 for all they could get early for the last six years. This demand may be limited, but still he thought the present shipments could be largely increased.

Higher up on the mountains—say at "Yankee Jim" and "You Bet" and similar situations—the apples mentioned by Mr. DeLong do well. The Rhode Island Greening, Yellow Bellefleur and Tompkins County King have also paid well. He believed apple-growing would be found profitable everywhere if the right varieties were chosen and properly taken care of.

Speaking of pruning, Mr. Williamson spoke of heading low and shading the trunk. If the limbs do not shade it, it must be done otherwise. He found the borer's parent could be discouraged from laying her eggs by wetting the southwest side of the tree with stinking soapuds, putting it on several times in the season. If the trunk is shaded this is not needed. He also spoke of pruning to prevent over-bearing. He confined pruning mainly to thinning out, and not heading back branches; but this depends much upon the habit of growth of the variety. He would not treat a tree so as to make a bramble bush head.

#### Woolly Aphis, Etc.

Mr. Klee, being asked about the woolly aphis, gave his experience with the use of gas-lime at the University, which has been fully described in the RURAL of May 15, 1886.

Referring to the tent caterpillars, Mr. Williamson said that a little buhach will destroy them at once. Sulphur will kill the red spider and yellow mite. Of all the pests, he considered the woolly aphis the hardest to fight. A recipe, consisting of 20 pounds of quicklime, one gallon of coal oil and 50 gallons of water, to be applied to the roots, has been sent to him as a positive cure for this evil.

James Shinn, of Alameda, was strong in praise of the ladybug as a destroyer of the woolly aphis. He also recommended ashes placed around the base of the tree for the same effect.

Professor Hilgard spoke of the proposition to hold a grand fruit display at Sacramento during the encampment, and remarked the desirability of an immense central fruit exhibition for the benefit of Eastern tourists. He said he considered such an exhibition preferable to a number of small ones throughout the State.

Mr. DeLong urged the use of whitewash on trees as a preventive of injury from the sun's rays.

Judge Blackwood spoke of the codlin moth and its ravages, and recommended the use of a decoction consisting of a gill of Paris green to 40 gallons of water for the destruction of these pests. He denied that the fruit thus produced would be poisoned or injured in the least.

A praparturiens walnut tree was exhibited by John Rock of San Jose, three feet high, which bore fruit.

Two varieties of cherries were exhibited by G. Tozetti, San Leandro. Mr. Coates had a sample of Centennial in glass, and Mr. DeLong made a fine display of cherries in the new patent top glass jar, invented by DeLong & Ashby, and used at the Petaluma Cannery.

After deciding that at the next meeting W. W. Smith, of Vacaville, should read a paper on pear growing, with A. T. Hatch, of Suisun, as alternate, the society adjourned until the last Friday of July.

**NEW ZEALAND FUNGUS.**—A curious trade has sprung up of late years in a peculiar kind of fungus that grows on the trees in the North Island of New Zealand, and which is exported exclusively to China. The uses to which it is applied do not seem to be well known. In 1873 the British authorities at Hongkong said it was "much prized by the Chinese community as a medicine administered in the shape of a decoction to purify the blood, and was also used on fast days with a mixture of vermicelli and bean-curd instead of animal food." Subsequent information shows that it is used in soups as ordinary food, and it is also used as a dye. The exports during the past ten years have grown from £1927 to £18,939, but the increase has not been uniform.

#### Nurserymen's Association.

As stated in last week's RURAL, there was an organization of a Pacific Coast Nurserymen's Association effected immediately after the last meeting of the State Horticultural Society in this city, June 26th.

W. M. Williams, of Fresno, on calling the meeting to order, explained the object of the convention to be the formation of an organization for mutual protection. F. W. Willis was elected temporary secretary. The chair appointed Messrs. Rock, Williamson and Pepper a committee on credentials. Messrs. Fox, Shinn and Eisen were appointed a committee on organization, and Messrs. Rock, Hammond and Cleveland a committee on order of business.

The convention then adjourned until 8 p. m., when it reassembled. It was then resolved that the existing officers be declared permanently elected. The Committee on Order of Business then reported and the report was adopted. The Committee on Credentials reported that only those nurserymen issuing catalogues be admitted to membership, and recommended the following dealers, who were declared elected members: John Rock, of San Jose; Coates & Tool, Napa; W. M. Williams, Fresno; W. H. Pepper, Petaluma; C. W. Reed & Co., Sacramento; D. W. Lewis, Fresno; G. Tozetti, San Leandro; William Coghan, Marysville; A. T. Hatch, Suisun; James Shinn, Niles; R. D. Fox, San Jose; E. Gill, Oakland; California Nursery Company, Niles; Gustav Eisen, Fresno; Isaac Collins, Haywards; A. Cleveland, Alameda; N. P. Harmon, Phoenix; W. R. Strong & Co., Sacramento, and Thomas M. Herin, San Francisco.

Permanent organization on the report of the Organization Committee was urged by James Shinn, of Niles. He argued that as the nursery business is yearly becoming more important, such course was necessary. Other members urged incorporation as the only means of securing satisfactory results, and it was finally resolved that the organization be permanent and should be styled "The Nurserymen's Association of the Pacific Coast."

The chair then appointed as a committee to draft a constitution and by-laws Messrs. Williamson, Shinn, Rock, Coates and Lewis, and instructed the committee to report Saturday at the morning session.

#### Constitution.

At the opening of the second day's session the Committee on Constitution and By-laws reported.

The constitution provides that the association shall embrace only nurserymen, florists and seedmen actively engaged in the propagation of stock. The object of the association shall be to promote the general interests of the members: First—In the cultivation of acquaintance. Second—In an interchange of ideas with others engaged in this avocation. Third—To aid in the protection of our patrons from fraudulent dealings and the injurious results arising therefrom to the members of the association. Fourth—The exchange and sale of stock.

The by-laws provide for the election of officers, the appointment of an Executive Committee and general government of the association. Annual meetings shall be held the last Friday in May; semi-annual meetings shall be called by the Executive Committee. Membership fee was fixed at \$2.50. One section of the constitution occasioned considerable discussion when the question for adoption came up. It was the provision that an inventory of all the stock on hand should be supplied by each member to the secretary for general use of all members. The smaller nurserymen naturally objected to this rule, claiming that it might be injurious to their business. The section was finally adopted, as well as the entire constitution and by-laws as reported.

#### Election of Permanent Officers.

The election of permanent officers was proceeded with and resulted as follows: President, James Shinn, of Niles; Vice-President, W. M. Williams, of Fresno; Secretary, R. D. Fox, of San Jose; Treasurer, John Rock, of San Jose; Executive Committee—James Shinn (ex officio), R. Williams, of Sacramento; Gustav Eisen, of Fresno.

The following names were subscribed to the constitution and by-laws: James Shinn, Niles; W. R. Strong, Sacramento; W. M. Williams, Fresno; William Coghan, Marysville; W. H. Pepper, Petaluma; G. Tozetti, San Leandro; E. Gill, Oakland; Coates & Tool, Napa; Adolph Cleveland, Alameda; W. P. Hammond, Phoenix, Or.; D. W. Davis, Fresno; Gustav Eisen, Fresno; C. W. Reed & Co., Sacramento; Isaac Collins, Haywards; John Rock, San Jose; R. D. Fox, San Jose; California Nursery Co., Niles.

The association adjourned to meet the last Friday in August, after the session of the Horticultural Society.

**THE PETALS OF THE BUTTERCUP** have, as well known, peculiar varnish-like luster. The cause of this has been investigated by Dr. Mobius, who attributes it to a highly refractive yellow oil existing in the epidermic cells, increased by the fact that the layer of cells of the mesophyll is densely filled with minute starch grains.

## THE DAIRY.

### A Grand Jersey.

We are informed that the famous young Jersey bull Ashantee's Sultan 15573 has been purchased by Mr. William Niles, of Los Angeles, Cal. This specimen of the Jersey breed of cattle is greatly admired on account of his fine individuality, and especially because of his royal breeding on every line through his long line of rich ancestors noted for their records as butter producers. He was sired by the famous bull King of Ashantee 6677, for which \$5600 was paid at auction, and \$10,000 has been offered and refused for him since; a son of the world-renowned Coomassie 11874, the winner of the prize at the royal shows on the Island of Jersey for five years in succession, distancing all competitors, and her progeny have been great prize-winners in the show rings on the Island of Jersey; at the English royal shows; also the principal State Fairs in the United States. Coomassie and her grand-daughters and great-grand-daughters have so far made the greatest butter tests on record. Some 37 of Coomassie's descendants have produced from 14 pounds two and a half ounces of butter in seven days, as two-year-old heifers, to 39 pounds 12 ounces as matured cows; and in one instance her grand-daughter, Princess II, tested before a committee, produced 46 pounds 12 ounces of butter in seven days. No family of Jerseys has done better as butter-producers and in the show ring than the Coomassies. Evidence of their actual commercial value has been legitimately shown in the auction ring, when within two years 100 animals of the Coomassie family sold for \$175,-425; an average (including some calves and old cows) of \$1754.25 each.

Through his dam, Young Nightingale, Ashantee's Sultan 15573, is an inbred Sultan, 58, a noted sire and famous prize-winner, and combines the blood of the Sultan and Nightingale families. This blood united with the Coomassie blood makes a combination of good qualities hard to excel. In fact, on every line Ashantee's Sultan's pedigree shows his royal breeding.

### Statistics of Bogus Butter.

Mr. Henderson, of Iowa, made a speech on the artificial butter question the other day, which he withheld for revision and enlargement. It appears in the Record, and contains some statistics of the business which he did not stop to read when on the floor. According to him Kansas City turns out 6000 pounds of oleomargarine daily; Chicago, 100,000 to 200,000 pounds daily, according to different estimates. Of oleo oil, or pure beef fat, 250 tierces a week are made in St. Louis for shipment to Rotterdam; Kansas City makes 200, and Chicago from 1200 to 1500 tierces weekly. Of butterine, St. Louis made 100,000 pounds in the winter, and Kansas City makes 6500 pounds a day. The Standard Butter Company of Boston made last year 148,814 pounds of oleo oil and 180,000 pounds of artificial butter. The Providence Dairy Company of Rhode Island made 1,750,000 pounds of butterine last year. Cincinnati made 766,000 pounds of butterine; Nathan & Co., of New York, made 2,000,000 pounds of butterine the same year. Rardon & Co., of Boston, made 2,740,000 pounds of oleomargarine and 1,158,000 pounds of oleo butter. The Woodlawn Dairy Company, of Pawtucket, R. I., made 931,000 pounds of oleomargarine, and a Pittsburg concern makes 50,000 pounds weekly of oleo oil, mostly exported to Holland. Louisville last year made 100,000 pounds of butterine. The value of butter and cheese exported of late years has ranged from \$10,000,000 in 1872 up to \$16,000,000 in 1881, and then down to \$10,000,000 in 1885 and \$6,000,000 for three-quarters of the current fiscal year. The value of imitation butter and oleo oil reported was \$70,000 in 1876, and it rose to \$4,842,000 in 1884. In 1885 it was \$4,451,000, and for nine months of the current fiscal year it has been \$2,221,399. The imitation butter exports were a little more than 2,000,000 pounds in 1883, and since that time they have rapidly fallen to 362 545 pounds for the three quarters of the current year. The exports of oleo oil jumped from 19,000,000 pounds in 1882 to 37,000,000 pounds each in 1884 and 1885, and fell back to 19,000,000 for the three quarters of the current year.

### Complimentary Samples.

Persons receiving this paper marked are requested to examine its contents, terms of subscription, and give it their own patronage, and, as far as practicable, aid in circulating the journal, and making its value more widely known to others, and extending its influence in the cause it faithfully serves. Subscription rate, \$3 a year. Extra copies mailed for 10 cents, if ordered soon enough. If already a subscriber please show the paper to others.

### Don't Fail to Write.

Should this paper be received by any subscriber who does not want it, or beyond the time he intends to pay for it, let him not fail to write us direct to stop it. A postal card (costing one cent only) will suffice. We will not knowingly send the paper to anyone who does not wish it, but if it is continued, through the failure of the subscriber to notify us to discontinue it, or some irresponsible party requested to stop it, we shall positively demand payment for the time it is sent. LOOK CAREFULLY AT THE LABEL ON YOUR PAPER.



## Standard Sizes for Iron Axles.

Our readers who use wagon gear—and they will comprise nearly all of our subscribers—will be interested in the following letter by R. G. Sneath, of Jersey Farm, which we copy from the *Carriage Journal*:

The subject of iron or steel axles for wagons and carriages would appear anything but a live subject to write about, and yet they are the innocent cause of sad losses, tedious and expensive delays, untold blasphemy and infinite disgust, to the human family. The manufacture of these highly useful articles, under present methods, is, no doubt, criminal, as their use sadly interferes with the progress of mankind. Webster defines crime as "a public wrong," "that which is condemned," etc., and I will try to show wherein the wrong lies, that it may be condemned.

As near as I can learn, there are, perhaps, 40 different sizes of axles in their greatest diameter—say from  $\frac{1}{2}$  inch up to 5 inches; then there is a variation in length of spindle in each size, of from  $\frac{1}{4}$  to 3 inches, giving, say, 11 sizes in length to each size in diameter, or multiply 11 by 40 and you have 440 sizes simply by one maker. Now, estimating the number of makers in the United States and elsewhere, who make our axles, at 100, we should multiply that number by 440, which makes 44,000 different sizes. I do this because I do not know of any two makers that make alike, in fact hardly two axles by the same maker are alike.

Axle boxes not only vary in fitting axles but differ in thickness and taper; some  $\frac{2}{3}$  inch boxes are  $\frac{3}{4}$  inch thick, while others are  $\frac{1}{2}$  inch. Some nuts are  $\frac{1}{2}$  to  $\frac{3}{4}$  larger on the square end than others of the same sized axle, making from three to four different sized wrenches necessary, at times, for a patched-up wagon. In  $\frac{2}{3}$  inch axles I have noticed a difference of  $\frac{1}{4}$  inch in the taper, between the different makers, and also that it was very difficult replacing lost nuts on account of the various sizes.

In new axles, before the boxes are removed, it is quite essential to mark each arm and box in order to return them to their respective places; otherwise you may have trouble, as they are pretty sure not to be alike, and you may get your hind wheel in front.

Extra boxes to fit closely, in case of repairs, are an accidental thing, and in order to be sure that they are not too small, you are pretty sure to order them a size or two too large. The wobbling, however, of wheels thus fixed is neither pleasant nor profitable. Axles are not marked distinctly enough to prevent the wear and tear, dust and grease, from obliterating the maker's name and marks, and the correct measurement of such axles, when well worn by the farmer or teamster, is a matter of great uncertainty and notorious inaccuracy.

Orders for either axles, boxes or nuts, from such a source, will ordinarily have to be duplicated before a fit is obtained, and should such orders come from the mountains, several hundred miles off, the damage by delay—even of a nut being lost—may run up into hundreds and thousands of dollars, especially when a large body of men and horses are waiting the arrival of some special thing in connection with machinery.

The principal reason of serious delays and loss in this respect is that nearly all orders on this coast must come to this city, as there is no stock to speak of carried elsewhere. The next is the difficulty of filling the order after its arrival here. Most of the wagons and carriages in use here are of all conceivable sizes and patterns and come from the Eastern States, and, notwithstanding the great wealth of the wholesale dealers in these articles in this city they are not equal to the task of furnishing 44,000 different kinds of axles and make the business pay. Consequently, the old axles and boxes must be thrown away and new ones take their place, or the orders sent East to be filled, perhaps, by the maker, while the stock of axles here is dwindling down under this process to a point that is not even respectable, and in smaller towns hardly any stock is kept.

Iron boxes that vary in thickness cause a short life to wheels, for, in replacing in one case, the hub must be cut to admit the larger box, and in the other the hub must be filled with something to enable the smaller box to stay in place, and in neither case can the farmer or teamster place the box centrally and securely.

If the boxes were made uniform in inside and outside diameter, and of a standard pattern, upon the principle of a gun and its cartridge, exactly alike of a given size, then any person could replace a broken box without loss of time or money.

If axles, boxes, nuts and wheels were interchangeable like our government's arms, or the mowers, reapers and farming implements of the present day, then a few extras would accommodate a whole neighborhood of farmers. The village blacksmith and the country store could then be persuaded to keep extras, for there would be a profit in it.

In a business I have myself, I employ about 30 wagons. They were picked up from various sources and no two are alike. I soon found myself in trouble in the matter of repairs, and I then adopted one make of axles and one size for each department. Also one size of wheel and one width of tread (five feet to outside of tires), and one width for shafts and poles where attached to the wagons with springs, as well as one size and make of springs. I keep a few springs and axles and extra boxes and wheels,

perhaps a dozen of the latter, so that in painting and tire-setting the wheels can be shifted. And now I have no delay from breaks, as about all my wagons are now up to standard sizes, through repairing.

It may be of general interest to say that I receive about 12,000 pounds of milk daily from Jersey Farm Dairy, San Bruno, Cal., on thoroughbred wagons carrying 6000 pounds at a load, going five miles an hour, on axles  $2\frac{1}{2} \times 2\frac{1}{2} \times 12$ , making 60 miles daily or 22,000 miles annually, or 150,000 made in the last seven years by two wagons that are alternated for repairs. One of the wagons had axles  $2\frac{1}{2} \times 2\frac{1}{2} \times 11\frac{1}{2}$  which were always grinding and heating, and needed oil continuously, notwithstanding any set or gather we gave it, and it was only used while repairing the other. But upon changing the axles to the size and taper of the other, it gave entire satisfaction. I estimate the life or duty of such an axle, loaded and cared for properly, at 50,000 miles; and of the tires, 1x3, at 5400 miles. My experience favors a  $\frac{3}{4}$ -inch taper to 12 inches in length, and in axles  $1\frac{1}{2}$  to  $2\frac{1}{2}$  inches diameter; the length should be about five times the larger diameter, as giving the greatest strength and durability.

I think it would be safe to say that on this coast, with two millions of people, there are at least 1000 stores and places where at least 10 sets of axles with boxes and nuts would be kept, if the business was simplified by the adoption of a few standard sizes, that were uniform and interchangeable. These axles being worth say \$10 per set, would make the stock of 10,000 axles, at \$10, \$100,000. The wholesale stores in this city, and other large towns in the interior, would perhaps carry 5000 axles more, which would figure \$50,000, or \$150,000 worth in all would be carried by the trade over and above what is now carried.

Now, the whole United States having 30 times the population we have, would, if the same ratio is preserved, carry four million five hundred thousand dollars worth in excess of present stock, or with extra boxes and nuts from five to six millions.

I can remember the time when, to get a one-half inch or three-eighth inch nut for a carriage bolt, it was necessary to visit the blacksmith, as no two nuts or bolts were alike, and he would perhaps have to recut the bolt or make a new one, as his screw cutter was unlike anybody's else. But now I venture to say that there is not a farm, store or shop on the coast where a three eighth or one-half inch bolt and nut could not be obtained, either new or second-hand, and so it should be with nuts for ordinary iron axles for farmers; they should be obtainable anywhere.

The enormous growth in the trade of those articles that are manufactured cheaply, on a grand scale, because of their uniformity, interchangeability and general use, can be noted in carriage and machine bolts, guns, pistols and cartridges, clocks and watches, mowers, reapers, sewing machines and many other things.

It is only a few years since every planing mill in this city had a different gauge for flooring, and if a builder obtained flooring from two yards his floors would be spoiled, as the tongue and grooves would not match. Now all are alike.

It seems remarkable to me that in this modern age so large a number of respectable people should be engaged in a calling wherein the public are damaged to the extent of millions of dollars annually through unnecessary delays, while they themselves are ruining their own market for their goods to the extent of millions also, and without having an apparent knowledge of the fact.

There should be a combined effort on the part of all manufacturers, dealers and users to concentrate this business to a few standard sizes that can be agreed upon by the dealers and makers; and hardware dealers are particularly interested in the matter, as the enormous variety of wooden hubs they are now constrained to keep makes their business unprofitable.

Wagon and carriage makers by adopting standard sizes for wheels, especially for those most largely in use, and keeping extra wheels on hand for sale, would, no doubt, find a large demand for wheels that are finished in iron and paint, for emergencies, as thousands are broken every month and people have not time to wait for weeks for the paint to dry on a repaired wheel.

And why not agree at the same time for width of tread and tires and between standards of bolsters, size of king-bolts, distance from doubletree to axles, length of tongues, etc., so that the bodies, racks, breaks, bolsters, tongues, etc., can be interchangeable.

These reflections come from 40 years of actual and active experience, and the figures I have given, as the probable result of a change, I candidly believe to be not far out of the way. I have mentioned this matter to several gentlemen, who have dealt largely in wagon materials for many years, who have universally coincided with me in the belief that this whole business has become intolerable and should be remedied immediately; and that if half a dozen axle manufacturers, or less, should take hold of the matter promptly and advertise thoroughly that their work was interchangeable there would be no difficulty in selling all they could make, rapidly, at better prices even than now.

MERIT will tell; misfit spectacles will ruin your eyesight; judge by comparison. Muller's optical depot, 135 Montgomery St.

## The Credit Foncier.

The Credit Foncier of Sinaloa is a scheme for a co-operative colony, to be planted in Mexico near Topolobampo Bay. The projector of the enterprise is Albert K. Owen, of Chester, Penn.,—a civil engineer, who has made extended surveys for Mexican railroads and written much upon transcontinental short lines. He is of Quaker parentage and a strong practical socialist. In a letter to Minister Romero, he says: "Our colony is a co-partnership of artisans, mechanics, inventors, farmers and other skilled persons, who are not necessarily 'capitalists,' but we unite our 'money,' skill and talent to purchase a tract of land, to build houses, to lay out farms, to erect factories, to buy machinery and to operate the same—agreeing that each member of the co-partnership, firm, company, corporation or colony will be directed and assisted to do that which he or she is most capable of doing and be paid in accordance with the quality and quantity of the work finished."

His plan is to establish a hacienda of 150,000 or 200,000 acres in the neighborhood of Topolobampo Bay, (the Pacific terminus of the proposed American and Mexican Pacific Railway) and there not only raise grain and fruits, sugar and fiber plants, horses and mules, cattle, sheep and goats, poultry, etc., but also grind the wheat and corn, make bread and crackers, can and dry the fruits, spin the wool and cotton, weave cloths and blankets, tan the hides, make the leather into shoes, saddles, etc. and trade in all their surplus products—in short "unite farm, factory, transportation and exchange."

"In the construction and management of these houses, workshops etc.," continues Mr. Owen, "we wish simply the same protection and rights enjoyed by the haciendas in the building and management of their villages, factories, etc. \* \* \* to have a wholesome place where we can live and work, educate ourselves and be useful."

Minister Romero, who had already shown an interest in the scheme and conversed with Mr. Owen regarding it, in his reply refers to his government's desire to promote the immigration of worthy settlers and to the colonization laws, insuring liberal franchises, which have been lately enacted by Mexico; although he was unable to say officially just how warm a welcome Sinaloa would give to a colony introducing so radical novelties, or what substantial and definite encouragements they might depend upon in the way of subsidies and contracts.

A little weekly, edited by Marie and Edward Howland, is published at Hammonton, N. J., to further integral co operation in general, and this enterprise in particular. A late issue informs us that of the proposed 15,000 shares over 10,000 have been taken; that up to April 4th upwards of \$330,000 has been promised for deposit—not counting real estate, &c, offered—and that the persons represented number 2200.

## Inoculating Fruit Trees.

We had a call recently from Mr. W. M. Edgar, of Ione, who wrote his "Cure for Curl Leaf" last May. He is a practical nurseryman and fruit-grower of many years' experience, and has lately devised a method of inoculating trees and vines with a certain preparation, which he claims will be taken up into their sap and prove the death of aphides, scales and borers. Mr. Edgar was just back from a 10-days' tour in Sacramento and Yolo counties, where he had been exemplifying his plan of treatment on orange, peach, apple and pear trees, vines and also roses, at Woodland, Winters and Putah Creek. The effects, he claims, are to be looked for in four to six weeks. He spoke of an old apple tree upon his own place which was fairly white with aphides when he took it in hand. In five weeks from that time every insect was gone—not a vestige of one left. Mr. Edgar is an old Californian and early subscriber for the *RURAL*. He lived in Humboldt and Yolo before settling in Amador; has worked hard and seen the ups and downs of life. He has been at Ione four years, and now has a nursery of about 8000 trees—apples and stone fruit—and 50,000 rooted vines, including Tokay, Muscat, Rose of Peru, Isabella, Zinfandel and many other standard varieties. He feels confident that his process of inoculating diseased trees and vines (on which he has already filed a caveat) will be of great service to the horticulturists.

## Cheap Money for Farmers.

Farmers in this State will be glad to learn that they can borrow on mortgage any amount, from \$5000 to \$500,000, from S. D. Hovey, 330 Pine St. San Francisco, at 6 to 7 per cent and taxes. \*\*

## Fruit Drier on Exhibition.

One of the Meeker Sun Fruit Driers, with all the latest improvements suggested by the experience of last season, is now on exhibition at the factory, 5th and Bryant streets, on and after Monday, Jan. 25th.

As now arranged we consider it much the most perfect and economical of any of the various driers to which the attention of fruit-growers has been called. Its various productions are the perfection of purity and excellence, and at the same time the most economical in cost of production. Fruit-growers are invited to examine and test the drier and the fruit prepared in it. Those using this drier last season realized handsome profits on their fruit.

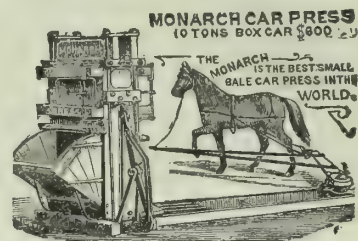
## HALL'S SARSAPARILLA

Cures all Diseases originating from a disordered state of the BLOOD or LIVER. Rheumatism, Neuralgia, Boils, Blotches, Pimples, Scrofula, Tumors, Salt Rheum and Mercurial Pains readily yield to its purifying properties. It leaves the Blood pure, the Liver and Kidneys healthy and the Complexion bright and clear.

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STEEL BALING TIES,  
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AND THE CELEBRATED

HOLLOW IRON AXLE WAGONS.

SEND FOR CATALOGUE.

## CALIFORNIA STATE FAIR—1886.

At Sacramento, Sept. 6th to 18th.  
TWO WEEKS.

The Attention of the Farming Community of this State is particularly called to the Liberal Awards, and advantages offered for

COUNTY EXHIBITS.

The importance of an exhibit made by separate counties, showing the productive qualities of the various sections of our State, has become more apparent each year since the system was inaugurated by this Board. Recognizing the interest made manifest in the past by both the public and the exhibitors, through whose energy and enterprise valuable agricultural lands have been brought to the notice of the world, and counties with small populations have increased in a manifold degree, by reason of the producer having come forward with his products that were of such quality as to enable him to meet all competitors, the Board have deemed it proper to increase the premiums in this Department, and to that end have appropriated \$2000 to be distributed among the various counties making displays under the following provisions: To those who may have charge of the exhibits, we would call their attention to the fact that these awards will be made for the most extensive, perfect, and varied exhibit of Farm Products (exclusive of live stock) exhibited as a County Production. Thus it will be seen that it is to be wholly devoted to the products of the farms located in the county where the exhibit is made from, and does not include manufactured goods of any kind or character except those grown and raised in the county from whence the display comes.

For the best display, as per explanation above, First premium of \$500, cash. The remaining exhibits shall receive premiums in proportion to their excellence, as compared with that receiving the First Premium. Competition to be between counties only. That is to say, that the entire exhibit made by one county must compete against the entire exhibit of another county. The premium awarded to each county exhibit will be paid to the committee in charge of said exhibit.

The State Board of Agriculture earnestly desires the hearty co-operation of the various subordinate Granges throughout the State, in making this exhibition of California's products a success, whereby the varied products of different localities may be fully shown. We would ask the appointment of a committee from the Grange in each county to call upon and urge the patrons to make a display representing their respective counties.

Address the Secretary at Sacramento for Premium Lists and other information. JESSE D. CARR, President.  
EDWIN F. SMITH, Sacramento.

## DIVIDEND NOTICE.

## The German Savings and Loan Society.

For the half year ending June 30, 1886, the Board of Directors of The German Savings and Loan Society has declared a dividend at the rate of four and thirty-two one-hundredths (4 32-100) per cent per annum on term deposits and three and sixty one-hundredths (3 60-100) per cent per annum on ordinary deposits, payable on and after the 1st day of July, 1886. By order.  
GEO. LETTE, Secretary.



## Educational.

## MILLS SEMINARY.

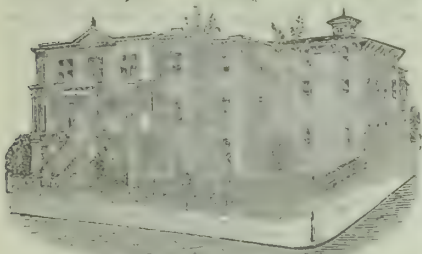
The next term of this well-known Institution will commence on

Wednesday ..... August 4, 1886.

For Circulars giving particulars, address

MRS. C. T. MILLS,  
Mills Seminary P. O., Alameda Co., Cal.

## IRVING INSTITUTE



A SELECT SCHOOL FOR YOUNG LADIES.—The next session will begin Monday, August 2, 1886. For catalogue or information address the Principal, Rev. Edward B. Church, A. M., 1036 Valencia St., San Francisco, Cal.

VAN NESS SEMINARY  
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## A BOARDING AND DAY SCHOOL

Young Ladies and Children,  
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For Catalogues and particulars, apply to MRS. S. B. GAMBLE, or MRS. E. H. WOOD.

REFERENCES—Rev. W. I. Kip, Bishop of California; Rev. C. O. Tillotson, Santa Cruz; Hon. C. H. Hartson, Napa; John D. Yost, San Francisco; F. A. Hihn, Santa Cruz; E. J. Wilson, Vallejo; Capt. A. D. Wood, San Francisco; Eugene Sherwood, San Francisco.

## Field Seminary for Young Ladies,

1825 Telegraph Avenue,

Oakland, - - - - - California.

Address MRS. R. G. KNOX, Proprietor, or MISS FRANCES A. DEAN, Principal.

THE FIFTEENTH YEAR WILL BEGIN  
Wednesday.....July 28, 1886

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Boarding and Day School,

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PRINCIPALS.

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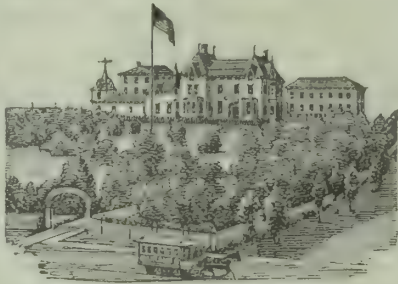
## HOPKINS ACADEMY.

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SIXTEENTH SCHOOL YEAR begins Tuesday morning, July 27th, 1886. Boarding and Day Scholars received. Send for Catalogue.

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Preparatory, Commercial, and Academic Classes.

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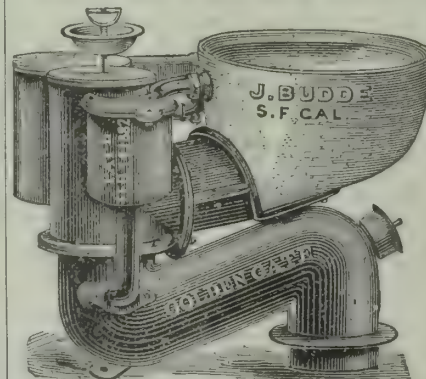
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Monday.....August 2, 1886

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The only secure-locking device to keep sewer gas entirely away from dwelling houses.

JOSEPH BUDDE, Manufacturer, 43 Fremont Street, S. F. All kinds of Water Closets, Slop and Waste Hoppers always on hand. Write for information

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We have pressed 400 tons with our Whitman Hay Press. We have pressed from 8 to 14 tons a day; in grass hay, from 8 to 10 tons per day with ease; we have pressed in grain hay, 8 tons in 6 hours. In grain hay, bales run from 180 to 240 pounds; in grass hay, 125 to 190. We have pressed 190 pounds with 10 feeds, which the Press cannot do, as their feed box is smaller. Our bales are much smoother and more tightly than those made in the Press. We have averaged 15 tons a day, in wild oat hay.

GREGG BROTHERS.

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Acme STACKER,

The Z. O. 50 P. C.

As shown above, with two rakes like this, \$175. The cheapest stacking outfit. Will stack, from swath, 4 or 50 tons per day.

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GOOD FOR 30 DAYS.

I will ship, in localities where, as yet, I have no agent, one sample No. 2 washer, Pat. Sept. 1, 1885, and "Empire" wringer, for trial, the party to pay for them at wholesale prices; and act as agent, if found satisfactory; if not, return them at my expense.

TAKES THE LEAD. Why? At last, to Perfection. Imitation of hand rubbing the principle. AGENTS WANTED Exclusive Territory. TERMS FREE.

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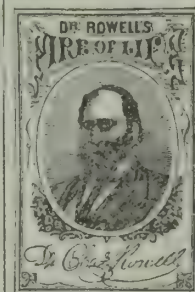
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## ORANGE CULTURE

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## Fruit Display for the G. A. R. at Sacramento.

Preparations are under way for a grand display of California fruit during the reception which the Sacramento people will tender to the delegates to the G. A. R. Encampment next month. The Sacramento Bee gives the following report of a recent meeting for arrangement of details of the event:

A meeting of the Committee on Fruit Display on the occasion of the G. A. R. reception, was held last night at W. P. Coleman's office. Present: R. D. Stephens, Wm. Johnston, Jos. Routier, Robert Williamson, Sacramento; A. F. Abbott, Sutter county; K. H. Plate, Natoma; L. W. Buck, Vacaville, and Captain Weinstein, of General Committee.

R. D. Stephens was elected chairman, and J. O. Coleman acted as secretary.

A communication from A. T. Hatch, promising his co-operation and a liberal donation of fruits, and making some valuable suggestions, was read and placed on file.

On motion, L. W. Buck, P. E. Platt and Chairman R. D. Stephens were appointed an Executive Committee on Fruit Display.

On motion, the secretary was instructed to furnish members of the committee with stencils for marking packages.

On motion, each member of the General Committee on Fruit Display will be a committee of one, and be instructed to canvass their respective districts for contributions, and report at the next meeting.

The General Committee on Fruit Display, as at present constituted, is as follows: R. D. Stephens, chairman; A. T. Hatch, Suisun; K. H. Plate, Natoma; Hon. Wm. Johnston, Richmond; P. E. Platt, Sacramento; J. C. Boggs, Newcastle; Hon. J. Routier, Routier's Station; Hon. John Bidwell, Chico; Webster Treat, Davisville; R. B. Blowers, Woodland; Hon. L. W. Buck, Vacaville; Sol. Runyon, Courtland; Hon. Thomas E. Frazer, Placerville; Prof. E. W. Hilgard, Berkeley; A. F. Abbott, Sutter county; James Rutter and Isaac Lea, Florin; S. H. Kerr, Elk Grove; C. P. Wescott, Rocklin; A. C. Gray, W. G. Murphy and Wm. T. McLean, Marysville; A. F. Boardman, Auburn; W. D. West, Stockton; C. H. Smith, Vina; Will S. Green, Colusa; B. R. Hackett, Winters; George Parker, Vacaville; C. M. Price, Oroville.

A general discussion was had as to the best means of making this feature of the proposed reception a grand success, and all agreed that the fruit display should and would be one creditable to the State.

Adjourned until 1 P. M. on July 12th.

## A Few Recent Field Fires.

At Ione, last Saturday week, some workmen were engaged setting up headstones in the Catholic cemetery, when a pot of molten metal was accidentally overturned. The dry grass took fire and the flames spread rapidly, but an alarm was sounded, and presently men, women and children were running to the fire with buckets and wet sacks. A full head of water was on, and hydrants being near at hand the fire was soon under control without much damage being done.

On the 30th ult. four miles southeast of Athol, 300 acres of grain, valued at \$3000, were consumed. The fire was supposed to have been caused by a passing locomotive. No insurance.

A fire started near the railroad track east of Pomona, extended through a field of stubble and burned near Mr. Hill's haystack and house, each of which was saved only by hardest exertions of the family and one or two neighbors.

On the 1st a fire broke out at the threshing machine at work in a field on the Gabilan ranch, probably from a spark from the engine, and consumed about 200 acres of grain standing and in stack. The machine was not much damaged. There was no insurance.

On the 2d a fire on Del Burge's ranch, near Waterloo, destroyed about 100 tons of hay, which was stacked near the house. The house was saved by some trees which stood between it and the haystack.

On the ranch of Frank Tomb, near Marysville, \$50 worth of fencing and some stubble were burnt. The grain sacks were saved by the strenuous efforts of two harvest hands. Careless hunters caused the fire.

Matches dropped in a stubble field on Newbert's place, eight miles east of Marysville, caused a fire which consumed considerable stubble and a feed wagon and burned one horse to death. The fire was prevented from reaching the stacks and threshing outfit in the field by hard work of men in the vicinity.

At Dixon a fire broke out in the stubble near the cemetery. Fortunately, a large number of men were near at hand and the flames were extinguished before they had made much headway. If the north wind had been blowing at the time, the destruction of property might have been terrific. The fire doubtless owed its origin to the carelessness of some cigarette smoker.

Beware of dropping sparks, hot ashes and cigar stubs!

## Eastern Fruit Shipments.

The second special fruit train was sent from Sacramento to the East on June 30th. It consisted of 15 cars sent by Strong & Co., E. T. Earl, Lyon & Curtis, and other members of the California Fruit Growers' Association. The early fruits are in rather small supply, and canners and fruit-shippers seem to be ready to pay such good prices that the Fruit Union is not yet sending train loads.

The following letter concerning the sale of California fruit at the East was lately received at the office of the California Fruit Union in this city:

CHICAGO, June 26, 1886.—A. T. Hatch, Pres. Fruit Union, San Francisco, Cal. DEAR SIR:—Inclosed we hand you duplicate account sales for various lots of fruit, for which we have forwarded account sales and New York draft to the various parties. We trust sales will be found correct and satisfactory. There are no particular changes to note in our market except that we are getting a little better prices to-day for apricots; are selling at from \$1.10 to \$1.25 and \$1.50, and hope first of the week to get them up to \$1.50 and \$1.75. Peaches are selling here at from \$2.00 to \$2.25; we think we will be able to get even higher prices the coming week. Plums are selling at \$2.00 to \$2.25 and occasionally at \$2.50. We are in receipt of a letter to-day, forwarded to us by one of our California friends, in which a certain party tried to figure out the way the grower is getting left by consigning apricots to Chicago to be sold at \$1.00 a box. We have sold apricots at \$1.00 a case, but we had to do it to meet competition; the bulk of our sales will be found considerably above \$1.00. We think the sales we have forwarded to the growers up to the present time cannot fail to be very satisfactory to them. You can rest assured that we will leave no stone unturned that will benefit the California Fruit Union. Some of these parties have an idea that by dropping down the prices in this and other eastern markets, they can make the fruit growers tired of sending fruit so they can buy it for almost nothing, but we think your fruit growers will not be taken in by any such chaff. The parties we speak of sold plums here at \$1.25 to \$1.50 per half crate, when we were selling at \$2.00 to \$2.25, and in some instances at \$2.50; they sold peaches at \$1.00 to \$1.50, when we had no trouble in getting \$2.00. We can at all times get higher prices for stock than any other house in this country; we have the trade; people know when they get goods from us that they get just the fruit we represent it to be; for that reason they favor us with their orders. We have no doubt but that all the growers will be more than satisfied with the results of their shipments when they receive sales. Sales will go forward as promptly as they can be closed out. You understand that it is a difficult matter to make shipments to these eastern cities and get account sales back in a day or two; it takes a little time to close the goods out. Just as fast as sales are forwarded to us we will forward New York draft and account sales to the growers.

Shall be pleased to hear from you soon, and will give your favors prompt and careful attention.

Yours very truly,  
PORTER BROS. COMPANY.

## A Delicious Table Fig.

Mr. Edward Frisbie, of Anderson, Shasta county, brings us a sample of a very fine fig, which is considered by experts to be different from other figs grown in this State. It is a medium-sized fig of a delicate yellowish-green color, very tender, thin skin, sweet and of good flavor. Mr. Frisbie has had this variety for many years, and before going to Shasta county he grew it on his ranch near Vallejo Junction, in Napa county. In 1858 he ordered a lot of fruit trees from the Eastern States and from Europe, and is not sure whence this fig came. One feature of its growth is that the figs become nearly half grown before the foliage puts out. The fig has been cherished by Mr. Frisbie and his family as a very fine fruit, and their guests who had traveled in various parts of the world pronounced it the best fig they had eaten; but it was only recently that they concluded that it was a different variety from those grown by the fig-growers of California. Mr. Pettigrove, of Anderson, has dried some of them for Mr. Blowers and others, and reports that they dry well, and the skin, which, as we have said, is thin, becomes beautifully translucent. Mr. Blowers considers it a different variety from any other in the State. Being thus thoroughly convinced of its desirability, Mr. Frisbie has made arrangements to have trees grown to meet any demand for it which may arise. We consider the fruit well worth the attention of fig-growers.

A. T. DEWEY and family have just returned from a three weeks' season of delightful rest and recreation at Crystal Springs, near St. Helena. No section of the State affords more beautiful scenery or attractive drives for pleasure. The faithful managers of the Rural Health Retreat and many generous-hearted friends met in their pleasant homes in and around St. Helena will long be held in kindly remembrance by their recent visitors.

HE dropped a cigarette by the wayside and the loss was \$25,000 in the burning of Dorsey's wheat field. In lighting a pipe the match fell on the grass and over 1000 acres of wheat on the West Side was consumed last Saturday and Sunday. Is it not about time that there was some law to make smoking and using matches on the public highway a misdemeanor?—*Modesto Herald*.

## PACIFIC COAST WEATHER FOR THE WEEK.

[Furnished for publication in this paper by NELSON GOROM, Sergeant Signal Service Corps, U. S. A.]

DATE.	Portland.				Red Bluff.				Sacramento.				S. Francisco.				Los Angeles.				San Diego.			
	Rain.	Temp.	Wind.	Weather.	Rain.	Temp.	Wind.	Weather.	Rain.	Temp.	Wind.	Weather.	Rain.	Temp.	Wind.	Weather.	Rain.	Temp.	Wind.	Weather.	Rain.	Temp.	Wind.	Weather.
June 31-July 7.																								
Thursday .....	.21	64	S	Cy.	.00	81	N	Cl.	.00	75	NW	Cl.	.00	69	W	Cl.	.00	90	W	Cl.	.00	73	NW	Cl.
Friday .....	—	64	SE	Cy.	.00	84	S	Cl.	.00	76	S	Cl.	.00	62	W	Cl.	.00	85	W	Cl.	.00	71	W	Cl.
Saturday .....	.07	66	NW	Cy.	.00	74	E	Fr.	.00	76	SW	Cl.	.00	63	W	Cl.	.00	84	W	Cl.	.00	66	W	Cl.
Sunday .....	.04	64	SW	Cy.	.00	79	N	Cl.	.00	73	NW	Cl.	.00	67	W	Cl.	.00	82	W	Cl.	.00	69	NW	Cl.
Monday .....	.03	64	S	Cy.	.00	83	S	Cl.	.00	78	SW	Cl.	.00	65	W	Cl.	.00	88	SW	Cl.	.00	69	SW	Cl.
Tuesday .....	.10	77	S	Fr.	.00	78	S	Fr.	.00	77	SW	Cl.	—	65	W	Cl.	.00	82	W	Cl.	.00	68	NW	Cl.
Wednesday .....	.00	78	SE	Cy.	.00	79	S	Fr.	.00	78	SW	Cl.	.00	69	W	Cl.	.00	89	NW	Cl.	—	—	—	—
Totals .....	.45				.00				.00				.00				.00				.00			

EXPLANATION.—Cl. for clear; Cy., cloudy; Fr., fair; Fy., foggy; — indicates too small to measure. Temperature Wind and weather at 12:00 M. (Pacific Standard time), with amount of rainfall in the preceding 24 hours.

## List of U. S. Patents for Pacific Coast Inventors.

Reported by Dewey & Co., Pioneer Patent Solicitors for Pacific States.

From the official report of U. S. Patents in Dewey & Co.'s Patent Office Library, 252 Market St., S. F.

FOR WEEK ENDING JUNE 29, 1886.

- 344,563.—BELTING—J. D. Channell, Nevada City, Cal.  
344,519.—SETTLER—Clayton & Mackie, Salt Lake City, U. T.  
344,520.—CONCENTRATOR—Clayton & Mackie, Salt Lake City, U. T.  
344,357.—MECHANICAL MOVEMENT—S. Desvisme, Los Angeles.  
344,370.—WHISTLE, MATCH SAFE AND CIGAR CUTTER—A. Greth, S. F.  
344,373.—SIGN—H. L. & W. L. Harris, S. F.  
344,654.—GAS REGULATOR—H. L. & W. L. Harris, S. F.  
344,532.—ELECTRIC LIGHT REFLECTOR—W. A. Jones, S. F.  
344,538.—LAMP FILLER—J. M. McFarland, Virginia City, Nev.  
344,456.—BRIDLE BLIND AND LOOP—H. J. Noyes, S. F.  
344,401.—CAR AXLE BOX—J. Petithomme, Sac.  
344,682.—ANIMAL EXTERMINATOR—M. Scholl, S. F.  
344,689.—CARRIAGE GEAR—Edward Squires, Beaverton, Oregon.  
344,466.—KNITTED STOCKING—Frank Wilcomb, S. F.  
16,758.—DESIGN, BRIDLE BIT—W. Davis, S. F.  
16,762.—DESIGN METAL INGOT—F. B. Morrow, S. F.

HOW TO PREVENT GREEN SLIME IN TANKS.—Some one asks how to prevent green slime from collecting on inside walls of a water tank. My tank for several years was troubled the same way and had to be frequently cleaned, and at length I chanced upon what seems, after two years, to be the remedy. It is forcing air through the water. At first the feed-pipe to the tank discharged upon the surface of the water and there was very little disturbance. Then the pipe was changed so as to enter the tank at the bottom, and as the windmill is on slightly higher ground than the tank, the forcing in of the water by the pump carries with it a large amount of air, so that when the tank is filled it boils and bubbles at a great rate. Since that time the tank has been perfectly free from slime, and after two years has not required to be cleaned even once, and a colony of brook fish have kept it free from "wrigglers" of all sorts, and seem to have made fair growth, though fed very unfrequently.—*Country Gentleman*.

LOWELL WAGONS AND BUGGIES.—Readers must have noticed the attractive full-page advertisement of the Lowell Manufacturing Co.'s wagons and buggies in last week's RURAL. The establishment is a new one and should be given a trial. As stated in the advertisement, there is a full descriptive catalogue issued which can be had by addressing Lowell Manufacturing Company, corner San Pablo avenue and Peralta street, Oakland, Cal.

## Windmills.

Horton & Kennedy's Enterprise windmills (advertised elsewhere in this paper) have been in use on the Pacific Coast 16 years. They are perfect regulators, and have given entire satisfaction—many of the oldest (still in use) having cost little or nothing for repairs. Parties desiring the old reliable Enterprise mill, with all the latest improvements and at prices lower than ever before, will do well to address Horton & Kennedy, Livermore, Cal., or Jas. Linforth, 116 Front St., S. F.

## Take a Receipt.

ALWAYS TAKE A RECEIPT from a newspaper agent. Not simply because a few out of many are tricky or careless, but because accidents will sometimes happen to the best of business men. It is a favor due to the publisher that every subscriber shall take a receipt from the agent, or clerk whom they pay. All our receipts have a corresponding stub which agents are accountable for and are required to return.

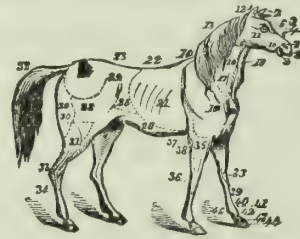
SWIFT STEAMER.—Efforts have recently been made in Europe to invent small steam craft capable of being propelled at almost express railway train speed. A small vessel for service in the Adriatic is now being constructed by a Prague engineer, the speed of which will, it is alleged, equal that of a fast railway train. This result is expected from an improved screw and a novel method of construction.

## A GOOD PREMIUM!

## WEBSTER'S PRACTICAL

Probably all of our readers have occasion to use a dictionary every day. In some cases words cannot be correctly spelled; in others, the pronunciation is difficult; while in still others the meaning is not understood. This is true, not only of children and of the uneducated, but of many of the more intelligent as well; and every one who attempts to do without Webster's Practical Dictionary attempts to do without one-half of his opportunities for intellectual improvement.

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For further information ADDRESS THIS OFFICE, 252 MARKET ST., S. F.

CATCHING FISH BY MACHINERY.—A Mr. Robertson, of Stockton, Me., owns a patent on a machine for catching fish, and is having a number of them made in Belfast. The implement consists of a frame on which is mounted a windlass which is geared to a strong spiral spring. The fish-line is wound on the windlass, and leads over a sheave at the end of an arm which extends out-board, and then to the water. The spring being wound up and the line run out, the machine is ready for operation. When the fish bites the pull on the line disengages the spring, and the fish, if he isn't stronger than the machine, is pulled in. When the sinker reaches the end of the arm, a catch which has held the arm in place disengages, and the fish is thrown in-board, and landed on deck. The model works well on land, and the inventor claims that he has given it a practical trial in catching haddock in the bay, and that it works perfectly.

HEAT OF THE GULF STREAM.—It is well understood that Great Britain and other parts of Northwestern Europe owe much to the warming influence of the Gulf Stream. The extent of the effect has been given in the calculations of Dr. James Croll, who has found that the amount of heat conveyed northward in the Atlantic by this stream is equivalent to 77,479,650,000,000,000 foot pounds of energy per day, which is equal to all the heat received by 1,560,935 square miles at the equator, and more heat than conveyed by all the air currents. The heat of the Arctic Seas and North Atlantic would be diminished that much by the stoppage or diversion of the great ocean river.

SALT FOR CORNS.—It is said that if common salt is placed upon corns on the feet and allowed to remain there for two weeks, the troublesome pets will come away without pain.



## Breeders' Directory.

Six lines or less in this Directory at 50c per line per month.

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**E. C. OLAPP**, South Pasadena, Cal. Light Brahmas, Plymouth Rocks and Silver Spangled Hamburgs, Poultry and Eggs. Ex. and P. O. Money Order offices, Pasadena.

**JAS. T. BROWN**, 18 Georgia St., Los Angeles, Cal. Breeder of Thoroughbred Poultry of the leading varieties. Send for circular and price list.

**O. J. ALBEE**, Santa Clara, Cal., breeder of Langshans, Partridge Cochins, Pedigreed Scotch Collies, W. C. B. Polish, Wyandottes, B. Leghorns, B. B. R. G. Bantams.

**T. D. MORRIS**, Sonoma, Cal. Tuolouse and Embden Geese, Bronze and W. Holland Turkeys, and all leading varieties of Thoroughbred Poultry.

**CHOICE LAND AND WATER FOWLS** for sale at all times of all the most popular and profitable varieties. Please inclose stamp for new circular and price list to R. G. Head, Napa, Cal.

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**D. D. BRIGGS**, Los Gatos, Cal. Fancy Poultry breeder.

**AXFORD INCUBATOR**—Best in the world; never beaten in competition; from \$37.50 to \$50.00. Pekin and Roman Ducks, best in the State; \$7.50 per trio, or \$2.00 each per doz. Eggs, \$3.00 per doz. For particulars address L. P. Clark, Mayfield, Cal.

**CALIFORNIA POULTRY FARM**, Stockton, Cal. Send 2-cent stamp for illustrated Catalogue.

**W. C. DAMON**, Napa, Wyandottes, W. and B. Leghorns, P. Rocks, L. Brahmas, Pekin Ducks.

**MRS. M. E. NEWHALL**, San Jose. White and Brown Leghorns, Langshans, Plymouth Rocks, Light Brahmas, Pekin Ducks and Bronze Turkeys.

**GEO. B. BAYLEY**, 1317 Castro St., Oakland, Importer and Breeder of all the best known and most profitable Land and Water Fowls. Publisher of the Pacific Coast Poultryers' Hand Book and Guide. Price 40 cents. Send 2-cent stamp for illustrated Circular.

**ALHAMBRA POULTRY YARDS**, J. J. Jones, Prop'r, Martinez, Cal., importer and breeder of the finest strains Wyandottes, P. Rocks, Langshans, Houdans, Crevecoeurs, W. Leghorns, L. Brahmas, Bronze Turkeys.

### HORSES AND CATTLE.

**H. S. SARGENT**, Stockton. Thoroughbred Jersey Cattle, and Poland-China Hogs from imported stock.

**J. H. WHITE**, Lakeville, Sonoma Co., Cal., breeder of Registered Holstein Cattle.

**OLYDESDALE HORSE CO.**, Petaluma, Cal. Full bloods and grades on hand and for sale. Address G. B. McNear, Secretary.

**PETER SAXE & SON**, Lick House, San Francisco, Cal. Importers and Breeders, for past 14 years, of every variety of Cattle, Horses, Sheep and Hogs.

**WILLIAM NILES**, Los Angeles, Cal. Thoroughbred Poultry, Cattle and Hogs. Write for circular.

**GOTATE RANCH BREEDING FARM**, Page's Station, S. F. & N. P. R. R. P. O., Penn's Grove, Sonoma Co., Cal. Wilfred Page, Manager. Breeders of Short Horn Cattle, English Draft Horses, Spanish Merino Sheep and Berkshire Swine.

**THE BEST HERD OF JERSEYS**, all A. J. C. C. registered, is owned by Henry Pierce, San Francisco.

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**Estate of M. E. BRADLEY**, San Jose, Cal., breeder of recorded thoroughbred Shorthorn Cattle and Berkshire Hogs. A choice lot of young stock for sale.

**J. R. ROSE**, Lakeville, Sonoma Co., Cal., breeder of Thoroughbred Devons, Roadsters and Draft Horses.

**GEO. BEMENT & SON**, Redwood City. Ayshire Cattle, Southdown Sheep, Berkshire and Essex Swine.

**SETH COOK**, Danville, "Cook Farm," Contra Costa Co., breeder of Aberdeen Angus, Galloways and Devons (Registered). Young stock for sale.

### SWINE.

**I. L. DICKINSON**, Lone Oak Farm, Sonoma, Tuolumne Co., Cal., breeder of thoroughbred Essex Hogs. Pigs now ready for sale. Prices reasonable.

**WILLIAM NILES**, Los Angeles, Cal. Thoroughbred Poland-China and Berkshire Pigs. Circulars free.

**JOHN RIDER**, Sacramento, Cal. Breeder of Thoroughbred Berkshire Swine. My stock of Hogs are all recorded in the American Berkshire Record.

**TYLER BEACH**, San Jose, Cal., breeder of thoroughbred Berkshires.

### SHEEP AND GOATS.

**KIRKPATRICK & WHITTAKER**, Knight's Ferry, Cal., breeders of Merino Sheep. Rams for sale.

**EASTON MILLS**, Lakeville, Sonoma Co., thoroughbred Spanish Merino Sheep. Choice rams for sale.

**J. B. HOYT**, Bird's Landing, Cal., importer and breeder of Shropshire Sheep; also breeds cross-bred Merino and Shropshire Sheep. Rams for sale.

**L. U. SHIPPEE**, Stockton, Cal. Importer and breeder of Spanish Merino Sheep, Durham Cattle, Red Duroc and Berkshire Swine. High graded Rams for sale.

### BEEES.

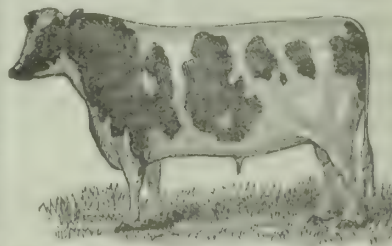
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Packages, 25 cents. Makes 5 gallons of a delicious, sparkling and wholesome beverage. Sold by all druggists, or sent by mail on receipt of 25 cents. C. E. HIRKS, 48 N. Delaware avenue, Philadelphia, Pa.

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### HOLSTEIN & JERSEY CATTLE

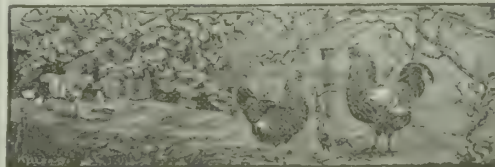
Heifers in Calf to such grand bulls as Netherland Star, Clifden Prince (Holstein) and Ashantee's Sultan (Jersey) for sale at reasonable prices.

Also **POLAND-CHINA** and **BERKSHIRE PIGS**.

**POULTRY**—All Varieties.

WRITE TO **WILLIAM NILES**, Los Angeles, Cal.

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### HIGH-CLASS POULTRY.

Clean sash on Plymouth Rock Chick at Great California Poultry Show at San Francisco, Jan. 11th to 15th, 1886. The first is the cheapest. Illustrated Catalogue sent upon application; worth \$1 to any breeder of poultry. Send me your name on a Postal Card, 5000 copies of this Illustrated Catalogue for free distribution.

## MILK OIL SHEEP DIP

THE GREAT REDUCTION IN PRICE MAKES IT THE MOST ECONOMICAL IN THE WORLD. SAFE, SURE. IT DOES NOT STAIN THE WOOL.

**SAM'L. CABOT**, SOLE MANUFACTURER AND PATENTEE, 70 KILBY ST. BOSTON, MASS.

## MERY'S IMPROVED PIONEER BARLEY CRUSHER

Using the Benoit Corrugated Rollers.

### STILL AT THE FRONT!



This Mill has been in use on this Coast for 5 years, TAKEN THE PREMIUM AT THE STATE FAIR

Four years in succession, and has met with general favor, there now being

Over 200 of them in use in California, Nevada & Oregon. It is the most economical and durable Feed Mill in use. I am sole manufacturer of the Corrugated Roller Mill. The Mills are all ready to mount on wagons.

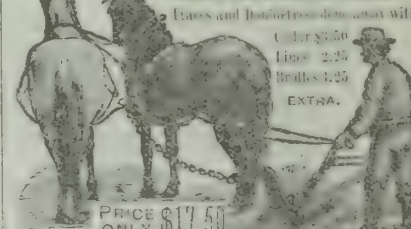
I thank the public for the kind patronage received thus far, and hope for a continuance of the same.

**M. L. MERY, CHICO IRON WORKS, Chico, Cal.**

### WE PAY THE FREIGHT.

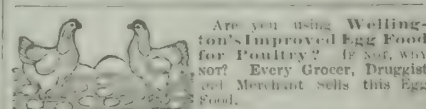
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**Operative Surgery and Treatment of Chronic Lameness Specialties.**

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### HOLSTEIN-FRIESIAN CATTLE

FROM THE HERD OF

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On his Ranch at Vina, Tehama County, Cal.

For prices and catalogue address

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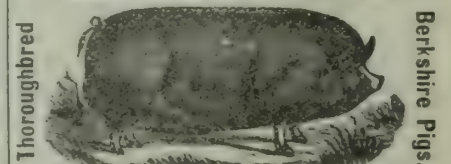
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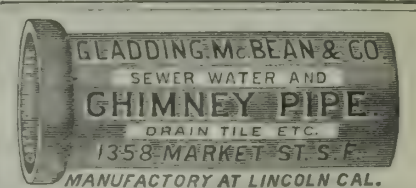
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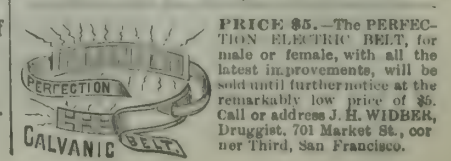
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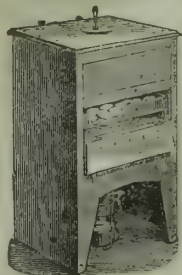


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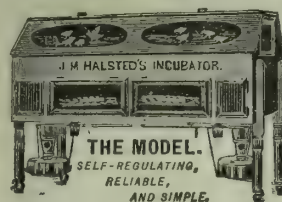
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## S. H. MARKET REPORT

NOTE.—Our quotations are for Wednesday, not Saturday the date which the paper bears.

## Weekly Market Review.

## DOMESTIC PRODUCE, ETC.

SAN FRANCISCO, July 7, 1886.

The week's trade in staple produce has been small owing to the adjournment of exchanges from Friday to Tuesday. The prevailing topic of conversation is the lessened yield of wheat over large areas of the State, because of the hot winds. Some information upon this point is given elsewhere in this issue. It seems that the great wheat States of the West are also greatly reducing their yield from the too generous estimates which were early made. A dispatch from Chicago, July 4th, says this week's *Farmer's Review* will have the following: Detailed reports from the spring wheat-growing States, together with actual results from winter wheat harvesting, indicate that the official estimates as to the probable total crop yield will not be realized. Actual injury to crop in Minnesota is already serious, while the average reports from Dakota, Nebraska, Wisconsin and Iowa indicate that many sections have felt the blight and that the average yield has already been considerably lessened.

Rains in Ohio, Indiana and portions of Illinois have delayed harvesting and caused some injury. In 27 counties of Illinois which return reports as to actual results of the wheat harvest, the yield has varied widely from 5 to 18 bushels to the acre. The range of wheat yield is from 10 to 18 bushels. Reports from 11 counties of Minnesota indicate that the present wheat outlook does not promise to exceed one-half to three-fourths of an average, where the full effects of drouth have been felt. In Fairbault, Sherburne and Chippewa counties the outlook is declared to be unusually poor. Reports from Indiana show that the wheat harvest is of excellent quality, though the field will fall short of an average crop. Need of rain for all growing crops is indicated throughout Wisconsin. In Dakota the need of rain is again beginning to be felt throughout the entire Territory. In Hughes and Clay counties the drouth is very severe.

The latest by cable from abroad is as follows: LIVERPOOL, July 7.—WHEAT—Firm, and held higher. California spot lots, 6s 4d@6s 7d; off coast, 3s 6d; just shipped, 3s; nearly due, 3s 6d; cargoes off coast, hardening; on passage, firmer and held higher; Mark Lane Maize, steady; English country markets, firm; French, generally dearer; Wheat in Paris a turn dearer, and Flour dearer. Wheat and Flour on passage to U. K., \$2,425,000 qrs.; quantity on passage to Continent, 670,000 qrs.

## Rapid Advance in Wheat in Chicago.

CHICAGO, July 7.—During the first hour on 'Change there were some wild scenes in wheat puts. August opened at 82½¢, and an avalanche of offerings were brought out, which broke values down a little, but the shorts came out in force, and with almost no stops August advanced to 83½¢. The market was greatly excited. The rapid advance caused the suspension of John W. Rumsey, an old member of the board. The amount involved cannot be yet learned. There has been, within a week, a straight advance in wheat at 8¢ per bushel.

## Foreign Review.

LONDON, July 5.—The *Mark Lane Express* in its review of the British grain trade during the past week says: The brilliant and unbroken fine weather is opportune and is improving the surviving crops. If there is no rain the finest possible samples will be obtained. The trade still favors the buyers. The sales of English wheat during the week were 36,243 quarters at 31s, against 38,837 quarters at 33s 3d during the corresponding period of last year. Flour has been depressed, especially American. Two cargoes of wheat have arrived, nine were sold, four were withdrawn and two remained. Trade forward is almost nominal. At to-day's market wheat and flour were quiet and unchanged.

## London Wool Sales.

LONDON, July 5.—The bidding at the wool sales to-day was animated with improved business. Sales are as follows: Victoria, 2700 bales; scoured, 9½d@10s; greasy, 6d@10s 2d; fleece, 1s@2s 6d. New South Wales, 4600 bales; scoured, 8½d@10s 9d; greasy, 5½d@11½d; fleece, 1rd@1s 4½d. South Australian, 1000 bales; scoured, 7½d@10s 4d; greasy, 6d@11½d. Queensland, 400 bales; scoured, 2½d@10s 5d; greasy, 7½d@10s 2d. Tasmania, 1000 bales; scoured, 11½d@10s 4d; greasy, 6½d@11rd.

## English Wool Markets.

LIVERPOOL, July 6.—Market dull. No business passing in cargoes. Indian shipments large, and unless we have bad weather our market will not respond to American markets for several months.

## Chicago Fruit Market.

CHICAGO, July 6.—California Fruit Union: The weather with us is very hot. Apricots are selling from \$1.65 to \$1.75; plums, from \$2.00 to \$2.50 and what peaches arrive in good order at from \$2.00 to \$2.50, but many arrive in bad order. Figs arrive in such a condition that they are worthless; there is no demand whatever for them. PORTER BROS. CO.

## New York Wheat Market.

NEW YORK, July 4.—Wheat closed ½ cent off—July, 85½¢; August, 86½¢; September, 86½¢; November, 86½¢; December, 86½¢; January, 90½¢; February, 92½¢; May, 95½¢.

## Eastern Wool Markets.

NEW YORK, July 4.—A good business is doing in available stocks, and sellers claim that they could increase the movement if wools were only here to offer. Supplies, however, come forward slowly. More manufacturers than usual are in the market, and every day seems to add to the value of attractive grades. Among sales were 3000 pounds spring California at 21 cents, 10,000 pounds Utah at 27½ cents, 50,000 pounds Oregon at 20 to 21 cents, 50,000 pounds Oregon at 23 cents. The tone of the Philadelphia market is very strong, and desirable new wools are promptly marketed at full and improving prices. Among sales were 115,000 pounds fine and medium Territory at 22 cents, 5000 pounds medium Territory at 23 cents, 10,000 pounds medium

Territory at 22½ cents, 45,000 pounds medium Territory at 24 cents, 10,000 pounds medium Territory at 24½ cents, 21,000 pounds low and medium Territory at 20 cents, 5000 pounds Nevada fine at 19 cents, and 125,000 pounds California on private terms. In the Boston market sales were heavy, and the increase in prices ranged from 1 to 2 cents. The tone of the market is very strong.

BOSTON, July 6.—Wool firm; good demand. Ohio and Pennsylvania X fleeces, 32c; XX and XXX and above, 34@35c; Michigan X fleeces, 32c ½ lb.

## New York Hop Market.

NEW YORK, July 4.—All hands are on the fence awaiting the effect of the weather this week on crops. There is not enough demand to offer a good outlet for the stocks on hand. A sharp rise in prices is expected if there is no improvement in the crop before the 10th inst. Pacific coast crop of 1885, common to choice, 8 to 12 cents.

## Local Market.

BAGS—The syndicate put on a bold face and say they can make bags worth 20c, but they don't want to. The reduced crop should counsel them to be moderate in their views.

BARLEY—Barley is 2½¢ lower per cbl. for the best feed. There is enough feed barley arriving, and there is not much interest in the trade. Old Barley is scarce and firm.

BEANS—There is little change; bayos and pink beans are 10c higher.

CORN—Corn is quiet and unchanged.

DAIRY PRODUCE—Full notes are given below.

EGGS—Ordinary lots of ranch eggs have sold a little cheaper than last week, but fancy have sold higher than quotations.

FEED—Bran is unchanged. Cornmeal is \$1 cheaper per ton. Hay receipts have been small this week. The range is as follows: Alfalfa, \$6@9; barley, \$6@8; oat, \$7@9; wheat, \$9@12 ½ ton; extra choice, do, \$13@14.

FRUIT—Full notes are given below.

HOPS—The market is full of interest and is discussed in other columns of this issue.

OATS—There is no change.

ONIONS—Supplies are small and rates have advanced.

POTATOES—Potatoes have also advanced from 10 to 20 cents per cbl. for the best sorts.

POULTRY AND GAME—There is much difference between ordinary and fancy lots, though all are higher than last week. Venison is again in market in fair supply.

PROVISIONS—Trade is good, and Eastern ham prices have advanced.

VEGETABLES—Descriptive notes are given below.

WHEAT—The local market is firm and considerable sales are being made. Today's sales on call were as follows: Buyer season—200 tons, \$1.31½; 300, \$1.31½; 500, \$1.31½; 300, \$1.31; 300, \$1.30½; 300, \$1.27½; 1700 tons, \$1.28; 500, \$1.27½; 100, \$1.27½; 100, \$1.27½; 300, \$1.27½; 300, \$1.27½; 1400, \$1.21½; 1900, \$1.21½; 3300, \$1.21½; 100, \$1.21½; 300, \$1.21½; 100, \$1.21½; 100, \$1.21½; 200, \$1.21½; 500, \$1.21½; 100, \$1.21½; 100, \$1.21½; 400, \$1.20½; 1000, \$1.20½; 1200, \$1.20½ ½ cbl.

WOOL—There is a good demand, with no notable change in values since last week.

[COMMUNICATED.]

## Market Information.

## Livestock.

Beef cattle, if choice and will cut up without waste, find a ready market at full prices. Butchers prefer paying ½¢ advance for a bullock that will cut up well, even though it be small-sized, and when selling, cattlemen must always take this into consideration. The offerings on the market continue moderate. Shipments of choice beefs to the East continue to be reported, which emphasizes the impression that our market will probably rule higher soon. Mutton and lambs are marked up under stronger holdings in the interior and light supplies near by to draw from. It is now claimed that our market will rule strong until drives are made from the summer pastures. In cows there is nothing new to report. The horse market continues quiet, probably due to the holiday season. There is a continued inquiry for general utility horses and also medium-sized work horses.

The following are to-day's meat prices: Beef—Stall fed 6½¢@7¢ ½ lb; grass fed, extra, 6½¢@6½¢; first quality, 5½¢@6¢; second, 5½¢@5½¢; third, 4½¢@4½¢. Calves, small, 7½¢@8½¢; larger, 6¢@6½¢ ½ lb. Mutton—Ewes, 4½¢; wethers, 4@5c. Lamb—Spring, 6¢@6½¢ ½ lb. Pork—Live hogs on foot, 4¼¢@4½¢ for both grain and dairy fed; 2¼¢@2½¢ for soft; dressed, 6¢@7c for hard, and 4¢@5c for soft. Grass-fed stock sell on foot, gross weight, at one-half the price they fetch dressed; stall-fed, on foot, fetch one-third less than they sell at dressed.

## Bags.

The market has shown more strength, owing to lessening offerings by outside holders. It is claimed that all of 9,000,000 bags have been sold this season. This includes sales from the pool and also from the outside. Well-informed parties say there are only 5,000,000 bags not held by the pool, and when these are placed the price will be advanced. Outside holders are selling at 9 to 9½ cts and the pool adheres to 10 cts.

Advices from Colusa report grain bags being offered in that place at 8½ cts by farmers who overbought.

## Cereals.

Crop advices continue to be of an unfavorable character. It is now conceded that the wheat crop on the west side of the San Joaquin will fall short 25 per cent of estimates made the forepart of last month. Some claim that the shortage on previous estimates is all of 33½ per cent. Harvest returns from Colusa, Yolo, Butte, Yuba and Sutter are confirmatory of the shortage reported in last week's RURAL PRESS. Barley is not threshing out so heavily as was thought.

Owing to the past week having only two market days, not much can be said regarding prices here.

Interior advices confirm current reports that an advance is being paid for both wheat and barley over the bids made by buyers here.

A large-sized vessel is loading for New York the barley mentioned in last week's issue. The grade is choice feed and brewing.

European cables the past week report a strong-growing wheat market on the continent, owing to adverse crop reports in France and Germany. In England there is fine growing weather, but advices report it impossible for the crop to be an average.

Eastern advices are confirmatory of a shortage of wheat on former estimates. It is now doubtful if the entire crop of the United States will go over 400,000,000 bushels against an estimate the forepart of last May of 485,000,000 bushels. Corn crop advices at the East are favorable.

Farmers ought to guard against so-called sales on call at the Produce Exchange, for it is claimed that the call board will be used to make producers sell when they should hold.

## Dairy Product.

Choice grades of butter hold to strong prices, but fair to good is in oversupply, necessitating concessions, at times, to effect sales. It is feared that the price of packed butter will rule very low this winter, owing to the low prices ruling West for fresh butter and an increased quantity packed.

Cheese is without change. The demand is slack and stocks are beginning to accumulate more freely. Western advices report a falling market, with surplus in excess of the demand.

Eggs are reported weaker, yet without change in prices. Very choice fresh-laid from well-known shippers fetch 27 to 28 cts.

The market is well supplied with eastern and Salt Lake eggs, but owing to poor quality they are more or less neglected.

The market for hens, roasters and turkey gobblers has ruled exceedingly strong throughout the week. Some extra choice large, fat hens sold at \$8 to \$9.50 a dozen, and large young roosters for roasting fetched on Friday last over \$12 a dozen. Gobblers sold at 20 cts, but they were choice. The general run of the poultry received was only fair to good, and did not fetch much more than was quoted in the daily press. Ducks have been hard to sell, as the Chinamen are too poor to indulge much in such luxuries.

## Vegetables.

Potatoes have ruled steady at firm prices under moderate receipts and a good demand. Stocks are not allowed to accumulate.

Onions ruled strong up to Saturday, when a weaker feeling was noticed, as the party buying for shipment East had his wants met. The market closed weak to-day. Green Peppers are in liberal supply at lower prices. They sell by the box.

Green Okra is in better supply, with some difficulty met in getting over 20 cts a pound.

Summer squash ruled steady up to Tuesday and to-day, when the market was weaker but no lower. Tomatoes are coming in very freely with lower prices ruling. Yesterday it was hard to get over 50 cts a box, unless they were choice.

Cucumbers have ruled weak and lower throughout the week. The pickle factories are buying the small sized, also peppers, small white onions and cauliflower.

Green corn has come in liberally, yet the price for choice kept well up, owing to a good local and shipping demand up north.

## Fruits.

The market for apricots has been advancing each day under strong buying from canners. On Thursday, choice six-inch boxes sold at 80 cts, Friday 85, Saturday 90, Tuesday \$1, and the same to-day. The advance was due to strong competition owing to a leading firm in this city buying about 200 tons at Vacaville, which they sold to canners outside of this city.

The first consignment of large (average weight 12 pounds each) Ice Cream melons was received on Saturday by Thurston & Hartson from F. M. Slater of Vacaville. The same firm received on Tuesday the first consignment of Sweet Water Grapes. One box was from D. Dutton of Vacaville, and two boxes from G. O. Mead of Winters. The melons sold at about 40 cents each, and the grapes at \$1.25 a box.

The receipts of both pears and plums are increasing, and as canners are not in the market, prices are falling. The quality of the bulk received is improving but as yet is far from choice. Choice varieties find a ready market at from \$1 to \$1.50 a box. No Bartlett, except wind-fall, has been received. Currants have advanced steadily until \$4 was reached yesterday for some very choice. The crop is lighter than thought, which coupled with the Eastern and increased canners' demand have kept prices from falling to as low prices as obtained last year.

Peaches have come forward more liberally, causing lower prices. The more choice varieties, when in good condition, sold readily, but inferior were slow and hard to place.

Apples have kept steady with choice Red Astracans selling at \$1.50 to \$1.75 a box, extra slightly higher. Early Harvest sold at from 90 cts to \$1.25 a box. Heavier receipts are looked for commencing with next week. The market closed strong to-day.

Figs have been a drag at lower prices. Some had to be dumped on Thursday and again on Friday.

The first nectarines of the season came in yesterday from P. Fischer, Vacaville. They sold at \$1.75 per box.

Apples closed very strong to-day, but peaches, pears, plums and strawberries, weak and lower. Los Angeles oranges are weak and dull at from \$1.50 to \$1.75 per box; but lemons and limes are higher and stronger.

## Miscellaneous.

The tonnage-movement compares with last year at this date as follows:

	1886.	1885.
On the way.....	327,398	213,861
In port, disengaged.....	30,390	90,858
In port, engaged.....	41,409	19,288
Totals.....	399,197	311,007

The above gives a carrying capacity as follows: 1886, 638,704 short tons; 1885, 497,711 short tons. Increase over last year, 140,993.

The hop market is very active, with higher prices bid. Some contracts were drawn the past week at

15 and 17½ cts for choice new of this year's picking. It is reported that for something extra of this year's picking 20 cts was refused by a grower. Deliveries are to be made as soon as possible after picking. The demand for last year's picking is strong at higher prices. It is claimed that 12½ cts was paid for some that runs from good to choice. The cause of the advance was given in last week's PRESS.

Hams are selling at another advance of ½ ct per pound.

Hay is reported weak, but no lower.

## Wool.

Owing to the past week being broken by a two to three days' business vacation to allow the proper celebration of the Fourth, trading in wools has been lighter. Prices are fairly maintained under strong buying competition, particularly for medium to fine clips that are light and clean, and of fair length and storing staple. Both the European and Eastern markets are higher and active. Stocks are not allowed to accumulate with us, for buyers stand ready to take all desirable clips at full figures, even off grades find ready buyers.

San Francisco, July 7, 1886.

## Domestic Produce.

WEDNESDAY, July 7, 1886.	
BEANS AND PEAS	
Bayo, cbl.....	1 20 @ 1 35
Butter.....	1 25 @ 1 50
Castor.....	4 00 @
Pea.....	1 65 @ 1 75
Red.....	1 00 @
Pink.....	1 10 @ 1 15
Large White.....	3 00 @
Small White.....	1 65 @ 1 75
Lima.....	2 00 @ 2 25
Fid Peas, blk eye 1 50 @	
do green.....	1 00 @ 1 12½
do Niles.....	1 25 @
BROOM CORN	
Southern.....	3 @ 3½
Northern.....	4 @ 6
CHICORY	
California.....	4 @ 4½
German.....	6 @ 7
DAIRY PRODUCE, ETC.	
Cal. fresh roll, lb.....	14 @ 18
do Fancy brands.....	19 @ 20
Pickle roll.....	20 @ 21
Firkin, new.....	15 @
Eastern.....	10 @ 12½
EGGS	
Chesno, Cal., B.....	6 @ 7½
Eastern style.....	8 @ 12½
EGGS	
Cal., ranch, doz.....	25 @
do, store.....	20 @ 24
Ducks.....	— @ —
Oregon.....	16 @ 18
Eastern, by ex.....	— @ —
Pickled hens.....	— @ —
Utah.....	21 @ 22
FEED	
Bran, ton.....	14 00 @ 14 50
Cornmeal.....	6 00 @ 6 25
Hay.....	16 00 @ 17 00
Middling.....	16 00 @ 17 00
Oil Cake Meal.....	26 50 @ 28 50
Straw, bale.....	30 @ 50
FLOUR	
Extra, City Mills.....	3 75 @ 4 25
do City Mills.....	3 50 @ 4 10
Superior.....	2 75 @ 3 25
GRAIN ETC.	
Barley, feed, cbl.....	77 @ 87½
do Brewing.....	1 50 @ 1 60
do new.....	57½ @ 60
Chevalier.....	1 40 @ 1 65
do Coast.....	1 10 @ 1 20
Buckwheat.....	1 00 @ 1 05
Corn, White.....	1 00 @ 1 12½
Yellow.....	1 00 @ 1 10
Small Round.....	1 12½ @ 1 15
Nebraska.....	30 @ 35
Oats, choice.....	1 35 @ 1 40
do No. 1.....	1 25 @
do No. 2.....	1 20 @ 1 22½
do black.....	— @ —
do Oregon.....	1 25 @
Rye.....	1 00 @ 1 10
Wheat, No. 1.....	1 20 @ 1 22½
do No. 2.....	1 20 @
Choice milling.....	25 @
HIDES	
Dry.....	15 @ 16
Wet salted.....	8 @ 9
HONEY, ETC.	
Beehive, B.....	21 @ 25
Honey in comb.....	8 @ 10
Extracted, light.....	3½ @ 4
do dark.....	3 @ 3½
HOPS	
Oregon.....	— @ —
California.....	8 @ 10
ONIONS	
Red.....	65 @
Silver skin, new.....	55 @ 60
NUTS—JOBBING	
Walnuts, Cal., B.....	7½ @
do Chile.....	7½ @
Almonds, hdshl.....	6 @
Soft shell.....	10 @
Brazil.....	11 @ 12
Pecans.....	10 @ 12½
POULTRY AND GAME	
Hens, doz.....	6 00 @ 7 00
Broilers.....	5 00 @ 6 00
Ducks, tame.....	3 50 @ 5 00
do Mallard.....	— @ —
do Spring.....	— @ —
Geese, pair.....	1 00 @ 1 50
do Goslings.....	1 00 @ 1 50
Wild trap, doz.....	— @ —
White.....	— @ —
Turkeys, B.....	12½ @ 16
do Dressed.....	— @ —
Turkey Feathers.....	10 @ 30
Tail and wing.....	— @ —
Snipe, Eng. dom.....	— @ —
do Common.....	— @ —
Quail.....	— @ —
Rabbits.....	1 00 @ 1 25
Hare.....	— @ —
Venison.....	6 @ 10
PROVISIONS	
Cal. Bacon.....	8 @ 8½
Heavy.....	8 @ 8½
Medium.....	8 @ 8½
Light.....	10½ @ 11½
Extra Light.....	12 @ 12½
Lard.....	7 @ 7½
Cal. Smoked Beef.....	12 @ 12½
Region Eastern.....	10½ @ 12
Hams, Cal.....	12½ @ 14
do Eastern.....	12½ @ 14
SEEDS	
Alfalfa.....	11 @ 11½
Cyan.....	34 @ 4
Clover red.....	45 @ 50
do White.....	45 @ 50
Oat.....	20 @
Flaxseed.....	24 @ 24½
Hemp.....	5 @ 5½
Italian Rye Grass.....	25 @
Perennial.....	25 @
Millet, German.....	10 @ 12
do Common.....	10 @ 12
Millet, white.....	14½ @ 5
Brown.....	24½ @ 31
Rape.....	1 @ 1½
Ky. Blue Grass.....	30 @ 32
3d quality.....	15 @ 18
Sweet V. Grass.....	20 @ 25
Orchard.....	20 @ 25
Red Top.....	15 @
Hungarian.....	8 @ 10
Lawn.....	30 @ 40
Mesquit.....	10 @ 12
Timothy.....	5½ @
WHEAT, ETC.	
Humboldt and.....	21 @ 23½
Mendocino.....	1



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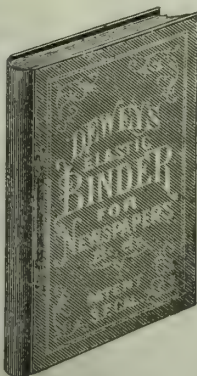
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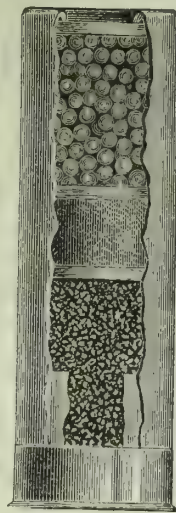
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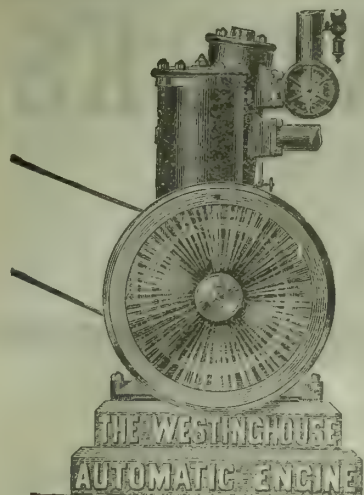
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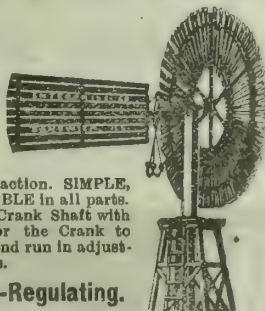
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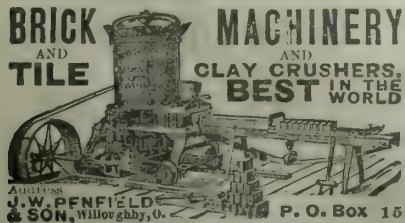
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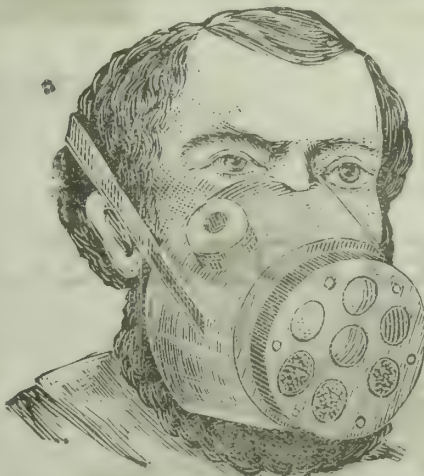
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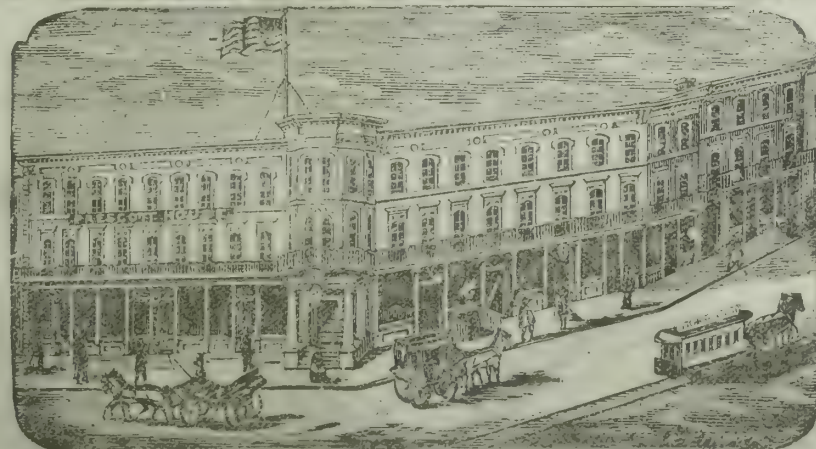
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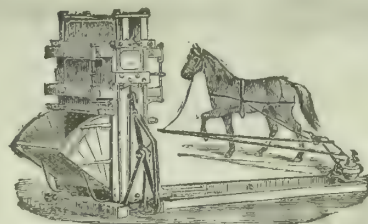
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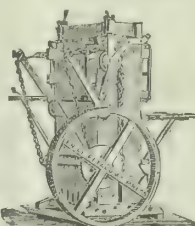
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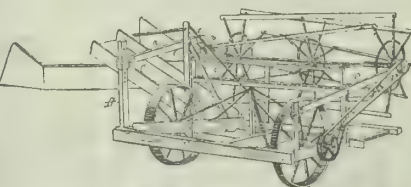
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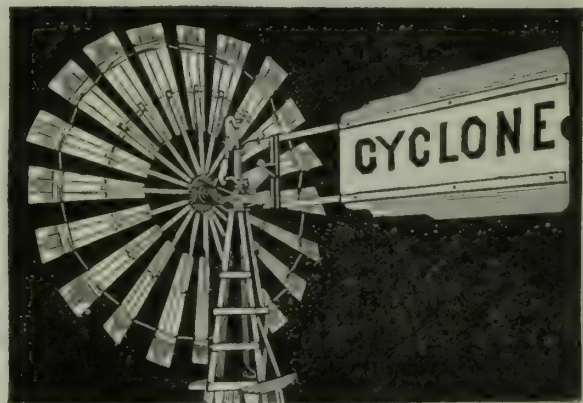
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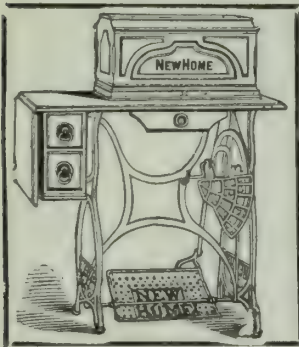
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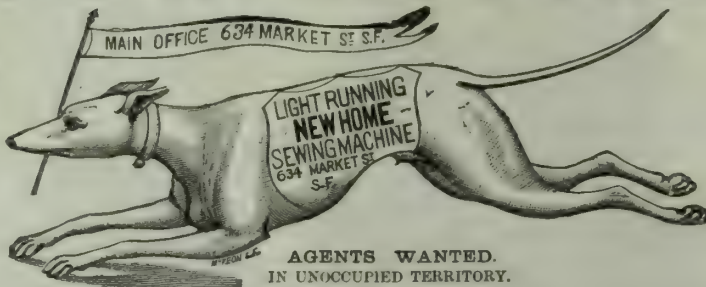


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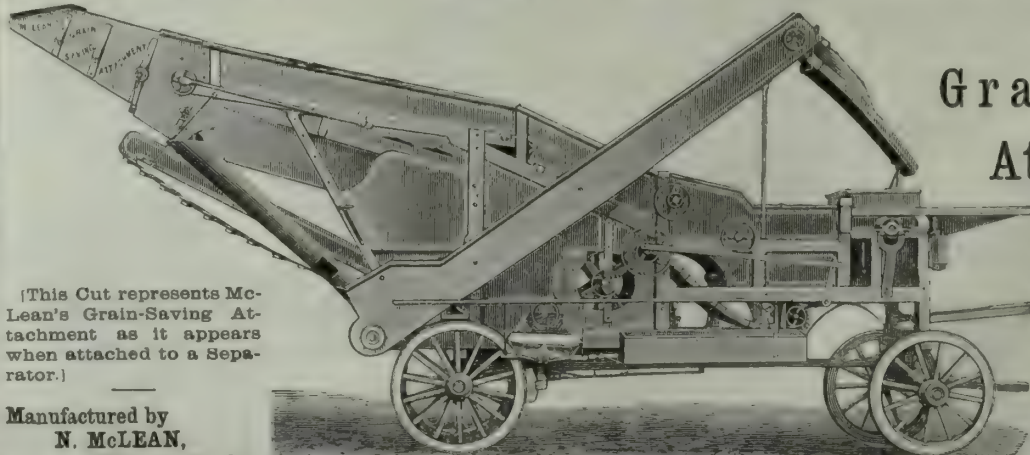
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# PACIFIC RURAL PRESS

TWENTY-PAGE EDITION.

Vol. XXXII.—No. 3.]

SAN FRANCISCO, SATURDAY, JULY 17, 1886.

{ \$3 a Year, in Advance  
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## The Woolly Aphis.

We saw something in the University orchard the other day which we never noticed before and have not seen on record, though it may be. In looking for signs of the codlin moth we saw a little woolly substance on the calyx end of the apple, and breaking open the apple found a colony of woolly aphis snugly ensconced in the calyx tube, which was slightly open. The aphis had evidently found a snug harbor here while the ladybirds were scouring the tree and had destroyed all in sight. Of course a colony of aphis thus protected would escape the ladybird, which could not enter the very small opening, nor could it be reached by any spray. We are watching to see whether the tree will be repopled by aphides bred in these covers.

Professor Hilgard gave us the other day a letter which he had just received from the eminent French horticulturist, M. Ch. Joly, Vice-President of the National Horticultural Society of France. He speaks in commendatory terms of the publications of the College of Agriculture, and comments especially upon Bulletin 55 concerning the woolly aphis which was published in the RURAL PRESS of May 15, 1886. Thousands of remedies, he says, are used to get rid of the woolly aphis, but he gives it as his opinion that a remedy must be much as possible an insecticide and a manure as well. It is no doubt true that such a combination is highly desirable, and such, in fact, is the case with most of the remedies now used in this country. The wood ashes used about the root crown of the trees is a valuable manure. Gas lime has some manurial properties and has shown itself to be valuable also as an ameliorator of harsh soils. Lime, which has been often used in this country, has also a tonic effect upon some soils. We have also a number of special applications which are kept secret by those who use them, which are known to have fertilizing constituents.

M. Joly gives this as the treatment which has proved best by long experience in France. First: Scrape off the rough bark during the wet season, and burn all the moss, dead bark, etc., and burn up the scrapings. Second: Make in a barrel a mixture of "black soap," powdered sulphur and lime, with clay in sufficient quantity to make the mixture about as thick as cream. Apply this with a brush on the trunk and larger limbs of the tree; in fact, cover the whole tree with it as far as practicable. The clay acts merely as a medium for holding the other substances together. As the rain follows it will gradually wash off the mixture and will let it fall on the roots and will reach the insect there.

M. Joly urges California apple-growers to try this treatment for the woolly aphis, and assures them they will find it satisfactory. He does not think a perfect cure is to be expected if there are neighboring orchards which are not treated, but the result of the treatment will be clear, bright-barked and vigorous trees. The operation has to be repeated every two or three

years, and will pay in the beneficial effect upon the trees.

We regret M. Joly does not give more definitely what he means by "black soap." If he means such soap as is made at home with grease and lye from wood ashes, such a material would

RAMIE.—There is just now exceptional interest in the extraction of ramie fiber in all parts of the country. New Orleans seems to be a focus for the Southern interest and parties who believe they have the coming ramie machine are urging the growing of the crop and the estab-



THE EDUCATIONAL PROBLEM.

be out of the reach of most people for lack of ashes, for in this country of large orchards and small need of fires the size of the fruit-grower's ash pile bears a very small proportion to the size of his orchard. Perhaps M. Joly will write us more fully as to the alkaline element in his prescription.

AN exhibition of Fresno county products will take place at San Francisco on the occasion of the Mechanics' Fair and Grand Army Encampment next month. A similar exhibition that took place last year was a great success.

lishment of the ramie industry. San Francisco is also attacking the problem, and at least two machines, one working dry fiber and one green, are being run experimentally. The ramie plots at the State University are furnishing the stalks for these experiments. If full success should be reached, ramie growing may be very profitable in this State.

EASTERN shippers at Vacaville are purchasing whole crops of grapes at \$70 to \$100 per ton on the ranch, and whole crops of peaches at \$80 per ton, furnishing boxes.

## Opening of the School Year.

This week the public schools in the bay region have reopened their doors and the too-short vacation is over. According to the daily paper reports, the ferries carried more people on last Sunday than during any single day this season, so great was the rush of people from rural haunts, returning on time to place their children in the schools on Monday morning. The pupils attending private schools have a longer summer rest, but the last of July will gather them in too and the study for another year will begin all around.

The opening of the school year reminded us of the excellent engraving which we have reproduced on this page as appropriate to the season. The picture represents the three great elements in the educational problem—the parent, the schoolmaster and the pupil. Do the young pupils ever think that they are the recipients of the combined sacrifices and exertions of the other two, and properly appreciate the work done for them? Does this little lad in the picture think that these two full-grown men are earnestly discussing some matter which is for his sole benefit? It is, no doubt, well that the children do not burden themselves too much with thoughts of the exact relations of things, else we might have too old heads on young shoulders; but it will do pupils no harm to think occasionally of all that is done to educate them, and conduct themselves accordingly.

We have thought how we could in a few words present the importance of the educational interest of the country. The philosopher, the statesman, the theologian could all give us volumes on this theme; in fact, libraries could be filled with treatises on education. We adopt the usual method of writers, who desire to give, in small compass, that which may provoke much thought, and take recourse to statistics. The report of the United States commissioner of education for 1884 shows that there are in the United States 16,794,402 children of proper age to attend school, and about three-fourths of these are in attendance upon either public or private schools. For the instruction of these children there are about 300,000 teachers employed. The total annual expenditure for educational purposes is over \$104,000,000, and the value of school property is nearly \$250,000,000.

All these large figures show what is being done for the children. It is done cheerfully because in the children lies the hope of the nation. Let each one of our young readers who may be attracted by these statements remember that upon him rests a part of the obligation to prove to history that the nation's hopes are well placed.

SAM, a Merced-river Chinaman, is shipping potatoes by the car load from Merced to El Paso, Texas. He pays \$160 a car freight, and the potatoes in El Paso sell for two cents a pound.



## HORTICULTURE.

## California Fruit at the East.

EDITORS PRESS:—The great and yet unsettled question as to the best methods of picking, packing and shipping our rapidly increasing fruit products should be constantly kept before the people, although many may regard it as supererogation to continue this harping upon this old subject. For one, however, to keep silent who may have witnessed the deplorable condition in which a large portion of our fruit reaches the Eastern markets is simply a dereliction of duty, if he has a proper regard for the whole fruit interests of the Pacific Coast, where so much is involved. My recent trip to the East was largely, it is true, in the special interest of fruit shipments of Southern California, yet I am free to say that I was not altogether unmindful of the welfare of the entire State, and to reduce my observations to practical suggestions, I would say:

First of all, that we want to ship ripe fruit first, last and all the time.

Second, as a rule, greater care should be exercised in taking the fruit from the tree, cutting the stem being undoubtedly the better way, instead of pulling the fruit off.

## Philosophy of Rind-Curing.

Third—All fruit should be allowed time to evaporate the surplus of watery secretions in the rind after picking, before packing for the market. In other words, it should be allowed ample time to sweat. By this process considerable shrinkage occurs, and when packed direct from the tree the rigid, unyielding rind is easily abraded in handling and pressing into packages; and when it is generally understood that it is the oxygen of the air penetrating these little cracks or abrasions of the skin or rind that causes decay, the sweating process will be more generally adopted in preparing all fruits for packing. Too much can scarcely be said upon this point. The cells composing the skin or rind of fruits are constantly distended to their utmost while on the tree by a watery secretion, and hence are ruptured at the slightest contact, or at least by rough handling, and this condition obtains until the fruit is past its prime ripe condition, when it will have lost its rigid texture, and these delicate cell membranes thus having parted with most of their watery secretion, through this natural curing process while yet on the tree, results in a shrinkage of parts, and consequently a collapse of the cell walls, which renders them not only tough in texture, yet plastic to the touch. The sweating, after picking, accomplishes the same as nature has indicated and described above, but in a much more rapid manner by proper management. Fruit thus prepared offers almost absolute immunity against decay caused by improper handling. It is somewhat analogous to dried fruit, i. e., the rind has been permitted to commence the process of drying, by which the inner pulp and juice are nearly hermetically sealed against atmospheric influences. Dried fruit, however much it may be banged about, never decays if kept in a dry and well-ventilated storage.

## Ventilation in Package and Car.

Fourth—Fruit packages should be constructed as open as wire work, if it were possible, so that a free circulation of air would thereby be secured in every direction, affording a continuous escape of all evaporated moisture from the fruit in transit to market. Not only should the small packages that compose the crate be secured separate from each other to insure perfect ventilation, but likewise the crates themselves, and last but not least, the car should then receive such attention in its construction and interior conveniences that the fruit packages can be firmly secured in place with this system of perfectly free and full ventilation, to enable all of the moisture escaping from the fruit to find rapid exit.

The first cherries that reached Chicago from California in May were from half to two-thirds either rotten or so moldy as to render them worthless. The cause of this was unquestionably the moisture thrown off and confined in the almost tight boxes in which they were packed after picking, and in which they were also shipped. After repacking they readily sold from 10 to 15 cents per pound in packages and retailed at 20 to 25 cents. Now, the loss here was simply frightful, and due also to a want of knowledge in handling this fruit under the circumstances. With a schedule of six days to Chicago, for instance, by rail, thoroughly ventilated packages, crates and cars, and these frightful losses can be, in a measure, prevented.

## The Opportunity at the East.

In this connection I wish to remark, what I base upon most diligent inquiry in our different sections of the Eastern States widely separated, that it is practically impossible to overstock those Atlantic city markets with ripe, clean, sweet oranges. Cherries, pears, Muscat grape and other favorite varieties, and possibly peaches and apricots, are laid down there in a wholesome and inviting condition. Our unripe fruit they do not want, nor will it pay to ship fruit to decay en route. The question of production, of course, has long since been fully settled; but

we certainly are most sadly remiss in the handling.

As regards the orange, which claims the attention at present of Southern California producers, we also have many things of vital importance to this special industry yet to learn. To continue to pick and ship the unripe fruit will sooner or later bring curses home to roost to all of those possessed of this unreasonable greed. The few green fruit consumers scattered over the Eastern world are usually possessed of unbridled tongues, and no better advertising medium could well be secured for any unholy purpose; and although Providence and the physician may be easily invoked to allay the mental and physical suffering resulting from this infraction of the arbitrary law of cause and effect, yet its pernicious results can scarcely fail to recross to the Pacific Slope.

During nearly a two months' stay at the East, besides being almost constantly on the move from place to place, afforded me ample opportunity to gauge public sentiment in regard to our oranges as they were then receiving them. I also made it a point to sample them myself at 10 cents apiece, in order to speak from knowledge, and I desire to assure all orange-growers that no unfavorable criticism ever greeted my ears on the quality. In fact, they were sweet and juicy, but occasionally some one would ask where our *sour* oranges grew that came to market in February and March.

As another pointer, I saw carloads of the San Gabriel valley oranges from Duarte to Pasadena (seedlings) sell for \$4.50 to \$7 per box; yet the famed Washington Navel is justly the king of oranges.

Another incident that is quite amusing to note, to say the least, was the great enthusiasm manifested by the retailers and newsboys selling fruits on trains, in crying the orange. To my mind it seemed to enforce the idea that too great a prominence before the public is sometimes a disadvantage, or may be so, and possibly it may be so in the present case. These newsboys, especially, as we all know, come rushing along seeking business with every one, and in offering their oranges the stereotyped cry was: "Here's yer nice, sweet Riverside oranges; two for a quarter." And the laugh comes in on Riverside, in these oranges having such black, smutty faces, while they claim not to grow smutty fruit.

Now, the point is, if Riverside did not grow these most delicious sweet smutty oranges, then some other community was grossly swindled out of the credit so justly their due, and in all of my humble efforts to correct this seeming abuse that the devil might receive his just deserts, I was almost insulted. With all the eloquence of a Demosthenes, I doubt whether it would have availed in convincing those orange-venders that it was the product of the great San Gabriel and Santa Ana valleys. The smut they seemed entirely oblivious about, but the sweet orange was the burden of their unceasing song. It may, therefore, be a question whether too great a notoriety is of enduring advantage even in the orange culture.

Upon the whole, in summing up, California has a grand future before her in fruit culture, but better brain and more science should take the lead, that ways and means are provided to save for a small profit what now is a double loss of production and decay in seeking a market.

O. H. CONGAR.

Pasadena, July 4, 1886.

## Keeping Lemons.

Pertinent to the letter of Dr. Congar, which we publish above, will be some notes of experience in handling lemons by two lemon-growers of California. We give first an item about G. W. Garcelon's practice with lemons, as described by the *Riverside Echo*: Mr. Garcelon has now (June 14th) several hundred boxes of lemons in fine condition, worth about six dollars a box in Chicago. These lemons were picked last December and January. How did he keep them, do you ask? He uses raisin trays, not sweat boxes, to keep them in, picking as soon as large enough (which he thinks is when they will go about 250 to 300 to the box). He lays the tray with cleats up, and places one layer of lemons upon it, placing another tray over them cleats down. Upon that he duplicates the arrangement with one layer of lemons and two trays, and so on. He keeps out both light and air, but finds no planer frame building just right—does not know how an adobe would affect the atmospheric conditions. They keep six months all right, Mr. Garcelon says, and by that time, generally about June or July, the market is sure to be good.

N. W. Blanchard, a large orchardist at Santa Paula, Ventura county, writes under date of June 22d to the *Riverside Press* as follows: I am now shipping by each steamer about 100 boxes, and the lemons have been picked from two to three months. A correspondent of the *San Francisco Bulletin* from Sicily not long ago stated that the lemons picked there in November were kept till March before shipping, while lemons picked in January were only kept three weeks before shipping, and that lemons picked early kept better than lemons picked late. He also stated that lemons were handled very carefully. In regard to this last point I have yet to learn from my experience that such careful handling is necessary. I have purposely bruised lemons to see if they would decay, and have noticed lemons that were out with the pruning shears in gathering and have not yet discovered

that they decayed in consequence in either case. It has generally been thought necessary that in curing lemons they must have air, i. e., some little air circulation. Now comes Mr. Garcelon to the front as one of the most successful men in curing lemons, and he tries to make his lemon-curing house air-tight. Apropos to the sand treatment, a man from Melbourne in my employ tells me that there the lemons are placed about three deep on shelves and dry sawdust poured over them, which settles down and around them, serving the same purpose as sand, perhaps. The important question is to keep lemons from December (I suppose) at Riverside, from January here, till July and August and September. Is not the answer: Pick in season, keep from circulation of air in a cool place, in sand, sawdust, or in tight stove-room in not too large bulk so that one rotten lemon shall not injure others in contact with it?

Another correspondent of the *Riverside Press* gives the following: Some of our lemons were picked in December and some in January. These were at first placed in an adobe room, ill-ventilated, and they decayed some; then removed the lemons, placing them about three deep on shelves, far enough apart to admit free passage of air; building open at each end. We found this to be satisfactory. We have kept some of them to test durance, and believe they will dry up without decay. The lemons that were picked when green proved bitter. Our experience thus far for best results decides us to let them color quite well, if they will do so without getting too large. Size and color are both governing influences.

My lemons that were picked early in the season and were well cured sold in the San Francisco market for two and three times as much net as other shipments were quoted. Sent some East, and the house immediately ordered five times as many as I could furnish.

I am satisfied that if we raise the right varieties and prepare them properly for market, our area for lemon culture is not large enough to meet the demand. Lemons if kept on the trees until, say, the latter part of March and April, thereby attaining large size, will decay very rapidly after being picked.

Ordinary help cannot be trusted to pick. My rules are: Cut carefully from the tree; place in the receiving basket with equal caution; keep dry; do not rub them; assort according to size, and when ready for market pack in a careful manner.

For keeping qualities the Eureka stands first; so-called Lisbon next. The Australian Lisbon is a prolific bearer, but keeping qualities poor. I have only two trees, but they gave me 20 boxes. Age of trees, eight years from bud; tree very thorny. I am planting entirely to Eureka. I consider they have more good points than any other. The only mark I can make against the Eureka is its form, and this will be obviated in a great degree by picking the fruit in the proper season and condition. If I have the true Lisbon, it is a very poor lemon for culinary purposes—too bitter.

## Plum Apricot vs. Black Apricot.

EDITORS PRESS:—Some weeks since you gave a handsome illustration of a fruit called the "Plum apricot," *Prunus Simoni*, if I remember aright. The picture and description strongly reminded the writer of the "Black apricot" which has been for many years in the standard orchard of the University of California, and to some extent propagated by nurserymen and others who have received scions from that source. It would be easy to send specimens of the fruit and foliage of the "Black apricot" to some disinterested gentleman east of the Rocky mountains who has the "Plum apricot" and find out whether the two are synonymous. The ripe fruit should also be submitted to the judgment of the State Horticultural Society. Let the fruit-growers of the State take these simple steps and they will know whether this candidate for their favor is really new and suited to their wants.

Aside from the question of the economic uses of the fruit of the black apricot, it has occurred to me that the tree may prove to be of value as a stock on which to work apricots and allied stone fruits. Its general appearance is that of a tree but little changed from its natural state by cultivation, and the slender twigs suggest suitability for cuttings that would strike root. Here in Europe it is found that the study of stocks to draft upon is of prime importance. We cannot know too much of this subject.

C. H. DWINELLE.

Florence, Italy, May 21, 1886.

PAINT FOR IRON.—A cotemporary throws out the following suggestion: "Required to produce a perfect paint for the preservation of iron and steel. It must have a high mechanical adhesive property, and be composed of material electro-negative to iron and mixed with some tenacious fluid vehicle containing no oxygen, if possible, and not liable to be decomposed by the iron beneath." Inventors would do well to give the subject their consideration.

MILDEW DESTROYER.—Sulphide of potash has proved in our practice all that has been claimed for it by the English press as a destroyer of mildew on roses, chrysanthemums and some other greenhouse plants. A quarter of an ounce dissolved in a gallon of water and thrown on the affected foliage with a fine rosed syringe will wholly destroy the fungus, and the leaves will not be injured.—*Vick's Magazine*.

## POULTRY YARD.

## Warm Weather Suggestions.

EDITORS PRESS:—In all branches of business there are times and seasons for doing some kind or kinds of work to the best advantage, and also some kinds of work can only be done at stated times in the year.

I don't think any farmer will doubt that what I have said will apply to farm work. Now a thought that I would like to have stick in the mind of each one, and all who keep fowls, is that this applies to the poultry business with a double force, and I would urge you to make a study to find out all you can as to how and when to do to the best advantage, for, as you make a success of this, and then apply your wisdom, just so far will your efforts be blessed with the chink of solid coin.

To help in this way let me give a few points that have come up in my own experience which will relate in main to warm weather doings in the poultry yard.

First, while warm dry weather is an important factor in the poultry yard, yet too much of a good thing may do harm, and so, for the health of the chicks (old and young), for July, August, and September, see that a good shade is provided for them in some shape, and do not depend on the roosting coop for shade from the sun.

Let your fowls run in the orchard, and if there is a tree near the coops where the soil is moist and loamy, there you will find the chicks in the heat of the day holding high court. Give your fowls all the room possible during the hot weather; the more you confine them, the less you will get for them, or from them, next fall.

If you have no shade trees or old buildings for their use, then buy some 1x3-inch stuff and some shakes, or in place of the shakes use old grain sacks and make a shade, for shade the chicks must have to prosper. Use your wits about it.

As July, August and September are poor months in which to hatch out chicks, I have never tried but one brood in these months, and that brood learned me this lesson: Never to try to do the like again, if by any possible means I could avoid it; and I think I can, even if I go out of the chicken business. There are several points against hatching in these months. Eggs are not apt to be fertile; the little fellows that come out are weak and seem doubly liable to diseases, and those that live do not seem to grow into good, plump, well-developed fowls, and the pullets will not lay until late in the spring when eggs are way down cheap.

Be careful and not give much, if any, corn or cornmeal during the warm weather, as it is only poison in a mild form to little chicks. It may do for a feed once a week for a change, but should be cooked, or at least soaked, till it will not swell in the crop.

Keep clean water in a cool, shady place, and be sure that it is fresh. There is no brute or fowl, or even one of the human kind, does seem to relish a drink of fresh cool water on a hot day more than a little chick, and they are large drinkers for their size. Give them thick milk if possible, as it seems to be food as well as drink to them. Another great thing in these hot days is to have the coop and runways kept very clean; to make them too clean is not in the power of man or woman. This much you can be sure of: If you don't keep them clean they will drop away on many little legs which you have not seen in the shape of lice and mites.

And, last of all, don't be afraid to use all your powers to keep your fowls in good health and the little fellows growing. Little attentions amount to large dollars in the poultry yard.

E. C. CLAPP.

South Pasadena, Cal.

## Wild Oats for Fowls.

EDITORS PRESS:—An old subscriber wishes to be informed, through the columns of your paper, whether wild oats are beneficial to poultry or otherwise. Let's hear from those of experience whether there is any stiff or briery hulls that would be like barley, or otherwise injurious.

INTERESTED.

Toll House, Fresno Co., Cal.

POULTRY IN FRANCE.—The number of fowls is estimated at 45,000,000, which, valued at 2½ francs each on the average, would amount to 112,500,000 of francs. The number of laying hens is taken at 34,000,000, and taking the number of eggs laid by each at an average of 90 yearly the total production of eggs in France would not fall short of 3,000,000,000, which, at an average of five centimes each, would amount to 150,000,000 francs. Of that number it is calculated that 100,000,000 eggs are hatched, of which 10,000,000 die as young chickens, 10,000,000 serve for reproduction, while 80,000,000 of chickens serve for food, which, valued at 1½ francs each, would represent 120,000,000 francs. To these figures must be added an extra value of 6,000,000 for coupons. Altogether, the value of poultry and eggs produced in France may be taken at 300,000,000 francs, or \$60,000,000.



## THE GARDEN.

## Various Small Fruits and Vegetables.

EDITORS PRESS:—On June 8th we were right in the height of strawberry picking. The crop is rather light this season; average picking about 60 pounds per day from one acre of ground. Varieties are Monarch of the West and Wilson, with a few other varieties on trial, such as Bidwell, Finch and Big Bob. The Wilson for this locality takes the lead, and consequently stands at the head both for market and for canning. Finch comes next; a large, fine, round berry, flavor like our old wild-meadow berry that I used to gather when a boy. Bidwell is a large, long, pointed, irregular-shaped berry too soft for transportation and rather mealy, with a flat, insipid flavor not worth much except as a show berry. Prices this season ranged well up, from 12 to 25 cents per pound.

While speaking of strawberries, perhaps our method of culture, etc., will not come amiss. We prepare our ground by plowing and grading so as to give a fall of about three-eighths of an inch to every 10 feet, and in order to do this I made a level out of 1½x4 inch pine lumber. Take one piece 10 feet long, and on each end put a leg 16 inches long, and in the center of the 10-foot piece put a spirit level. Then to give the fall, tack on the bottom of one of the legs a three-eighth inch block, and when this is set exactly level we have a fall of three-eighths of an inch to every 10 feet. With this instrument we can run a ditch or lay off ground to irrigate around the bend of a hill, or sag, as we choose, and have the desired fall, and as correctly as a surveyor's level will do it.

We mark off our rows 3½ feet apart and set our plants about two feet in the row, so as to work with horse and cultivator. We used to do all with a horse, but we find that we do not stir the ground deep enough the first time going over; so this season early in the spring we went through the patch with spades, and worked the ground up deep, and then followed with the cultivator and found it a decided improvement; the ground takes water better and our berries were larger and finer than when worked with the cultivator alone. The soil being moved to a greater depth gives chance for the roots to spread out, and we have a stronger and finer plant to produce the berries. We (June 19th) have just finished picking this season's crop; average picking about 60 pounds per day of four or five weeks' run, while last season our average was about 80 pounds per day. Thus you see there is a falling off of about 20 pounds per day. This patch contains nearly an acre, and we picked a little over 1240 pounds of berries from it and prices averaged for the whole crop about 12 cents per pound.

## Cauliflower.

I was telling one of my customers a few days ago that I would soon have cauliflower in the market.

"Well, well," said he, "that beats me; who ever heard of cauliflower in the month of June up in these mountains? What variety are they?"

"They are 'Henderson's Early Snowball,' and a sure heading variety; heads are now about five inches across."

Cauliflower likes good rich soil and plenty of water; coarse, long manure answers the purpose for a fertilizer very well. It keeps the ground loose and the water soaks through, and thus the soil is always moist. Our method of growing cauliflower, I presume, is the same as others, with this exception: we set lettuce between every cauliflower at the same time of setting out the plants. As soon as the lettuce is ready to cut, we plant some variety of early beans close to the lettuce, and by the time the lettuce is cut the beans are up; and by this time the cauliflower is ready to cut. We pull the stumps as we cut the cauliflower, and this gives the ground to the coming crop of beans. Thus we raise our three crops on the same ground the same season. This cropping can only be done on a summer crop of cauliflower. For winter cauliflower we have just sowed our seed and got it up about half an inch, and when we set out these plants we shall set Hansen's lettuce between each plant, and in this way we have early lettuce, which sells for a good, fair price when lettuce is scarce in the market.

## Blackberries.

"How do your blackberries look this season?" said one of our neighbors. "Is there going to be a good crop this season?" "Yes, I think that the crop looks well this year. They are now just commencing to turn red, and I think by the 10th of July we will be able to make a small picking."

Said neighbor B. to me a few days ago: "What do you do to make your blackberries so large and fine? You always have such a lot of them. What variety are they? I think I haven't got the right kind; mine do not produce like yours—are not as large and fine." My answer was this, our variety is the Lawton. We go through early in the spring, cut out all the old canes that bore fruit last year and thin them out to three or four canes to the hill; cut back all the laterals to about eight inches. "Well," says Mr. B., "you cut away about half of your crop." Yes, in number,

but we make up in size and quality what we lose in number, and the berries are much finer, and always sure of selling in the market, and they hold their size clear through to the last picking. Then, again, when the young shoots come up and get about four feet high, we go over them and pinch out the center bud; this makes the new growth throw out laterals clear down to the ground, whereas if this pinching out was not done the vines would have but few laterals. "I see, I see," he said; "you diminish the crop in no way by cutting back, and increase in size of fruit by the pinching out of the main shoot when young." That is it, exactly; besides, plenty of water and a light coating of manure help wonderfully.

## Cantaloupes.

Our Montreal green citron cantaloupes are now setting finely and bid fair for a good crop. Cucumbers likewise are setting heavily and are at this present time bringing a fair price in market.

## Beets for Stock.

A great deal has been said in the agricultural papers about beets for stock. We are trying it this season; have sown about one acre; but we failed to get a good stand. I do not think it was on the account of poor seed, but think it was our own fault. After planting we thought that the ground was too dry to bring them up, so we ran our furrows and turned on the water. The result was, the ground got too wet, and before we could get at it to stir the soil it got hard and the seed rotted in the ground. Now, I have sown Swedish turnips, where the beets failed to come, and thus secured a crop on the same ground. This crop we intend to feed out on the place to our milk cows and Essex hogs, as it is all-important to raise as much stock on the place as possible, or as much as the place will carry well, on account of the manure, for, as the old adage goes: "No manure, no corn; no corn, no cattle; no cattle, no manure."

## Starting Seeds.

Mr. Schneider, in the PRESS of July 3d, asks which would be the best way to start celery and cauliflower seeds. My method of starting celery is to prepare a hotbed early in the season, making the soil in the hotbed as fine as possible; soak the seed 48 hours in warm water, then sow over the bed as evenly as possible. Take a block or board and pat down the seed lightly, and then sprinkle sand or fine, well-rotted manure over the bed and firm down gently on the seeds. It takes about three or four weeks for celery seed to come up. The bed must be kept moist all the time, with a fine rose sprinkler. Manure or sand keeps the ground from baking and at the same time acts as a mulch to keep the soil moist.

For winter cauliflower we prepare a bed in the open ground in June or July, by making the soil as fine as possible; sow the seeds and cover with a slight coat of well-rotted manure; keep well wet down, and if the seeds are fresh no trouble will be experienced.

I. L. DICKINSON.

Lone Oak Farm, Sonora, Cal.

## Poor Garden Seeds.

EDITORS PRESS:—I see in last week's issue a piece on gardening. I have bought seed at the store and planted it and the result was it was worth nothing. I planted 300 plants which were bought for cabbage and they turned out to be nothing but plants grown from runout seed. Everything I planted did not make what it was labeled. I had a fine garden laid out, but got badly fooled in seed. In reply to my friend in regard to gardening, I would say to him that if he wants good seed do not buy at the country stores. If he wants to make a success in gardening he must have good, fresh seed, and it is best to buy it direct from firms which have seed farms, and furnish fresh seed true to name.

I sow all my seed in a hotbed. To prepare a hotbed take a large box and fill with manure, set at the south end of a building in the sun. Put four inches of good dirt on top of the manure, and then plant your seed one inch deep, and keep moist until the plants are up; then water every evening. I had splendid success in my plants this year. If my friend will get his seed of a responsible firm I think that he will have success in his garden. Potatoes should be planted in loose soil and about four to five inches deep. Sweet potatoes should be put in a hotbed or in a nice sandy soil to start. I start mine in a hotbed. A. S. C.

Elmira, Solano Co.

[Our correspondent advises planting seed one inch deep. That would not do for all seeds. Depth should be proportional to the size of the seed. An old rule is to plant as deep as four times the diameter of the seed. But depth depends upon moisture, etc.

There is no doubt much poor seed sold at the country stores, and yet it need not be so. If country merchants would take pains to learn the results from the seeds they sell, and then refuse to take any more from a seedhouse which imposed upon them, we should have the wretched business in poor seed and "killed" seed stopped. There is no reason why country

storekeepers should not sell good fresh seed, unless they are careless or their cupidity leads them to listen to the seed drummer who offers the largest discount. Selling poor seed, if it is done carelessly or designedly, is robbery. To guard against loss of time and labor, the planter should buy his seed early and test its germination, as described in the RURAL of July 3d, before he puts it into the ground.—EDS. PRESS.]

## THE FIELD.

## Wheat Crops and Prospective Market.

EDITORS PRESS:—Press telegrams give the *Rural New Yorker* as authority for the statement that this year's wheat crop of the United States is 435,000,000 bushels against 357,000,000 last year. Evidently the estimate is based on returns made at least a fortnight ago, since when fuller information of the damage during the last month to the crop in the West, Northwest and in this State has been received. Even now there are many in this State not willing to accept so large a percentage of damage to the California crop as my returns and those of other persons give. I am not in possession of the *New Yorker's* detailed estimates, therefore cannot state if it takes the bag pool's estimate of our crops or the estimates of conservative and well-informed parties. The bag pool puts the California wheat crop at 60,000,000 bushels before the damage by winds, but well-informed parties only placed it at 45,000,000 and now at 36,000,000. This is quite a difference. But accepting the *New Yorker's* figures as correct and the following is the result:

This year's crop, 435,000,000 bushels, carry-over visible and invisible from the crop of 1885—86, 65,000,000. Total, 500,000,000 bushels.

Last year's crop, 357,000,000 bushels, carry-over visible and invisible from the crop of 1884—85, 155,000,000. Total, 512,000,000.

So this season is entered under the most favorable circumstances with a lessened supply of 12,000,000 bushels. If last season's supply of 512,000,000 bushels was reduced to 65,000,000 bushels at the end of the season, the 50,000,000 supply ought to be reduced to at least 45,000,000 bushels.

This season the consumption for food will be greater, owing to increased population, and for seed there should also be a larger consumption, as the acreage seeded to wheat last fall and spring did not equal that seeded to wheat the preceding fall and spring. The surplus or carry-over is based on the ground that the United States does not export any more this season than the season just closed. If our exports are larger, then the carry-over will be just so much less; and that the exports will be very considerably larger is generally admitted by the best informed statisticians, and if such proves to be the fact, we will have a smaller carry-over in this country than for many years past.

Turning from the country at large to this State and the following is the situation: Total crop 1,400,000 tons, of which there will be required for seed and food 350,000; giving us a surplus for export 1,050,000 short tons. The carry-over from the season of 1885-6 is 75,000 tons, which added to the estimated surplus gives us an exportable surplus of 1,125,000 short tons. Last season the surplus for export was 550,000 short tons; carry-over 325,000. Total, 875,000 tons, against 1,125,000 tons this year. These figures give us an increased surplus this season of 250,000 short tons. Last year at the commencement of the crop season, the tonnage on the way and in port loading and disengaged was 140,000 tons carrying capacity less than at the commencement of this, the present season. Deducting the increased tonnage from the increased crop and there is only 110,000 tons difference between now and then, with the present situation decidedly more favorable for the drawing of more tonnage than last season. This last assertion is based on the failure of the Australasian wheat crop, which has and will continue to set the Australian fleet toward this port for return cargo to England.

Viewing the situation in all its bearings, I fail to discover anything to discourage farmers, but, on the contrary, everything to encourage. Of course, whenever there is a selling pressure buyers will take advantage of it, and get their supplies at as low a figure as possible, but then there does not, at this writing, appear any valid reason for farmers to sacrifice their grain at present low ruling prices. J. B. F.

San Francisco, July 8, 1886.

THE flowering plants known to botanists, says the *New York Independent*, are, in round numbers, about 100,000 species, but it is not improbable that, by the time all the recesses of the earth have been explored, the number will be largely increased, if not, perhaps, doubled. The whole interior of China is, so far, comparatively unknown; and, so far as the borders are occasionally penetrated, continually gives new species.

THE AIR OF THE SEA.—The air of the sea, taken at a great distance from land, or even on the shore and in ports where the wind blows from the open sea, is an almost perfect state of purity.

## FRUIT MARKETING.

## To the Fruit-Growers of California.

EDITORS PRESS:—The California Fruit Union was organized for the purpose of providing means by which the producers of our fruits might dispose of their productions in the Eastern markets to best advantage, thereby relieving the local markets so that local prices would be profitable to the grower, and so that the profits on these products might be saved to the growers instead of going into the pockets of speculators in these articles. The first two ends have been attained—at least the means are at the disposal of the growers. Yet with the opportunities at their disposal many of our fruit-growers fail to avail themselves of them, but continue to sell their fruits to speculators for Eastern shipping. The results to those shippers are generally very profitable; besides, by competing with the shipping producers they reduce the general average account of sales.

We fruit-growers found ourselves at the mercy of a few speculators, who made prices for our goods, and by competition in Eastern markets reduced prices there by glutting the various markets one at a time. To make profits they necessarily had to make low prices here. To avoid such occurrences in the future, we concluded to throw off their yoke and concentrate our products in the hands of a central agency for judicious distribution.

We have the power to do this. Do we intend to use it? If we do, instead of selling to the speculators, we should ship our own goods, on our own account, to our central agency, and reap the profits the speculators otherwise will get, which, on nearly all shipments made this season, when the goods have arrived at their destination in good condition, have been good.

Now, the question arises, will we ship our own goods, or will we sell them to others? Will we make these profits or will we still allow the speculators to have them? The way is open. We have our facilities for the shipping second to none; we have the best house in the United States as our general agent, a house, the reputation of which insures fair dealing with all, highest prices, sure and quick returns. Those who have in the past availed themselves of the services of this house will continue to do so. Is this no inducement to others to try them? We hope it is, and that the coming weeks, months and years will find our fruit-growers using the best facilities at their command for their own welfare. We hope that our union may be what it is intended to be, the great distributor of our products in the Eastern markets, returning satisfactory results to all its members, and incidental benefits to all engaged in like pursuits.

The outflow of apricots through the union has resulted, with few exceptions, very satisfactorily to the producers shipping, while the results on those not shipped the duldest of us can realize, when canners pay in San Francisco 3 to 3½ cents per pound, and at railroad stations 2½ to 3 cents per pound. All we now have to do is to stick to our text, "Concentration and judicious distribution," and our union will be a grand success.

Members will send their fruits in any sized lots, from 10 boxes to 10 carloads, to our manager, L. W. Buck, Sacramento, and it will be taken care of. Trains will be made up just as soon as our members will put their fruit in the cars. Surely, if speculators can buy our fruits and dispose of them profitably to themselves, we, who have the best facilities which it is possible to get, can do so. Or do we prefer to abandon the idea of a union, and place ourselves where we were before we started it?

The prices of our fruits to-day are in a great measure due to the California Fruit Union, and much to the endeavors of the fruit speculators to break it up. While many of our members are directly and indirectly giving aid to a combination of speculators, a few are working steadily and earnestly to frustrate their endeavors to destroy the union. Many members ask why we do not make trains. How can we, when our members sell their fruits to those who are endeavoring to break up our organization?

Where will we land when we have much fruit and no union? Last season there was not such a great quantity of fruit, and no union. What did you get for your fruits? Be careful that too many of you do not trust this great salvation to too few to work out. Those who are working for the union are doing it for the best interests of the fruit-producers, and will do everything in their power to benefit us all. But, for mercy's sake, do not do all you can to aid the speculators in their endeavor to put us where we were last year—simply at their mercy. They have no powder, unless you sell it to them; they will find it necessary to club muskets and retreat as best they can, if those of us who have shipping fruits will stand by and send part of it by the union, and sell the balance to canners and the local trade. Then we will succeed in our endeavor to help ourselves. We pay our money; we take our choice. The future will tell how well we pleased to do for ourselves. "United we stand; divided we fall." Suirun, Cal. A. S. HATCH.



## PATRONS OF HUSBANDRY.

Correspondence on Grange principles and work and reports of transactions of subordinate Granges are respectfully solicited for this department.

## Sacramento Grange.

EDITORS PRESS:—At the meeting of Saturday last, Bro. W. G. Klee, Inspector of Fruit Pests, was present and gave a short outline of his visit among the fruit-growers, and his intention of continuing his visits at various points. He finds plenty of work for a local inspector of pests in this county, and urged the Grange to take some action in having one appointed. He had at that day been at Davisville taking notes, and giving instruction how to conquer the evils that are continuing to spread throughout the State.

Bros. Lufkins, Greer, W. M. Hack, and others, participated in the discussion. The matter was laid over for two weeks to come up under the head of unfinished business, when a more extended discussion by the fruit-growers will take place.

A class will take the fourth degree the fifth Saturday of this month at 10 o'clock A. M. On the same day in the afternoon the Pomona Grange will meet and confer the fifth degree on a class, and all will unite in a harvest feast.

The literary exercises of the Grange will take place the second Saturday of August.

Farmers and fruitmen are very busy. The fruit is good as far as the crops last. The grape crop will be large. G. T. R.

Sacramento, Cal.

## Legal Honor in the Senate.

On June 10th the United States Senate, by a vote of 37 to 11, passed a bill, introduced by Senator Beck of Kentucky, prohibiting Senators and Representatives from being the hired attorneys of railroad corporations on which they are to sit as judges. Senator Hawley, of Connecticut, says the bill was sprung upon the Senate suddenly and stamped through. The general public say that its obvious propriety left the Senators without any ready ground of opposition and without the effrontery to vote against it. Out of the 76 Senators, however, 65 are lawyers, and if the bill becomes law, a large proportion of these who are either permanently retained by the roads or receive large fees from them, will be deprived of a rich source of income. Remember, many of them are employed, at high figures, precisely because their position as legislators enables them to be of service to their clients in matters of legislation, and the whole course of the Senate shows that it has been steadily subservient to these great subsidized corporations, and that any law, however urgently demanded by the interests of the people, if hurtful to those of any of these corporations, can be passed by that body only when the force of public sentiment in its favor becomes irresistible.

On June 22d, therefore, the bill was "reconsidered" by a vote of 31 to 21, and instead of being passed, as the public had a right to expect, was sent to the Committee on the Judiciary, made up entirely of lawyers, most of whom are the hired agents of corporations. Thirteen of the Senators—ten of them Republicans—who originally voted for the bill subsequently voted in favor of putting its fate into the hands of its deadly enemies. Mitchell, of Oregon, wanted to swamp the bill with ridiculous amendments. Evarts, of New York, regarded it as a stigma on the Senate and an insult and reproach to the legal profession, whose members are incapable of subordinating the interests of the public to those of their clients and themselves! Edmunds, of Vermont, thought it required an ideal honesty in Congressmen, such as can only be found in an angel-governed world.

In a body made up almost entirely of lawyers whose *esprit de corps* is notorious, Evarts' appeal was the most powerful, but the federal laws already contain many provisions for prohibiting lawyers in Congress from accepting fees to work for corporations and against the people. By laws passed by the Senate, a Senator is forbidden to take fees for procuring a contract or an office, or for any sort of service on any question which may be brought before him in his official capacity; or to take bribes, or to hold an interest in public contracts, etc. If these are not insults to the Senate or the legal profession, why should the provisions of the Beck bill be so regarded?

All the special pleading of all the lawyers in the Senate, which contains many of the best special pleaders in the country, will not convince the great public that men who, as representatives of the people in the highest legislative body in the nation, are called upon to legislate on the obligations of subsidized railroads to the Government and the people, should have fat fees from those very railroads at the time in their pockets. A question forced on public attention by this discussion is: "Is it right, is it expedient, is it for the public interest that 65 out of our 76 Senators should be lawyers?"—*Rural New Yorker*.

## Stockton Notes.

[Written for RURAL PRESS by Mrs. W. D. N.]

Two sharp midnight shocks of earthquake shook us from June rest into July. The night was still, with its sulphurous beauty of sky and glory of stars, divided by the sun's wide track. It is 18 years since we have had such a shaking. Then, milk was slopped from pans on the racks, gates opened and shut with a bang, and orchard trees bowed to each other, giving poor mortals an awful sense of helplessness, as the earth, that seems so reliable, swayed with pent force.

The just law to protect human life was executed June 29th, quietly, and with all the refinements of our high civilization. Uzza F. French, brought here for trial from Amador county for killing his brother-in-law, nearly three years ago, was hanged, after all efforts to clear him had failed. If a few more were strung up it might clear the papers of the sickening details that load them. Even he could sing "Washed in the Blood of Jesus" and feel that the blood bought pardon and the prayers of Father Brennan made him ready.

The plans of Colonel Myers, the Detroit architect, were accepted, and the courthouse is to be a fine edifice with regard to beauty of architecture, space, ventilation, light and all modern needs. The *Independent*, in a sensible and timely editorial, urges that granite from our foothills, not 60 miles distant, be used, that centuries to come may look upon the building that is to be the pride of our day.

The medical profession has lost one of its most upright and able members, Dr. E. A. Stockton, President of the City Board of Health. A courteous gentleman, fulfilling the duties of home and society cheerfully while struggling with ill health.

The pulpit reminded hearers of the Fourth with its sacred memories and present blessings, and the piff and whizz of boyish firecrackers broke the stillness of Monday. In the country, work went on in the harvest, for people feared fire, and a hard year had closed on them, and hay and wheat and everything a farmer sells is low, and economy—old, homely, almost a stranger—is set up, and her mandates deemed wise, even pleasant.

Most all grain is falling short of expectation, owing to shelling by the norther June 12, when it was in the dough—swelled to the utmost and shelled easier than when ripe. Some fields are badly lodged and twisted, and bother new harvesters. A Houser near here has averaged 20 acres a day.

Peach and Early June apricots do far better here than the Moorpark. The peach crop is very light. Now that it is canning and jelly-making time, I wish to recommend Cornell & Shelton's gummed labels (Birmingham, Conn.) I received the book from the RURAL PRESS office and find it so convenient for pasting on glass, tin or boxes.

Few persons do anything to prevent codlin moth, still early apples were good.

San Joaquin Pomona Grange, No. 3, has decided to compete for premium at the State fair, though fruit is not as good as usual, except grapes. Few fine sheep are kept now to furnish fleeces, because they don't pay. Stockton Grange held a spirited meeting on Saturday, June 10, to help on the Pomona exhibit.

Stockton.

## In Memoriam.

Sister Jane A. Holliday, one of the charter members of Alhambra Grange, has recently passed away, and the Obituary Committee, consisting of E. E. Smith, W. A. Fraser and Mrs. M. B. Lander, speak of her pure, quiet life in these fitting terms:

Again has the angel of death passed over Alhambra Grange, not to gently remind us that he hovers near, but to fold in his icy arms the form of another sister.

On the first day of the month he took one of our younger sisters, and again, ere the month is gone, he calls sister Jane A. Holliday, one of our charter members and second of that substantial 26, who has taken the degree of death—a degree beyond the pale of the subordinate Grange.

From the household has gone a prop; husband, daughters, sons and grandchildren have lost their best friend, and the place that knew her once shall know her no more. Her pure, quiet home-life that reached as well to neighbor and friend, has been one long sermon of patience and fortitude, and has left a fragrance that will follow all of hers, even to generations unborn. In the home is a vacant chair, in the Grange a void, in the neighborhood is a loss; yet over all and through all is a memory that will be lasting and pleasing when the marble slab that marks her resting place has crumbled into dust.

Alhambra Grange has lost a loved and respected sister, and in her sympathy whispered to the saddened household, "Your loss is her gain." She has but taken a higher degree, one given at the call of the Heavenly Master, and waiteth on the other side till, in the Master's own time, this same call cometh to her earth-waiting family and friends.

Valley Grange, also, has been called upon for the first time to mourn the decease of one of its number, John E. Martin. The resolutions—prepared by A. Thurber, D. P. Griffin and Harriette T. Bailey—declare that in his death the Grange loses one of its choicest members, the community one of its best citizens, and his home one of the best of sons and brothers.

HARVEST FEAST.—Temescal Grange will confer the fourth degree, opening at 10 o'clock, Saturday, July 17th. Remarks on a recent visit to Oregon will be expected from Rev. S.

Goodenough, of Santa Clara. Also, speaking by other able Patrons and Matrons. All Patrons are cordially invited, and especially from Eden and other neighboring Granges.

We were in error in stating that Mr. D. Lubin would speak at the next literary exercises of Sacramento Grange. Mr. Lubin has promised the State Grange Committee on Literary Exercises to be ready to address the next meeting of the State Grange on "How to Perpetuate the Republic."

## AGRICULTURAL NOTES.

## CALIFORNIA.

## Fresno.

APPLES.—*Fresno Republican*, July 9: While it is a demonstrated fact that some varieties of apples grow to perfection in this immediate vicinity, it is equally well known that most varieties obtain greater perfection in the foothills than they do in the valley. The probabilities are that in the course of development of the fruit industry the bulk of the apple product in the county will be in the foothills, although there are now but comparatively few produced there. We were shown this week a twig six inches in length from a young apple tree in the orchard of H. Knepper, on Fancher creek, some six or eight miles above the plains. The twig contained some 14 young apples, and was removed with many others because the tree was overloaded. The fruit was thinned out by picking off some of the young fruit, but the tree was so overburdened that many twigs were removed entire. All the apple trees in the orchard are loaded with fruit, and the varieties which are ripening appear to be first quality.

## Humboldt.

FROM SOUTH FORK.—*Cor. Humboldt Standard*: We had the pleasure of a five minutes' talk with Mr. Jacobson, proprietor of the Palace shoe store, Vance block, yesterday, who has just returned from his fine ranch on the South Fork of Eel river. He says feed is splendid in that section, and that the country and stock never looked better than they do this year. Fruit, he thinks, will not be quite so abundant as last year, but the quality will be superior. Grain looks fine and will yield well. Mr. Jacobson owns something near 500 acres of land in this section. It is a very valuable property and is so situated that it must in time greatly increase in value. From Mr. Jacobson we learn that Captain Stinson, well known in Eureka, having formerly lived here, is improving his place at Phillipsville by the erection of a fine barn. Captain Stinson's place is one of the very best on South Fork. The captain has put out a little prune orchard which is coming on very well indeed. The old orchard on the place is one of the largest and most productive in that section. Mr. Jacobson's family remains at South Fork, and he will himself return there in a short time for further recreation.

## Lake.

EDITORS PRESS:—I send you by express a small box of tomatoes grown on the hills, without any water, where two years ago was a waste of rocks, brush and trees. I send you these, as they may be of interest to some people who want homes in California. There are thousands of acres of as good land vacant in this county waiting for some man with a little money and plenty of industry. I planted on the hill, for experiment, where it is very steep, peas, beans, tomatoes and corn, and all are doing or have done well. If I had had better variety of tomatoes for early kind I think I could have been some weeks earlier. Fruit crop—peaches, a half; plums, apples and grapes, very good. — MAURICE KEATINGE, Lower Lake. [The tomatoes duly arrived, have been put to the practical test and prove good enough for anybody.—EDS. PRESS.]

## Los Angeles.

FRUIT SHIPMENTS.—*Anaheim Gazette*: Messrs. H. E. Cornwell and Williamson Dunn, of Los Angeles, connected with the freight department of the California Southern R. R., were in town yesterday. They are offering special inducements to shippers of grapes to patronize their line. They will send through fruit trains of not less than ten carloads, on passenger time, at the rate of \$280 per car to Kansas City and \$300 to Chicago. A less number of cars would pay proportionately more, and a single car attached to passenger trains would cost \$450 to Chicago. Last year's rate was \$600. It will be possible under this reduced rate to get our grapes to Eastern markets at a price which will place them within the reach of the masses, and thus stimulate the demand for them.

## Mendocino.

HOP-GROWERS' ANNUAL MEETING.—*Dispatch*: The Hop-Growers' Association of Mendocino county held its regular annual meeting Saturday, July 3, 1886. When the meeting was first called together there was not a quorum present, but after an adjournment of an hour the association reconvened, found a quorum present, and proceeded to business, L. F. Long, president, presiding. The minutes of the previous annual meeting read and approved, while the minutes of the special meetings were passed over unread. Treasurer McGarvey's annual report was received, and approved as correct, and

Secretary Poage's report was also approved. The election of officers resulted as follows: President, L. F. Long; Vice-President, W. D. White; Treasurer, Robt. McGarvey; Secretary, J. A. Poage; Directors, J. B. McClure, N. Bartlett, T. S. Parsons, Berry Wright, J. E. Johnson, B. Pemberton and A. J. Gibson. Notice having been given at the former annual meeting, by B. Pemberton, that he would offer an amendment to the first article or section of the by-laws, reducing the membership fee from \$5 to \$2.50, it was taken up for action, and the amendment adopted. Notice of an amendment to the by-laws was then given by W. D. White, worded as follows: "Any member of the association who removes from the county, or ceases to be a hop-grower, his name shall be stricken from the roll."

## Placer.

GROWTH OF TREES, ETC.—*Auburn Herald*: R. G. Breckenridge owns—or did until a few days ago, when he sold out to Mr. Olsen, of Sacramento—a beautiful place a little more than a mile south of Auburn. He has a full assortment of trees, vines, etc., many of which are in bearing, and none of which have ever been irrigated in the least, except by the showers of nature. Mr. Breckenridge cultivates thoroughly, and the place is a splendid illustration of the practicability of the theory of cultivation instead of irrigation. The growth of his trees is rank, and those in bearing promise a liberal yield, according to their age, of excellent fruit. To illustrate the thriftiness of his trees and vines, he left with us last Monday some samples of this year's growth. There were peach, pear, apple and plum limbs on which the new wood was from four to six feet long. One rank old blackberry vine was literally loaded with fruit, and another of this year's growth measured between six and seven feet. Every limb left with us shows the highest degree of thrift and vigor. In the hay line Mr. Breckenridge has just harvested a crop, and a bunch of rye grown on his place can be seen at the office which measures eight feet and three inches. This place is above the ditch, and Mr. Breckenridge could not conveniently irrigate if he was disposed to. He, therefore, adopted the cultivation theory from necessity, and the excellent result he is attaining promises to go a long way toward solving the irrigation question so far as the red land of the foothills is concerned.

## Sacramento.

THE FRUIT COMMITTEE.—*Record-Union*, July 13: There was a good attendance of the fruit committee at their meeting held yesterday at 1 P. M., at the office of W. P. Coleman, R. D. Stephens in the chair. Much interest was shown in the success of this branch of the reception. A resolution was adopted requesting the supervisors to make a suitable appropriation for the entertainment of the G. A. R. on August 11th. The following names, previously omitted, were added to the fruit committees at the following places: W. F. Crommiller, Penryn; J. H. Burnham, C. Ecklon, Polson; H. Mette, Mormon Island; Mr. Gillet, Nevada City; Senator Pirschner, Auburn; Senator F. De Long, Novato, Marin county; Mr. Le Franc, San Jose; Arpad Haraszthy, San Francisco; Mr. Portal, San Jose. The meeting adjourned to meet on August 2d, at 1 P. M., at W. P. Coleman's office, 325 J street.

SUN-DRIED APRICOTS.—G. S. Brown, of Vacaville, was in Sacramento yesterday, and exhibited samples of sun-dried apricots, which were very fine. He states that they are worth 17 cents per pound dried, but that even that price does not equal what they brought green this season, as it takes from five to six pounds of the green fruit to make one when dried. The best quality will make a pound of the dried fruit from five of the green, but less choice in quality will require six pounds. Mr. Brown states that the fruit dried nicely in two days, a third day being given after gathered and placed in a shady place.

HOPS.—A Chinese hop-grower on the river sold his crop yesterday for 21½ cents per pound. Last evening it was reported that 25 cents per pound was being offered by buyers. Evidently "hops are hops" again this year, and though the big prices of a few years ago are not looked for, growers will make a nice profit.

## San Bernardino.

GREVILLE ROBUSTA.—*Riverside Echo*: The wonderful flowers of the Grevilla Robusta are now in bloom. They are of a lovely toothed comb-like structure, the teeth or fringes standing up, deep red at the base and yellow at the top. The general effect is rich, rare and delicate in the extreme. They can be seen in front of Dr. Patton's orchard, also A. S. White's and in Mrs. Gilliland's lovely lawn.

## Sierra.

SHEEP.—*Sierra Valley Leader*: Deputy Assessor and Constable Danforth went to the Little Truckee bridge on Friday last to collect the new tax, according to a recent county ordinance, on 3000 head of sheep about to come into the county. The ordinance requires that all sheep not owned in the county shall pay a tax of five cents each to the county. The "gall" of these lower country sheep men is without limit. They bring up their sheep to eat up the pastures that our own ranchers need, and destroy our roads by filling them with stones and debris from the hillsides, and are not even willing to repair the roads they destroy, which the mountain counties have to expend



large amounts of money in the repairing. They destroy the feed and the public highway without paying one cent, either directly or indirectly, into the county treasury; make a fuss because we wish to work our mines, and injure us in that way, and then some come up here and eat up our feed. Our people are getting tired of it, and thus the recent county ordinance.

Solano.

FRUIT SHIPMENTS.—*Judicion*, July 10: During the past ten days there have been forwarded from Vacaville the following fruit shipments: July 1st, 203,540 lbs.; 2d, 202,630; 3d, 216,530; 5th, 82,740; 6th, 224,095; 7th, 228,640; 8th, 175,543; 9th, 198,500; 10th, 195,095; total, 1,727,363 lbs. This is only the beginning of the season, and from the above figures we feel no hesitancy in saying that there can be no question about the grand future in store for Vacaville. The enormous quantities of fruit forwarded daily from this place to points throughout the State, and to Eastern markets, must be conclusive evidence, even to the most obtuse observer, that Vacaville can have no equal in the production of fine fruits. The main street of our village during the past week was thronged with commission merchants, canery agents, representatives of Eastern forwarding firms and local buyers, all bent on the purchase of our fruits. The scene presented reminded one more of a day on 'change, during the halcyon days of the Comstock, than anything else we can liken it to.

TOMATOES.—*Winters Express*, July 9: For the four days past, ending on Wednesday noon, B. R. Sackett & Co. shipped from the Winters depot 2203 boxes of tomatoes, for which they have received good prices all the time—better than they did last year.

APRICOT DRYING.—As an evidence of the good done by the apricot drying we mentioned last week, we herewith give a statement of the number of pounds of apricots bought, the money paid therefor, and the amount paid the hands for cutting, spreading, etc. Number of pounds purchased from the growers, 81,408, for which was paid a cent and a half a pound, or \$1221.12; amount paid for help, a little over \$300. It will be seen from this that over \$1500 have been left in this community.

Tulare.

THE CATTLE SENT OVERLAND.—*Visalia Times*: The *Times* is indebted to D. Markham for a copy of the *Kansas City Journal* of June 15th, which contains the following item of interest concerning a lot of cattle that were shipped from Tulare recently, and which were mentioned in the *Times* of the 10th instant: "The arrival of 23 carloads of California grass-fed cattle in the city, yesterday, marked the opening of a heretofore undeveloped branch of the cattle trade, one which bids fair to develop to large proportions. The cattle were consigned to the Fish & Keck Company, and were the first that have ever been shipped this far East. Notwithstanding the long and tedious journey they appeared in good condition and above the average in weight. They sold for \$4.62½ per hundred and were shipped by G. D. Bliss, of Tulare county, Cal. The cattle from this State are high grade, and it is believed this experiment of shipping them to Kansas City will prove a success." The price mentioned in the above article is for live gross weight, and is equivalent to \$9.25 per hundred according to the California method of selling cattle.

MESQUITE.—Mesquite grass and red clover are excellent forage plants, and they have been successfully grown in this county. H. C. Moore, of the Rancho de Kaweah, who has been experimenting largely in growing grasses, was in town on Monday last and left at the *Times* office a sample bunch of each of the above-named grasses. He sowed 10 pounds of the mesquite grass a year ago last March. It grew to be about two feet high during the season and died, apparently, without going to seed, which caused Mr. Moore to believe that it was not adapted for the soil in this valley. In April last, however, he discovered it growing in the field again, and it has since attained a growth of four feet four inches, and has headed out nicely. It has also scattered over the ranch somewhat. Mr. Moore having found it in places over half a mile distant from where it was sown by him. He says that it will cut a ton and a half to the acre and is a fine fodder, especially for horses. The sample bunch of red clover is three feet in height. It was first sown on this ranch about three years ago, and thrives well on the moist land along the Kaweah river.

NEW WELLS.—General Turnbull, of the Pacific Coast Land Bureau, has just received a dispatch stating that an enormous flow of water had been struck upon the land of M. Spring, in the Tulare valley, of an artesian well. A six-inch pipe being sunk to the depth of 415 feet had penetrated a water-bearing stratum that sent up a column of water nearly five feet above the surface. This is the largest stream yet found in the famous artesian-well belt of Tulare valley, and is close to some of the lands of the Tulare colony.

Ventura.

HONEY.—*EDITORS PRESS*:—Extracting is about over in this county, and the crop does not come up to the estimation formed earlier in the season. The average is about one-half or possibly two-thirds that of 1884. Sumac is just coming into bloom, so that the bees will be able to fill up for winter stores. The quality of the

honey is good. The bee men are inclined to keep the honey in their own hands for the present.—*S., Santa Paula.*

THE NEW FRUIT DRYER.—*Free Press*, July 9: A *Free Press* reporter visited the new fruit dryer of W. T. Coleman & Co., on Santa Clara and Canada streets, yesterday afternoon, and was cordially welcomed by the obliging manager, Mr. Bailey. It did not take long to make a tour of the works for, although extensive, they are all on one floor. There are two dryers, each containing 16 chambers, having a combined capacity of 60 tons of fruit per day. Just now they are handling 24 tons, which is all that is procurable, and the average time of drying is from 10 to 11 hours. If the fruit were better, of course it would require a longer time for its preparation. Entering the works at the south door you come first to an entry, and on the left is a commodious office and to the right a large store-room. Passing then through a low arch, we come into the pitting room where there are now only about 20 pitters at work, utilizing about one-eighth of the available space. The pitters, women and children mostly, are paid by the tray and average \$1.15 per diem each. The dryers are in the center of the building, and are built after the old Smoltz patent improved by Blatchley. Their principle is a current of hot air passing from a furnace on a level with the fruit chambers and carried off by immense exhaust flues on top of the building. By this process only about 10 degrees of heat are lost from the current passing through the entire length of the fruit chambers. The fruit is shipped in sacks to the home house in San Francisco and is there put up in attractive packages best suited to the market demand. All the first-class fruit, however—which will be very little this year—is labeled as coming from Ventura county, and the poorer grades are sold under fancy names. The company have large establishments at various points on the coast and the same plan of shipment is followed at all of them. The dryer will be run during the apricot season, closing about September 1st, and will work to some extent on prunes and figs. Apples and pears, Mr. Bailey says, it will not pay to handle at present market prices.

ARIZONA.

PINK EYE.—*Phoenix Herald*: The pink eye has broken out quite seriously among the horses of the valley. Mr. McCann's stallion, Orphan Boy, is suffering from it badly, and Mr. Wm. Isaac has had two horses down with it. The first symptoms are a general stiffness much like founder. When this is observed the animal should at once be given a purgative and turned out to pasture, when they will generally recover. A few hours' driving or work after the stiffness begins to come on may prove fatal.

NEVADA.

FATTENING CATTLE ON HAY.—*Reno Gazette*, July 12: Farmers East would laugh at a man who would talk about putting fat on cattle in winter with hay, but here it is a regular business. The following statement shows the gain from feeding 133 head for 5 months and 12 days. The cattle left Reno on April 12th. They weighed 1170 gross when they came in October, and would not net half of it because they were not in shape; so the gain is even more than appears in the statement. They were called 585 when they came, and the statement nets them 636 pounds dressed.

OAKLAND, May 8, 1886.

D. C. Wheeler in acct. with Grayson, Owens & Co. Dr. Oct. 30, 1885, to 133 beeves, 76,705 pounds, \$3871.50.

Cr. May 1, 1886, by one steer died, \$29.11, 132 beeves, 83,993 pounds, \$6080.99.

WASHINGTON.

A SHORT HOP CROP.—*TACOMA*, July 9: The hop crop in Washington Territory, as estimated by competent judges, will be about 20 per cent short, caused by slack culture, due to a low market during the early stages of the season. The recent copious rains have done the hops much good, and as the season is late and growers in many cases yet cultivating, it is hoped to bring up the yield to within 15 per cent of last year's crop. About 3000 bales of the incoming crop have been contracted for October delivery, varying in price from nine cents (the lowest) and 25 cents (the highest) paid to-day, and this far the highest for the season. Twenty-two and a half cents has been offered for large quantities and refused, as growers are now disposed to await developments as to the amount of damage to the New York crop, daily reported here. The grade of this year's growth is sure to be good, as a light yield always improves the quality. There is no disease of any kind, and, in fact, never has been in hop plants of this region for the whole period of 17 years in which hops have been grown here. The yield for the Tacoma district, which includes Puyallup valley, will be something near 2,500,000 pounds, and for the whole Territory about 3,000,000 pounds.

A PAINT FOR WOOD OR METALS.—A mixture of zinc white with zinc chloride is found to furnish a paint of great value both for wood and metals, as it becomes very hard, and can be washed and brushed without injury, which qualities are, of course, of prime importance.

PACIFIC COAST WEATHER FOR THE WEEK.

[Furnished for publication in this paper by NELSON GOROM, Sergeant Signal Service Corps, U. S. A.]

	Portland.			Red Bluff.			Sacramento.			S. Francisco.			Los Angeles.			San Diego.		
DATE.	Rain.	Temp.	Weather.	Rain.	Temp.	Weather.	Rain.	Temp.	Wind.	Weather.	Rain.	Temp.	Wind.	Weather.	Rain.	Temp.	Weather.	
July 7-14.	Rain.....	Temp.....	Wind.....	Rain.....	Temp.....	Wind.....	Rain.....	Temp.....	Wind.....	Weather.....	Rain.....	Temp.....	Wind.....	Weather.....	Rain.....	Temp.....	Weather.....	
Thursday .....	.08	67	S Cy.	.00	83	S Cl.	.00	80	SW	Cl.	.—	60	W	Cl.	.00	91	W Cl.	
Friday .....	.30	70	NW Cl.	.00	90	NE Cl.	.00	79	NW	Cl.	.00	73	W	Cl.	.00	95	SW Cl.	
Saturday .....	.00	76	NW Cl.	.00	92	N Cl.	.00	85	SW	Cl.	.00	66	W	Cl.	.00	80	SW Cl.	
Sunday .....	.00	81	SE Cl.	.00	98	W Cl.	.00	86	SW	Cl.	.00	66	W	Cl.	.00	86	W Cy.	
Monday .....	.00	68	NW Fr.	.—	90	N Cl.	.00	86	SW	Cl.	.00	66	W	Cl.	.—	87	W Fr.	
Tuesday .....	.00	74	NW Cl.	.00	103	NE Cl.	.00	91	W	Cl.	.00	65	SW	Cl.	.00	90	W Cl.	
Wednesday .....	.00	76	NW Cl.	.00	104	S Cl.	.00	91	SW	Fr.	.00	69	SW	Cl.	.24	79	N Cy.	
Totals.....	.08			.—			.00				.—				.24			

EXPLANATION.—Cl. for clear; Cy., cloudy; Fr., fair; Fy., foggy; — indicates too small to measure. Temperature Wind and weather at 12:00 M. (Pacific Standard time), with amount of rainfall in the preceding 24 hours.

Senatorial Conflict on the Debris Question.

On Tuesday of this week there was a conflict in the United States Senate over the debris question, in which the two senators from California found themselves vigorously opposing each other. We give such information on the matter as is given in the several press dispatches this (Wednesday) morning.

Special Dispatch to the "Morning Call."

WASHINGTON, July 13.—Senators Hearst, Jones, of Nevada, and Ingalls, of Kansas, succeeded to-day, by combined effort, in defeating Senator Stanford's amendment to the river and harbor bill, to prevent dumping debris or slickens in the Sacramento, Feather or San Joaquin rivers and their tributaries. The Senate Commerce Committee struck from the bill the House proviso, which read as follows:

The Secretary of War, if he be not so satisfied, is hereby instructed to institute such legal proceedings as may be necessary to prevent washing, sluicing, dumping or discharging detritus, debris or slickens, caused by or arising from hydraulic mining by water used through pipes and used through nozzles under pressure, into either of said Sacramento and Feather rivers or any of their tributaries, or to such place or situation from which detritus, debris or slickens may be liable to be washed or carried by storms or floods and either of said rivers or tributaries, and he is hereby instructed to use out of said sum as much as may be necessary for said purpose.

Senator Stanford yesterday moved its insertion as an amendment, and debate began yesterday afternoon and lasted nearly three hours to-day.

Further in the bill is a general clause relating to all rivers that Ingalls, in his opposition to Stanford's amendment, claimed would cover the Sacramento, Feather and San Joaquin rivers. This clause, which Ingalls also savagely attacked, provides that it shall be unlawful to dump, discharge or wash, or cause to be dumped, discharged or washed, from any mine or mineral land or bank, tailings, boulders, gravel, clay, earth or debris, into any navigable waters or rivers for the improvement of which Congress has made or may make appropriations, or into any tributary branches or affluents of such waters or rivers. The flimsiness of Ingalls' argument lay in the fact that there is an appropriation of \$210,000 for the improvement of these rivers as soon as the Secretary of War is satisfied that hydraulic mining is stopped, and Stanford's amendment was designed to stop such mining, thereby making the appropriation available.

Hearst had proposed a cunning amendment to Stanford's amendment. It consisted of a few words intended to define hydraulic mining. After the words "by water used through pipes and used through nozzles under pressure," Hearst proposed to insert "directed against mountain sides or natural banks." Under this definition it is claimed that where ground had first been blasted, creating an artificial bank, or where it was desired to wash an old gravel bed, hydraulic mining could be carried on without Government interference.

Senator Stanford apparently did not see through Hearst's amendment, and accepted it. His amendment was then agreed to and a motion was made to strike it out, leaving the bill as originally reported from the committee. On this motion the yeas and nays were called, and it was adopted by a vote of 31 to 19. Hearst and Jones voted in the affirmative, and Stanford in the negative. Mitchell, Stanford and Ingalls took part in the debate, and Welton, McKenna and Markham were interested listeners. Ingalls contended that the proposition to stop hydraulic mining was an unprecedented invasion of private rights. Stanford denied this and stated that hydraulic mining gave a few men the right to despoil property of many farmers, and to injure and destroy 400 miles of navigable waters in the State, and to threaten the navigation of San Francisco, San Pablo and Suisun bays.

Special Dispatch to the "Examiner."

WASHINGTON, July 13.—This has been a field day in the Senate on the River and Harbor bill and has resulted in a victory for California, on which the valley and mountain men can be equally congratulated. To explain the situation it will be necessary to recall that for a number of years the appropriation for the improvement

of the Sacramento and Feather rivers has not been used, owing to a provision in the bill that the Secretary of War should first be satisfied that hydraulic mining on these rivers had ceased. Not understanding the term hydraulic mining as it is understood in California in relation to the "slickens" question, the Secretaries have refused to expend the money even since the hydraulic mining injunction was issued, because, under a strict construction of the term, even quartz mining has been constructed as hydraulic mining, owing to the water used in the milling process. When Senator Hearst appeared in the Senate committee on the River and Harbor bill, he saw that it would be necessary to protect both farming and mining interests to make it acceptable to California, and he induced the committee to modify the limitations on the expenditure on the Sacramento and Feather rivers by inserting the words: "hurtful to navigation," as applied to the kind of hydraulic mining which the Secretary of War must be satisfied is ceased. He then secured the insertion of the amendment which defined hydraulic mining, as understood in the slickens lawsuits. This work was done by Senator Hearst during the time when Senator Stanford was away from Washington. It was done with the co-operation of Senator Jones of Nevada, who is a member of the committee having the bill in charge. The committee amendments secured by Senators Hearst and Jones included the striking out of the clause in the bill which made it the duty of the Secretary of War to institute legal proceedings against almost every class of miners in California. It was therefore a surprise to Senators Hearst and Jones when Senator Stanford in the Senate moved to insert the objectionable clause.

Senator Hearst said that he supposed his colleague understood the committee's amendments were perfectly satisfactory to all interests in California, and hoped that the section as reported by the committee would not be disturbed.

As Senator Stanford insisted upon the reinsertion of the clause, then Senator Hearst prepared an amendment, defining what kind of mining might be proceeded against, following the definition of the court in the famous slickens suits. This amendment was adopted.

Senator Stanford then moved, again, to have the objectionable clause inserted and the motion was lost. All the Democrats and enough Republicans voted with Senator Hearst to keep out the clause. Jones of Nevada, Edmunds of Vermont and Ingalls of Kansas, all Republicans, voted with Hearst.

Stanford took the defeat rather roughly at first, not liking the idea of the new California Democratic Senator winning a single victory in a Republican Senate.

To a reporter who spoke to Senator Hearst about the matter, he said: "I am sure this will meet with Senator Stanford's approval when he understands it. I know already that the amendments I have secured are approved by both the mining and farming interests of California, because I framed them only after thorough discussion with the representatives of both interests. What the valley men want is an expenditure of the appropriation for the improvement of the Sacramento and Feather rivers. This the Secretary of War will proceed to do, when the bill becomes a law, as my amendment, 'hurtful to navigation,' requires him to see that only such mining as has been enjoined shall be stopped. The mining men, on the other hand, are satisfied that the clause which encouraged the blackmailing of quartz mining has been stricken out. Mr. Stanford did not seem to understand that the amendment defining hydraulic mining still remains in the bill. It is in its proper place, 12 pages further on, where it was inserted by the committee at my request."

THE WORLD MUST MOVE.—In 1877, electric lighting by the incandescent system was declared by many to be contrary to scientific principles. The same was said of the use of iron, and later, of steel, in bridge building. The Suez canal was once denounced as a wild and foolish scheme. Less than 50 years ago educated mechanics asserted that steamships could never carry enough coal for a long voyage. Leading ship-builders told us that iron ships could not swim, and when one or two floated it was said that they would not hold together permanently. Rolls for flour making were once hooted and derided. The world will not stand still for any one.





### Revelation.

[By JOHN GREENLEAF WHITTIER.]

"And I went into the Vale of Beavor, and as I went I preached repentance to the people. And one morning, sitting by the fire, a great cloud came over me, and a temptation beset me. And it was said: 'All things come by Nature,' and the Elements and the Stars came over me. And as I sat still and let it alone, a living hope arose in me, and a true Voice which said: 'There is a living God who made all things.' And immediately the cloud and the temptation vanished, and Life rose over all, and my heart was glad, and I praised the Living God."—*Journal of George Fox, 1690.*

Still, as of old, in Beavor's Vale,  
O man of God! our hope and faith  
The Elements and Stars assail,  
And the awed spirit holds its breath,  
Blown over by a wind of death.

Takes Nature thought for such as we,  
What place her human atom fills,  
The weed-drift of her careless sea,  
The mist on her unheeding hills?  
What reck she of our helpless wills?

Strange god of Force, with fear, not love,  
Its trembling worshiper! Can prayer  
Reach the shut ear of Fate, or move  
Unspitting Energy to spare?  
What does the cosmic Vastness care?

In vain to this dread Unconcern  
For the All-Father's love we look;  
In vain, in quest of it, we turn  
The storied leaves of Nature's book,  
The prints her rocky tablets took.

I pray for faith, I long to trust;  
I listen with my heart, and hear  
A Voice without a sound: "Be just,  
Be true, be merciful, revere  
The word within thee: God is near!"

"A light to sky and earth unknown  
Pale as their lights—a mightier force  
Than theirs the powers of Nature own,  
And, to its goal, as at its source,  
His Spirit moves the Universe.

"Believe and trust. Through stars and suns,  
Through all occasions and events,  
His wise, paternal purpose runs:  
The darkness of His providence  
Is star-lit with benign intents."

O joy supreme! I know the Voice  
Like none beside on earth or sea;  
Yea, more, O soul of mine rejoice,  
By all that He requires of me,  
I know what God Himself must be.

No picture to my aid I call,  
I shape no image in my prayer;  
I only know in Him is all  
Of life, light, beauty, everywhere,  
Eternal Goodness here and there!

I know He is, and what He is,  
Whose one great purpose is the good  
Of all. I rest my soul on His  
Immortal Love and Fatherhood,  
And trust Him, as His children should.

Not less than His restraining hand  
Is on our selfish seekings laid,  
And, shorn of words and works, we stand  
Of vain illusions disarrayed,  
The richer for our losses made.

I fear no more. The clouded face  
Of Nature smiles; through all her things  
Of time and space and sense, I trace  
The moving of the Spirit's wings,  
And hear the song of hope she sings.

—Atlantic Monthly.

### In Colorado.

[Written for RURAL PRESS by FANNIE ISABEL SHERRICK.]

Next to California, Colorado is certainly the most beautiful State in the Union. There are many who rank her first; but it seems to me, with all her snow-clad ranges and green valleys, she yet lacks a certain spirituality—that indefinable charm of atmosphere which makes her sister State pre-eminent in the world of beauty.

Among the Rockies are many enchanting pleasure places, with vistas of purple foothills overshadowed by giant mountain peaks, snow-covered the year round; but one sometimes misses the natural luxuriance that clothes the Sierras with verdure to their summits and longs for the cool breath of the redwoods and the tall majesty of these straight-limbed giants.

There is an awful grandeur and sublimity about the Rockies that commands a speechless admiration, rather than that near love which fills the hearts of those who have lived many seasons in California, close to the throbbing pulses of her ocean beaches, and the sacred silence of her wooded mountain temples. Then, too, is the charm of her Spanish missions, their old time bells echoing the chants of medieval days, their picturesque ruins quaintly contrasting the old with the new.

But "comparisons are odious," and let me

tell you something about the beautiful "Queen City of the Plains," though I suppose many of the readers of the PRESS are familiar with it.

The first glimpse the traveler catches of Denver is usually at sunset, after a long day's journey westward over the plains. For some hours he has seen the great ranges darkening the west. The sun illuminates their summits, then sinks behind them, lost to view long before the dusk. To the south a hoary head has lifted itself now and then out of the mists. As the night approaches it grows more vague, and at last the mystic sentinel disappears altogether. It is Pike's Peak, and the tourist gives a little sigh of disappointment as the dim outlines elude his vision. But the flame of the sunset has revealed a newer object of interest, the queen city lying at rest on the plains with her golden spires pointing heavenward, and her white highways reaching to the very portals of those grim, shadowy ranges.

For awhile one is content to look upon this beautiful picture without a thought of all the life that stirs within it, but the illusion is dispelled when at last its peaceful streets are invaded and the train pulls up in the fine stone depot, where all is bustle and confusion, and one is reminded forcibly of the enterprise and activity that has made Colorado what it is.

Denver is a bright city with all the modern improvements. Rows of pretty cottages line the well-shaded streets, and in the wealthier portions of the city mansions of the finest build and beauty mark the outgrowth of Western taste and culture. The business portions equal in pretentious buildings Chicago or St. Louis. What is known as the Tabor block is really a specimen of magnificent architecture, and does credit to the bonanza king who planned it. Whatever Senator Tabor's shortcomings may be, socially or otherwise, he has certainly done much toward the improvement and advancement of Denver.

Socially, Denver is very attractive. Her people are kind-hearted and hospitable, and their entertainments are always of the highest order. The Tabor opera house is considered the most beautiful of any in the State, and it is finished in the most elaborate style. All of the "stars" gravitate there, and the people who patronize it are always sure of good attractions.

Denver is what might be called a thoroughly wide-awake city. Every new idea is eagerly grasped and all improvements speedily appropriated. It was one of the first cities to be lit by electricity.

The most charming spot near Denver is the summer resort called Manitou Springs. No one could "do" Colorado without seeing the points of interest that surround Manitou.

It lies directly at the base of Pike's Peak, in a little valley which narrows into the canyon which is the beginning of the trail up the peak. I have never seen a lovelier nook than Manitou. It just fulfills one's idea of a summer resort, and one who loves nature could not but be happy in such enchanting pleasure-grounds. Near by is the Garden of the Gods, a most unique place with all sorts of fantastic imagery carved by nature in brilliant red sandstone. One can easily imagine the representations of gods and animals in these grotesque formations.

Many people make the ascent of the peak, but as the trip is a somewhat difficult one for those not robust in health, the majority of tourists content themselves with rambles and rides in the vicinity. There are many interesting canyons to explore, one of which leads to the Cave of the Winds and the Grand Caverns. A beautiful carriage drive through the Ute Pass brings one to the entrance of the former.

It would be difficult in so short an article to give even a summary of all the beauties that surround Manitou, it is so rich in all that nature can give of the grand and picturesque. Of course, to a lover of the beautiful like myself nature here is the great attraction, but those who go in search of health as well as pleasure find in the springs a cure for many things. The Soda Springs are nice tasting, and with the addition of a little sweet syrup would be a facsimile of the druggist's much advertised "ice-cold soda."

Manitou has an elevation of over 6000 feet. Though Manitou is the most beautiful town in Colorado, Leadville is certainly the most interesting. It is a fabulous place, and though something of its early wonder and interest has passed away it is still to the eye of the Eastern tourist a most wondrous place. Sprung up almost within a day, it still bears the impress of that sudden rush into life.

In 1878 the site of Leadville was marked by a few wooden shanties inhabited by a few hundred people. In less than a year its population increased to 5000, and before the close of 1879 25,000 people were inhabitants of the new town.

Now it is a thriving city with well-built stores and business houses, comfortable residences and well-kept streets. To look upon its present prosperity and steadily increasing population, one would never imagine that the town was only seven years old. The railroad trains coming and going, the stylish equipages on the streets, the well-dressed people, are more suggestive of a sedately grown Eastern town than of a mushroom mining camp. It is difficult to imagine how short a time has elapsed since the only way to Leadville was a mule trail, and the mad enthusiasts over gold were forced to endure the most terrible hardships before they reached their goal.

The climate of Leadville is rather a trying one, owing to the extreme elevation. As some

wit has remarked, "It has nine months of winter and three months late in the fall." The summers are exceedingly short, and even in the warmest weather the snow peaks so surround the place that one, apparently, by a slight exertion could throw snow-balls at mid-day. However, the sun is quite powerful at noon; and though the nights are frosty even in June, the mid-hours of the day make one seek the shady side of the street.

People with weak lungs find much difficulty in breathing the air of Leadville. The atmosphere is extremely rarefied, and one who desires to visit all the mines finds many a hard climb before him. The mountains in the vicinity seem literally honey-combed with these mines; and though fortunes are not made and lost in a day, as formerly, the yield of the mines is something marvelous. Notwithstanding all the millions that have been taken from the hearts of these mountains, there still remains untold wealth.

One cannot help feeling the wonder of this town so far removed from the rest of civilization and so high among the clouds, yet fraught with the same life, the same interests, that animate the commonplace towns of the older ordinary countries. It is said to be the highest town in America, and it is surely high enough to satisfy even the most ambitious mortals. Its elevation is over 10,000 feet.

Leadville is reached by the Denver & Rio Grande Railway, which is justly termed the scenic route of America. It winds upward through the narrow gorges and canyons, reaching an altitude of 10,000 feet, and one could not imagine a grander ride. It is positively awe-inspiring. I felt like holding my breath when the sturdy engine leaped across the chasms or plunged boldly under the shadow of giant mountain cliffs in a mad race with the headwaters of the Arkansas.

Many grand scenes have I looked upon in this beautiful land of ours, but never one grander than that which greets the startled, wonder-stricken gaze of the tourist who is carried swiftly but surely through the Royal Gorge of the Arkansas.

So high are the rock walls that they seem to shut out the light of heaven, and one looks upward through a semi twilight to the glittering line of azure that marks their summit. White-sprayed falls leap over the cliffs like showers of silver and lose themselves in the foaming stream that dashes through the gorge in an angry grandeur. Wild flowers fringe the rock masses, lifting their pale faces to the narrow cleft of light 2000 feet above. The shadow of centuries seems to hang over the white-walled chasms, and the eloquent voice of the ages seems surging in the river as it forces its way with a determined fury to the calm, shadowless plains beyond the mountains.

But who can describe that which is indescribable? As one stands in the Yosemite bereft of speech, so in this grand canyon the heart feels that which the lips may never express.

Perhaps as a rebuke upon our egotism Nature sometimes strikes us dumb with the wonder of her handiwork.

Denver, June 38th.

### A Trip to Monterey.

[Written for RURAL PRESS by a NATIVE DAUGHTER.]

When we first spoke of going to Monterey on the Fourth—or, more correctly speaking, the Fifth—the distance was an objection raised; then thought we were not very patriotic if we were afraid of a long ride or a little dust. It was quite gloomy when we left home at daylight, as a heavy, chilling fog hung over the valley. After riding a few miles it cleared off and the sun shone out brightly, and our spirits rose accordingly. We crossed the Salinas river, which is shallow, looking unlike the treacherous, booming stream of a few months ago. Although the road was rather heavy, it was pleasant as we wound through the long canyon, coming in sight at last of the beautiful bay and quaint old town of Monterey, around which so much of the history and romance of the early times cling. It looked its best on the pine-fringed hill, with the sparkling bay below, on whose tranquil waters the U. S. revenue cutter *Richard Rush* and many yachts were anchored. On several streets arches with the word "Welcome" were erected, and from every building the flags floated, and each vied with the other in its decoration of flowers and evergreens. The old custom-house, in its holiday garb, seemed a fitting place to raise again the flag where 40 years before it was raised for the first time. My eyes filled with tears as I looked at the gray-haired veterans and pioneers and thought how much we owed to them, and hoped the Native Sons, with their bright eyes and unfurrowed brows, would appreciate their labors, and would not be found wanting, should it be needed to follow in the footsteps of the brave fathers and mothers.

The soldiers, in their bright uniform, the rumbling of the heavy artillery wagons, booming of cannon, the bevy of fair girls who represented our States, the thrilling speeches, the oft-repeated Declaration of Independence interspersed with national songs and music, were things not soon forgotten.

I cannot close until I have added a few words in praise of the Del Monte. We do not wonder Eastern visitors are surprised, seeing it for the first time, for we, who are accustomed to many wonders in this land of sunshine and flowers, cannot fail to find in it new beauties

each time. It seemed as though we would go far before we could find a more lovely spot than the beautiful Del Monte, bathed in golden sunlight, nestling among the stately pines, around whose rugged trunks the ivy and bright-hued flowers cling. Each turn brought new wonders to gladden the eye, until we fain would ask where were finer views, greener grass, or rarer flowers. As I watched the smiling faces of the handsomely-dressed men and women, as they rode or walked at will, and listened to the merry shouts and laughter of the happy children, it seemed a completion to nature's loveliness. What a transformation! A few years ago we strayed amid a wilderness of pines and underbrush gathering cones.

I know not how long we might have lingered, had not the western sun warned us it was time to turn our faces homeward. Remembering it was the land of my birth, my heart was filled with pride, as I repeated those words: "Oh, California's the land for me."

Salinas, Cal.

### What Shall We Women Do?

[Written for RURAL PRESS by "NOW AND THEN."]

My husband is a business man—that is, he is engaged in mercantile pursuits—dependent, like every one similarly situated, upon the patronage of the public. I am a delicate woman, and cannot do my own work as I used to. I for years have had the same China boy—trained him myself; he was just the help that suited me. The strong anti-Chinese feeling on the part of some led us to give up our China boy for fear of the "boycotters." Chung was discharged and a girl sought for. No. 1 applied; did not seem strong. I offered her \$20 per month, same as I paid China boy. A few days' trial convinced her and me that she was not what I wanted. She had undertaken what she had never been taught. I offered to teach her if she would work for less wages. She became indignant and left. I was expecting company from the East and I was anxious for my old China boy to come back until I could get a good girl, but others had employed him.

In the meantime my husband made diligent inquiry for a good girl. At last No. 2 appeared. She wanted to know the exact size of my family; any small children; did we entertain much company; did I send all my washing out. Said she was not very strong, but would try it awhile. My husband had to prepare the kindling and build the fires and then awaken the maid. I really "laughed in my sleeve" over this part of anti-Chinese experience. One morning she pertly inquired why he did not put the teakettle on. Now, be it known unto you, my husband is a very "mild-tempered" man, notwithstanding he is affected with rheumatism. He meekly replied, "Shall I get the breakfast, also? How much do I owe you?" I got the breakfast that morning, and a nice hot dinner for him also. Next day came an intolerable sick headache.

My husband advertised. No. 3 put in her appearance—a bright, rosy-cheeked girl. She could do anything—cook, sweep or do plain sewing. I thought I had a treasure; but she was too fond of the sterner sex. I thought her young and giddy and made a few motherly suggestions about her conduct, etc. But one of the neighbor boys suggested to my husband I had better get rid of her.

Far be it from me to disparage my own sex; but this has been my experience with girls in California. I am not harsh or exacting and pay them promptly, and I only insist upon their doing what they contract to do. I have been forced to get another China boy.

One of our most popular merchants, who has never employed a Chinaman, signed a paper presented by the boycotters not to employ any Chinese, but reserved his mercantile rights. Mr. C. has a fine strawberry patch. He had been burned out and wished to economize and rebuild his fruit-drier. He employed Chinese to help him pick his fruit. The above mentioned merchant wished to handle his fruits on account of their extra quality. A committee of the boycotters waited upon him and threatened to boycott him. Harsh words followed and a bad spirit engendered among hitherto friends. All or nearly all of our potatoes are grown by Chinamen. Shall we boycott the potato dealers, too? Editors are supposed to know a great deal, and I want to know "what we women are to do."

Santa Rosa, Cal.

EXTINCTION OF RACES.—Attention has lately been called to two races of men that must soon become extinct. At the present rate of decrease, the Moors, of New Zealand, now reduced to less than 40,000 from 100,000 in Capt. Cook's day, must have disappeared by the year 2000. The Laplanders are estimated to be 30,000 in number, and are gradually becoming fewer. To the above might be added the North American Indians, who are rapidly growing fewer, and the time is probably not far distant when they will entirely disappear from this continent and the world.

THE FLIGHT OF SWALLOWS.—An experiment was made at Pavia, in Italy, with two swallows, to determine their speed. Two hen birds were taken from their broods, carried to Milan and there released at a given hour. Both made their way back to their nests in 13 minutes, which gave their rate of speed at 87½ miles an hour.



## To the Author of "Patchwork."

[Written for RURAL PRESS by FANNIE H. AVERY.]

O youthful mother, wise and sweet,  
That watched thy pretty little maid,  
As she with face all flushed, yet staid,  
Sat making patchwork at thy feet,

And noted how with earnest brow  
She busied with, and sewed and wrought,  
According to her baby thought,  
The patchwork quilt that's finish'd now.

The song thou wert inspired to write,  
As thou, with a fond mother's eye,  
Didst view the picture thoughtfully,  
And muse upon the charming sight,

Doth lead me to invoke for thee  
A long, and, oh, a happy life,  
To guide, and guard from earthly strife  
The little maiden at thy knee,

And watch her as she puts her deeds  
Together in her own life-work,  
To teach her soul no right to shirk,  
That she may gain the noblest meeds,

San Francisco.

## "Bill Simpson's Darter."

No matter how hard and ugly the truth is, it is more pleasing than the affectation of what is not real. Exposure is certain to follow people who try to go through life behind a mask of false pretenses. We have little sympathy for people like "Bill Simpson's darter." A gentleman traveling from Buffalo to New York city tells the story:

At Albany two ladies, dressed in the extreme of fashion, entered the car. Their manners indicated great affectation and consequent shallowness.

The only unoccupied seat in the car was directly behind a quiet-looking lady, evidently from the country. Her dress was of calico, her bonnet of plain straw, and her gloves were of cotton. She could not, however, have looked neater, and she had a good, honest face.

As the fashionable ladies adjusted their draperies in the unoccupied seat, one of them said to the other: "Don't you think it too bad that there are such poor accommodations in railroad trains now?"

"How—in what way?" asked her companion.

"Why, here we are crowded up in all classes of people, some of them so common. Look at that person in front of us."

"Horrid, isn't she?"

"Perfectly dreadful."

"Looks like a common laborer."

"How annoying to have to come in contact with such people."

"Belongs to some ordinary family. If one could only exclude one's self from such persons when traveling even short distances! I suppose it's horrid in me to say it, but I have all my life had such a repugnance to common laboring people."

The lady in the calico dress must have heard a part of this conversation, but her face was perfectly composed.

At that moment an elderly man in the homespun and home-made garments of a farmer came down the aisle. He stopped before the ladies of fashion, closely scrutinized the features of the one having "such a repugnance to common people," and just as the train stopped at the station, cried out loud enough to be heard by every person in the car:

"Looker hye, hain't you old Bill Simpson's darter? But I know you air 'thout askin'. How de do, anyhow? You don't change a speck. Got the same nose you had when you wor a little gal o' 12 or 15 year, trottin' bar-foot round my old farm in Podunk county."

"Yer mind how I youst ter give yer two bits a day an' yer dinner fer helpin' my younguns dig taters? Ho! ho! ho!"

The young lady had dropped her beaded veil and was nervously biting at her fan, but the old farmer went on heedlessly:

"There's been mighty lucky since then. Your pap went out to Coloraday an' made a bigfortin' thar, an' I hear you live in great style. But Bill Simpson ain't the man ter fergit old frens, an' you tell 'im that you've saw old Jack Billings, what used to give him a-menny a day's work when he was so pore his fam'ly had ter wait till the hens laid 'fore they could hev any breakfast. You kin remember that yerself, I reckon."

"An' ther wa'n't noboddy gladder nor me when yer pap did git rich so suddint, for he was a mighty hard-workin' blacksmith, an' always pore 'cause of bad luck."

"My wife sez she lost an awful good wash woman when yer ma moved, an'—I git off here. Good-by! good-by!"

The meekest, most subdued person on that train during the rest of the trip was "Bill Simpson's darter."

THE BIGGEST BUILDING in the United States will be the City Hall of Philadelphia, now in process of construction. Between \$11,000,000 and \$12,000,000 have been expended upon it since 1872. It is estimated to cover 2800 more square feet than the Capitol at Washington. The tower on the north side will be surmounted by a statue of Penn., and its extreme height when completed will be 535 feet.

## YOUNG FOLKS' COLUMN.

## Little City Chicks.

[Written for the RURAL PRESS by K. S. B.]

As to the care of young chickens in the winter, the necessity of keeping them very warm at night should be remembered. I have just brought one to happy henhood by keeping her near the kitchen stove all day, or in the bright sunshine; by feeding her on cooked cracked wheat, rice and milk (no water), and by keeping the little room made for her in a corner very warm by a tiny kerosene lamp burning all night, beside her shaded bird cage. When she was very young I shut her up under cotton batting, in a paste-board box with holes in it. It was very amusing to see her pick at my shoe or dress buttons, to have her tap at the window for attention, and cluck to me to come, when she found something particularly tempting in the grass. One friend kept her young orphan chicken every night in a covered basket, hung over the bathtub, in which was kept burning a small kerosene lamp; and now he croweth beside my little hen.

[We rather expect our RURAL young folks will laugh at the idea of raising young chickens in such ways. They will understand, of course, that the chicks were orphans picked up in the city streets and were rescued from cats or starvation by tender-hearted people, and evidently they were very grateful for the rescue.—EDS. PRESS.]

## The Young Folks' Club.

[Written for the RURAL PRESS by MRS. J. HILTON.]

I guessed right, Mr. Editor, when I said that surely the RURAL's children tended to the chicks and other birds, for I have received five letters from the dear young folks. I promised a card to the first received, thinking I would send a large card; but as the letters kept coming, I could not bear to disappoint any of them, so I sent handsome cards that could be put in a large letter envelope, to four of them and a tiny paper-covered book to the last one. As the answers are all so good I send them and hope to hear from many more of the dear children, and that they will ask questions as well as answer. The second letter has a question in it,



THE CHILDREN AND THE BIRD.

you will observe. The Club's unanswered questions were:

1st. How many eggs is it best to put under a hen? (K.)

2d. Who has hatched the largest number of eggs from incubators? (Tom.)

3d. Who has the best luck with hens which steal their nests? (E. H.)

4th. What makes my chicks mope about? (F. Wood.)

5th. Who can tell me the best way to care for pigeons? (Polly.)

## The Letters.

Dear Madam: In the RURAL PRESS for June 10th I found the unanswered question from Cally C: "What shall I feed my bird when it is molting?" I think she will find the following to be very good: Boil an egg hard and mix with it a great deal of red pepper; give the bird a fresh egg every morning.—GERALDINE FITZGERALD, Redding, Shasta County, California.

Mrs. J. Hilton: You wanted to know what to give canaries when they are molting? I would give soda crackers and hard-boiled eggs, and I would give asafetida to hens that have eaten too much meat. I would take a rasp and dull the spurs of a fighting rooster to prevent his hurting the other chickens, or cut off his head, but never cut the spurs.—From your little friend, FANNIE CLAPP, Tulare City.

Dear Mrs. Hilton: Tell Dick H. to give his hen a small pill of blue-mass. If X. Y. Z. will take his fighting rooster and trim one wing, he cannot fight

so well. If that does not cure him I would cut off part of his spurs. Can the Young People's Poultry Club tell me what to do for our big dog's lame foot? It looks like it had been burned, but has been sore for two months and don't get better.—HARRY HOPKINS (age 9 years), Santa Barbara.

Mrs. J. Hilton: I go to school, but I will try and answer these questions. I walk a mile to school, and before I go I have to help feed the pigs, calves, chickens, and 23 canaries. Don't you think that is pretty good for a little girl in her twelfth year?

1st. The 1st of July I put in a small pinch of saffron and rusty nails in the water for the birds and keep them until the 1st of September.

2d. For chickens getting sick from eating too much meat, mix up cayenne pepper and cornmeal and make a dough out of it, and feed your hen for two or three days.

3d. When mamma kept fighting roosters she cut the spurs just a little, so as they would not bleed, and it won't injure them.—EDITH M. MEAD, Morro, San Luis Obispo Co.

Mrs. J. Hilton: I send these answers to the questions in the RURAL:

1st. If the canary bird was mine I think I would feed it lots of pepper, cracker and milk, and fish bone. 2d. Give the hen soaked bread and milk.

## DOMESTIC ECONOMY.

## Guava Jelly.

EDITORS PRESS:—A correspondent recently asked for a recipe. When in Nassau, Bahamas, I made delicious guava jelly; stewing the fruit in a little water, taking the inner pulp and seeds for jelly, and the outer, coarse-grained part for marmalade, and following the usual method of making quince jelly and marmalade. The most important item to know about it is that one must use dry brown sugar to obtain the rich, ruby hue—white sugar will give it an amber color.

San Francisco.

K. S. B.

PRESERVED STRAWBERRIES.—A granite or earthen kettle should be used, as it is unsafe to allow fruit to cool in metal. For each pound of carefully plucked fruit, washed and drained, allow one pound of sugar. Clarify the sugar by allowing half a pint of water to each pound of sugar, and boiling until clear, removing all the scum that may arise. After the sugar is clarified, set the kettle off the fire and put in the strawberries with great care, pouring the syrup over the berries. The fruit must not be stirred, as it will suffer. Set the kettle aside until the next day, when it must be set on the range until the contents are hot. When thoroughly hot, set the kettle aside until next morning, when the same process is to be repeated, being careful never to stir. Now the fruit may cool, and when cold put it in jars, being careful that the fruit is covered with syrup.

## TO CLEAN GLASS AND SILVERWARE.

—Eggshells crushed into small bits, and shaken well in decanters three parts filled with cold water, will not only clean them thoroughly, but make the glass look like new. By rubbing with a flannel dipped in the best whiting the brown discoloration may be taken off off cups in which custards have been baked. Again, all of us are aware that emery powder will remove ordinary stains from the white ivory knife handles, and that the luster of morocco leather is restored by varnishing with the white of egg. Nothing, it is said, is better to clean silver with than alcohol or ammonia, finishing with a little whiting on a soft cloth. When putting away the silver tea or coffee pot which is not in use every day, lay a stick across the top under the cover. This will allow fresh air to get in, and prevent the mustiness of the contents familiar to boarding-house sufferers.

TOAST.—Many seem to think they have made toast when they brown the outside of a slice of bread. Have they? The object in making toast is to evaporate all moisture from the bread, and holding a slice over the fire to singe does not accomplish this; it only warms the moisture, making the inside of the bread doughy and decidedly indigestible. The true way of preparing it is to cut the bread into slices a quarter of an inch thick, trim off all crust, put the slices in a pan or plate, place them in the oven—which must not be too hot—take them out when a delicate brown and butter at once.

CHARLOTTE RUSSE.—Dissolve half an ounce of gelatine in half a pint of cold water. Whip a pint of sweet cream to a stiff froth and add to it the whites of two eggs, beaten until they are firm. When the gelatine is dissolved let it come almost to a boiling point and strain it into the egg and cream; sweeten all with four ounces of powdered sugar, and flavor with a dessert-spoonful of vanilla. Beat all together and turn into a mould lined with thin pieces of sponge cake. Set on the ice for three hours and serve.

STEWED STEAK.—Put one pound of tender, thick steak, having a little fat, in a saucepan. Pour over it two cups of boiling water and a finely minced onion, seasoning with salt and pepper. Spread a thick layer of mushrooms on top of the steak; cover the saucepan tight and set it where it will simmer, about two inches above the level of the fire. The saucepan should not be uncovered until the steak is to be removed to the dish. Forty minutes is enough time to cook it to a turn.

TUTTI FRUTTI.—One quart of rich cream, one and one-half ounces of sweet almonds, chopped fine, one-half pound of sugar; freeze and when sufficiently congealed add one-half pound of preserved fruit, with a few white raisins chopped, and finely sliced citron. Cut the fruit small and mix well with the cream. Freeze like ice cream. Keep on ice until required.

ASPARAGUS SOUP.—Boil one bunch of asparagus and one onion until tender, with one tea-spoonful of salt and one of pepper. Pass through a colander and mix with one quart of boiling milk, a little butter and one egg. Serve immediately.

3d. I should cut the spurs of the rooster.—JENNIE ROWELL, Easton, Fresno Co.

[As Mrs. Hilton was so generous as to send gifts to all the little people who wrote letters to her, the editor thinks he should give them a picture, too—so here it is on this page—"The Children and the Bird"—dedicated to the Young Folks' Poultry Club and to every little reader of the RURAL PRESS.]

## Saving.

As go the boy's pennies and dimes, so very likely will go the man's dollars and hundreds, by-and-by. Without having the spirit of a miser, the person accustomed to save has more pleasure in laying up than the spendthrift ever knows.

The way to keep money is to earn it fairly and honestly. Money so obtained is pretty sure to abide by its possessor. But money that is inherited, or that in any way comes in without a fair and just equivalent, is almost certain to go as it came.

Children that have a little money ought to practice saving something. Many boys of today hardly know a higher use for any money that comes into their hands than spending it for some foolish thing as quickly as possible. To such, a lesson of self-denial and economy is important.





A. T. DEWEY.

W. B. EWER.

Published by DEWEY &amp; CO.

Office, 252 Market St., N. E. cor. Front St., S. F.  
Take the Elevator, No. 12 Front St.ADDRESS ALL literary and business correspondence and  
Drafts for this paper in the name of the firm.

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Registered at S. F. Post Office as second-class mail matter.

SCIENTIFIC PRESS PATENT AGENCY.

DEWEY &amp; CO., PATENT SOLICITORS.

A. T. DEWEY.

W. B. EWER.

G. H. STRONG

SAN FRANCISCO:

Saturday, July 17, 1886.

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## The Week.

Affairs are quite stirring, aside from the ap-  
proach of the great social event—the coming of  
the Grand Army. The markets have assumed  
an activity somewhat unusual for midsummer.  
Wheat, it is true, has difficulty in moving its  
great bulk; but it seems to be gaining strength.  
Wool has been buoyant for some time and holds  
it well; even in the midst of an exciting politi-  
cal campaign the London wool markets show the  
Britons do not propose to go bare-backed what-  
ever happens to Ireland. Hops are true to  
their name, and are skipping up in a way to de-  
light those whom the aphid and mildew has not  
robbed of them. Fortunately, these evils are  
not prominent in California. Fruit is high and  
promises to remain so, for the crop is rather  
streaked and there is demand from several di-  
rections. There promises to be a good deal of  
money brought into the State this year for vari-  
ous products; but unfortunately, the distribu-  
tion of it will not be so general as we could  
wish. Such is often the case, and those who  
lack must patiently bide their turn.

## The G. A. R. Encampment.

The great event of the year in California is  
rapidly approaching. On Monday, August 2d,  
the various pageants, receptions, exercises and  
excursions of the Twentieth National Encamp-  
ment of the Grand Army of the Republic and the  
National Convention of its associate organiza-  
tion, the Woman's Relief Corps, will begin in  
this city, and until August 12th San Francisco  
and the adjacent towns will be filled with peo-  
ple who meet, not to recall the asperities of the  
war, but to look upon past events through the  
softening medium of the universally beneficent  
results which were attained, and to rejoice to-  
gether over the grand peace and prosperity  
which now bless the whole country.

Preparations have been in progress for months  
to suitably receive and entertain the thousands  
who will arrive from all parts of the Union,  
and there is every indication that the event  
will reflect credit upon the State in all its  
features. There will be many parts of the 10  
days' exercises which will have a general inter-  
est. Those who find joy in the grandeur of the  
parade and in the strains of martial music will  
have their eyes and ears well employed. There  
will be from day to day excursions to various  
cities which have prepared receptions. We ex-  
pect to publish in our next issue the full pro-  
gram for the Encampment, so that our readers  
at a distance may be able to participate in the  
event by attending such demonstrations as they  
may choose.

There will be efforts in several counties to  
give the visitors a condensed view of the coun-  
try, as shown by her products, and we hope all  
who have been appealed to to aid in this matter  
may respond generously. In Sacramento they  
are putting forth such a vigorous and wide-  
reaching effort that it very much looks as  
though the capital city would have two State  
Fairs this year. This is quite characteristic of  
California. Her citizens are disposed to get up  
anything which will please and entertain their  
guests.

## The Coming Wheat Crop.

We suppose everybody has concluded by this  
time that there will not be nearly so much  
wheat harvested in this State this year as the  
early estimates promised. We opposed these  
estimates from the first because we knew the  
gauntlet of unfavorable conditions which the  
crop had to run before it reached the sack, and  
we always conscientiously oppose figures which  
are put forth merely to serve those who have  
grain to buy or sacks to sell, and are mutually  
served by having the impression go out that the  
State is overflowing with wheat. There are a  
few others who like to have big figures because  
they think it looks well for the State, but are  
unmindful that to gratify their taste for the im-  
mense they minister to the interests of specula-  
tors and tend to the ruin of the producers. We  
have declared our faith in such matters before,  
but we cannot resist the opportunity to enforce  
the lesson again.

We judge last week that the Sacramento val-  
ley had more than its share of the hot winds  
which did the injury. It was worse toward the  
northern limits of our great grain region; but it  
was bad enough in the lower counties of the  
San Joaquin valley to accomplish quite a re-  
duction of the general output. One of our read-  
ers at Modesto writes: "The crop is not turn-  
ing out well. One neighbor received 13 bushels  
of wheat where he expected 18, and another 15  
bushels where 20 bushels were expected." This  
is a great reduction. Concerning Stanislaus  
county in general, the Modesto Herald of July  
8th says:

The yield in some localities is fully up to ex-  
pectations; but in others it has fallen short  
almost one-half. In estimating the probable  
yield of the whole county for this season, the  
best informed put it at not over 4,000,000 bush-  
els. Information from the west side is that the  
crop will be the largest ever produced there,  
and but for the winds threshing it out, and the  
two or three destructive fires, it would have  
given the county as large a yield as in 1880.

The reports from the Sacramento valley show  
that the injury previously noted there was not  
exaggerated. The following from Marysville  
by telegraph, July 12th, gives a sad picture:

As the threshing season advances, the fact is  
developed that the norther of June 10-12 did  
much greater damage by shelling out grain than  
was estimated by the farmers. This, together  
with other drawbacks of the season, has re-

duced the yield to less than 50 per cent of an  
average crop in Sutter and Yuba counties.  
This circumstance, in connection with the low  
price of grain, has a depressing effect on the  
farming community and business interests gen-  
erally.

What seems to us the best general statement  
of the total wheat prospect in this State is the  
following from the *Daily Report*, and even this  
we regard as fully as great as the conditions  
will warrant. We consider the figures rather  
over than under-drawn:

The figures of the wheat crop, as given below,  
are based on assessors' returns of acreage seeded  
to wheat, and the average of the yield per acre  
of the farms threshed up to July 5th. As a  
very large number of fields were cut for hay, an  
allowance of five per cent on the total footing  
of each county has been made. Had it not been  
for the hot winds of June 10th, 11th and 12th,  
this year's crop would have been the largest in  
our history, for the grain in many of the fields  
in the largest wheat-growing counties were  
threshed out by the wind so as to make it worse  
than folly to harvest that left. Aside from this,  
many fields were so badly threshed out that  
they did not yield within 25 to 75 per cent of  
what they promised on June 9th. Under these  
circumstances, the State's crop is wonderfully  
large, for it is nearly double that of last  
year.

The yield so computed is as follows:

	Bushels.
Alameda.....	990,000
Amador.....	23,400
Butte.....	1,831,000
Calaveras.....	245,000
Colusa.....	4,650,000
Contra Costa.....	1,490,000
Fresno.....	3,515,000
Kern.....	230,000
Los Angeles.....	3,990,000
Mariposa.....	24,800
Mendocino.....	100,000
Merced.....	1,538,000
Monterey.....	1,250,000
Napa.....	305,000
San Benito.....	710,000
Sacramento.....	855,000
San Bernardino.....	65,000
San Diego.....	350,000
San Joaquin.....	2,695,000
San Luis Obispo.....	1,110,000
San Mateo.....	160,000
Santa Barbara.....	750,000
Santa Clara.....	1,790,000
Santa Cruz.....	375,000
Siskiyou.....	145,400
Solano.....	636,000
Sonoma.....	560,000
Stanislaus.....	3,185,000
Sutter.....	991,000
Tehama.....	1,150,000
Tulare.....	5,890,000
Tuolumne.....	112,000
Ventura.....	340,500
Yolo.....	3,150,000
Yuba.....	320,000
	45,021,200

The unfavorable conditions which affected  
the greater part of the wheat area stopped short  
of Tulare, and a good year with a vast increase  
of development of that county gives it the ban-  
ner for 1886.

Reports from the grain fields in other States  
are discussed by one of our contributors on  
page 55 of this issue. The latest telegrams en-  
force the conclusions of last week as to the fall-  
ing off in the product east of the Rocky mount-  
ains. The following are the dispatches:

WASHINGTON, July 10.—The July report of the  
Agricultural Bureau says: The average condition  
July 1st of winter wheat has declined from 92.7 to  
91.2 and of spring wheat from 95 to 83. The con-  
dition of spring wheat has declined from 98 in June  
to 83, in consequence of high temperature, drying  
winds and lack of rain. In the principal States the  
decline has been: Wisconsin, from 97 to 75; Minne-  
sota, from 98 to 78; Iowa, from 100 to 90; Nebraska,  
from 97 to 83; Dakota, from 99 to 85.

CHICAGO, July 11.—The following crop summary  
will appear in this week's issue of the *Farmers' Re-  
view*: In portions of Dakota, Minnesota, Wisconsin  
and Iowa the injury to the spring wheat has been  
increased, and has embraced a wider area than was  
noted in the detailed reports of the *Review* three  
weeks since, when the great danger which threatened  
the crop from blight was fully outlined. In large  
sections of Dakota, Minnesota and Wisconsin,  
where the fields were visited by light rains at the  
close of this week, the damage to grain was such as  
to prevent any revival of life, and the injury inflicted  
was complete. In the sections where the drought  
was the most severe the yield will not exceed from  
five to eight bushels to the acre.

DEATH OF THE STALLION CESAR.—We regret  
to learn that Cesar, the promising and famous  
young Percheron stallion, died very suddenly of  
apoplexy on the 2d inst., on the farm of his  
owner, Mr. Wm. B. Collier, at Bridgeton, Mis-  
souri. Our readers will, many of them, remem-  
ber Rosa Bonheur's spirited likeness of this  
fine prize-winner, which appeared in the *PRESS*  
of April 4, 1885. In addition to the honors  
won up to that date, he last year took the  
prize for three-year-olds at St. Louis. Mr. Col-  
lier naturally feels saddened, and has our sym-  
pathy in the loss of so noble and valuable a  
creature.

THE Santa Barbara papers incline to the  
opinion that that city must soon become a port  
of entry, and want a custom-house built at the  
earliest convenience of the Government.

## They Come to a Healthy State.

Now that thousands of visitors are starting  
westward for a sojourn in California, it is grati-  
fying to be able to give public assurance that  
the sanitary condition of the State is good, and  
that our guests need not fear contagion of any  
sort. Dr. Tyrrell, Secretary of the State Board  
of Health, in his report for June, refers to the  
accepted principle that the death-rate of a com-  
munity indicates with unfailing certainty its  
sanitary condition, and thence feels justified in  
inferring a highly favorable state of sanitary  
matters in California. The deaths reported  
number 751, in a population estimated at 582,-  
450—a percentage of 1.3 decedents per 1000, a  
smaller percentage than is usually found at this  
season of the year. Although this indicates  
conditions favorable to health at the present  
time, yet, as the summer advances, all sanitary  
officers should see that the water supply is kept  
free from pollution, that everything likely to  
develop disease is removed, and general clean-  
liness adopted.

Reports received from every county in the  
State agree that no serious sickness prevails.  
As might be expected, disorders of the bowels  
are experienced in many places, and if cholera  
had invaded our coast would be the cause of  
serious alarm. They can, however, be largely  
traced to the prevailing summer heat, the un-  
wise consumption of fruit, and it may be an in-  
dication that the water supply of those towns,  
where the disease is common, has become pol-  
luted from surface or sewer drainage. With  
the exception of the prevalence of bowel dis-  
orders, the health of the community is excel-  
lent.

It is often claimed either that sunstroke is  
never known in California or that it is of ex-  
tremely rare occurrence. The latter statement  
is certainly true, and even in the few cases on  
record there may have been sometimes predi-  
posing causes on the part of the victim. For  
example, it may be claimed that there was a  
case of sunstroke last month, and yet the Sec-  
retary of the State Board claims that alcohol  
was the real slayer. In his report of the case,  
Dr. May Gydison, of Salinas City, says that the  
man so stricken "was an apparently stout,  
healthy fellow, but a hard drinker, aged 27 or  
28 years. He went to work in the field in the  
morning feeling quite well. About 10 A. M.  
he complained of great thirst and dizziness, im-  
mediately became unconscious, and died within  
three-quarters of an hour from the time of seiz-  
ure." As sunstroke is very uncommon in Cali-  
fornia, it is of great interest to collect all avail-  
able and undoubted cases, that a record may be  
kept to ascertain whether the affection is only  
an exceptional occurrence, due to the habits of  
the victim, or is taking its place among the  
regular disorders incident to the climate and in-  
dependent of personal habits or pursuits.

As it would not be polite to suppose that any  
of our coming guests are guilty of chronic al-  
coholism, we can quite safely assure them all  
immunity from sunstroke.

## Building Up the City.

San Franciscans are naturally desirous to ex-  
tend the business interests of the metropolis,  
but they often do things which have just the  
opposite effect. The "bag ring," or "bag  
pool," or "bag corner," or whatever aliases the  
undesirable thing goes by, has proved already  
an element to divert trade from San Francisco.  
They grow a very respectable amount of grain  
in Los Angeles county and the growers are  
good business men, too. When they saw the  
bag interest of San Francisco had laid a trap for  
them they concluded not to walk into it, but  
turned about and ordered bags from the East  
and left the San Francisco people with their  
bags on their hands.

Who can blame them? The time has gone  
by when San Francisco can corner the State.  
We rejoice to see the metropolis thrive, be-  
cause we have interest and habitation here; but  
when San Francisco endeavors to take unfair  
advantage of people, we are glad to see them  
assert their independence. Competition be-  
tween San Francisco and other local and East-  
ern points is now more wide and active than  
ever before, and her future will depend much  
upon fair dealing. Things can't be done now  
which were possible when San Francisco was  
off in one corner of the world.



## Experience in Fruit Packing.

We had an item some weeks ago of fruit sent to the Colonies Exposition in London from Australia. Although there was much fruit lost, some arrived in good condition and attracted much attention. We find in our latest received files of the *Adelaide Observer* an interesting account of the materials used in packing the fruit for the long journey and the results therewith. We shall give the points, as it will interest those who are making experiments with preservative packing material in this State.

Various attempts were made from 1862 onward in shipping fresh fruits from South Australia to London. This was before steamers were fitted up with cold storage chambers. Many experiments were made during this early period, of which we note the following: Grapes were first sent to London packed in sawdust; had preserved the shape of the bunches, but they were every one of them fermented and had a most acrid and unpleasant taste. They were absolutely worthless. There was a larger case containing six small boxes, lined with earth, and the inner boxes had the grapes packed in charcoal. They each and all presented the appearance of black bricks, which, on being broken, showed some fossil like remains of grapes. The whole of the grapes were packed in hermetically sealed boxes, and the conclusion arrived at was that the mode of packing should be avoided.

There was another experimental shipment on April 11th with Napoleon pears and grapes in kiln-dried sawdust, but the grapes were no good; the pears, however, were in excellent condition, but tasted of sawdust. Sir Arthur Blyth, commenting thereon, says: "It seems clear that in all fruit shipments sawdust should be avoided."

The conclusion reached seems to be that package in cork dust of a coarse character gives the best chance of success, and that tin-lined or hermetically sealed cases are a mistake.

The fruit sent in cool storage for the recent London Exposition is described as follows:

The fruit sent comprised apples of the following sorts: Stone pippin, French crab, dessert, Dumelow's seedling, golden reinette, Cleopatra pomeroi, scarlet nonpareil, Norfolk Beaufin, strawberry and raspberry pippins and Garibaldi. Pears—Swan egg, glox morceaux, Napoleon, large stewing, winter Nelis and assorted lots; also other fruits, such as water and sweet melons, quinces, grapes, pomegranates, lemons and oranges. There were also raisins, currants, almonds, filberts and walnuts, of course; but the great interest is centered in the fate of the perishable fruits. Each steamer took away over four tons of South Australian fruits and vegetables, and the first shipment was by the *John Elder* on March 8th. The next was by the *Austral* on March 22d, the third by the *Cuzco* on April 5th, the fourth by the *Liguria* on April 19th, and the fifth by the *Iberia* on May 3d. The next shipment will be the last. The principal shippers of fruit through the Colonial and Indian Commission were the Hon. R. D. Ross, Mr. J. F. Pascoe, Mr. Robert Davenport and Mr. T. Hardy. The apples were packed mainly in two different ways. Some were merely placed firmly in the case after a most careful inspection of each apple by a man whose duty it was to see that none were bruised or overripe. Others were placed between layers of dried cedar sawdust, the stuff being put in while the case was being gently shaken, so as to settle the sawdust well down between the apples, layer after layer. Pears were packed in the same way. Cork dust was also tried; but sawdust is considered equally as effective, in spite of previous failures, and not so expensive. Some few cases have been sent with wheat chaff as a packing. A case of grapes packed in wheat chaff was sent to England some time ago from Adelaide, and arrived in excellent condition. It was this success that led to the experiment being tried again.

As we have said, the cable dispatches spoke of the arrival of some of the Australian fruit in good condition. Our contemporary has these advices also, but will await full reports by mail before concluding whether the experiment is, upon the whole, a success or not.

In this connection we may mention an essay recently read by J. F. Torrance before the Nova Scotia Fruit Growers' Association, a copy of which is kindly sent us by Dr. John Strentzel, of Martinez. It seems that Mr. Torrance has secured a patent upon what he calls an "Infusorial Fruit Case." It is a case within a case, an inch space between and the space filled with "infusorial earth," the fruit in the inner case being packed in this same earth, which, it is claimed, resists all decay. Infusorial earth is sometimes called diatomaceous earth, and there

are considerable deposits of it on different parts of this coast. It is light and white and easily reduced to an impalpable powder. We suppose it acts just as does fine dry sand or finely ground gypsum, both of which have been experimented with in this State for fruit keeping. It accomplishes isolation of the fruit, exclusion of germs of decay, and in case any single fruit decays, it absorbs the juices and prevents the spread of decay. It seems to us that infusorial earth would be better than sand, free clay or gypsum, because of its pure white color and the fact that it is so much lighter than the other materials. The Nova Scotia inventor expects great things from the invention in sending fruits and flowers to Great Britain.

## Senator Hearst and Oleomargarine.

We are gratified to see that Senator Hearst has relieved the anxiety of California people. He has been telegraphed several times as on the oleomargarine side. At first we thought it must be a mistake, but the reiteration of the statement made us a little anxious lest through his vote California might give an uncertain sound in defense of the genuine dairy industry. Senator Hearst's letter on the subject is, it is true, a little diplomatic and somewhat on the Delphian oracle style of expression, but we propose to understand it as we wish it, and regard it as a denial that he has any liking for the bogus side of the issue. His letter is as follows:

UNITED STATES SENATE,  
WASHINGTON, D. C., July 1, 1886.

D. D. Shattuck, Esq., San Francisco, Cal.—MY DEAR SIR: In response to your favor of June 21st, permit me to advise you not to be uneasy as to how I will vote on the oleomargarine bill, or any other measure affecting the interest of California.

While the newspapers do many useful services they cannot always be relied upon to know in advance how I, or any other Senator, propose to vote on every measure coming up in the Senate.

My knowledge of the needs of California, my interest in the State and the history of my past life with reference to my attitude toward the welfare of California, should satisfy you that I would not vote contrary to the best interests of the State.

Very truly yours,  
GEORGE HEARST.

From mail advices just received from Washington, it seems that the dairymen's measure won its first step in the Senate. President Reall, under date of July 6th, writes as follows:

The Senate Committee on Agriculture reported our bill Thursday as it passed the House, without amendment. There had been great danger that we would not get enough votes to report it, or that the tax would be reduced to a nominal sum and the licenses changed, as there has been terribly strong pressure brought to bear against us on the committee, but the arguments in favor of the dairymen proved unanswerable. Our own friends on the committee wavered for a time on the amount of tax, but finally yielded their views in behalf of protection for the farmers.

This is our fourth great and successive victory. The first was in securing a unanimous report from the House Committee, the second in passing the bill through the House, the third in having it referred to the Committee on Agriculture when it came to the Senate. Had we failed then the splendid result of yesterday could not have been achieved. Our last victory is no less important than the others.

Of course the great and final issue will come on the passage of the bill by the Senate. We suppose the press dispatches in the daily papers may be expected to bring news of its progress or defeat almost any day. On the other hand, action may be considerably delayed. Certainly everything which can be done by the dairymen to enforce their wishes upon the attention of Senators should be undertaken. It may be worth while to use the telegraph freely and to call meetings in all butter neighborhoods which might telegraph their action. We understand that Governor Stone-man, at the request of some of our city dairy merchants, sent a dispatch favoring the measure to Senator Hearst last week. Mr. Reall suggests as follows:

It is of the first importance that every Senator be convinced of the necessity for this bill. Please, therefore, again write all the Senators urgently, particularly those from the Southern States. Get your friends, including your merchants, lawyers and physicians, to write also. Send in petitions; hold meetings, and adopt resolutions; and, above all, act quickly and at once. It is of the greatest importance that we should succeed, and succeed completely. Insist upon the House Bill with the five-cent tax and full licenses. We must have the House Bill adopted by the Senate without change or amendment. Unless it passes there will be ten times more butterine made next winter than there was last, and the dairy industry ruined. The passage of this bill is of more importance to milk producers, butter and cheese makers and cattle-breeders than anything else.

It is certainly vital that no neglect should now allow the issue to fail. Everything which seems wise should now be done by those interested either in making or eating genuine butter, and should be done quickly.

## Irrigation Development.

We have obtained a copy of Vol. I of the irrigation report of Wm. Hammond Hall, State Engineer, a handsome book of 622 pages, bearing the title "Irrigation Development." The State of California ordered, by legislative enactment, that Mr. Hall's reports should be published by the State printer and sold by the Secretary of State at a trifle over the actual cost of publication; so this volume can be had of Hon. T. L. Thompson, of Sacramento, at \$2.75 per copy, with 25 cents for postage if the book is ordered by mail.

The State Engineer has certainly produced a volume which will yield him much honor and be of lasting service to the State. He proposes to issue his report on irrigation in three large volumes, of which "Irrigation Development" is the first. It treats of the history, customs, laws and administrative systems relating to waters, water-courses and irrigation in France, Italy and Spain. Volume II will be entitled "Irrigation in California," and will treat of water-sheds, precipitation and water supply; lands requiring irrigation, irrigation districts, water rights, riparian interests, works, systems, practice and statistics of irrigation in California. The closing volume of the series will be entitled "The Irrigation Question," and will consider the development of this question in California, the Mexican civil law, the English common law, the Californian customs, the conflicts, the questions, review of irrigation and water-right laws, a system for California. The full report of three volumes will comprise an irrigator's library which should be in every public and school library, and in as many farmers' homes as possible.

Returning to the volume just issued, "Irrigation Development," of the contents of which the following is an outline:

It is an epitome of a special literature and line of data which is, for the most part, inaccessible to all but a very few individuals of those for whom the work has been undertaken and is particularly intended.

There are 22 chapters, of which seven are devoted, each, to France, Italy and Spain, and the first one to the water laws and customs of the Romans, as forming the common foundation for those in the modern countries named. Each chapter is divided into two, three or four parts, according to the matter, and the parts are made up of short articles separately devoted each to a noticeable point or feature.

Within this outline the matter is systematically arranged and written for popular reading by those who take a special interest in the subject. While thus popularized as far as possible, the work is yet cast and built up as one for reference. Accordingly we find each chapter preceded by its table of contents and followed by its list of authorities, and reference preserved throughout the text and subdivisions to the pages of authority. And, finally, there is a very complete table of contents and an extended systematized index, which commend the work as one for reference.

It is especially important that this work of Engineer Hall should be widely and carefully studied now that the irrigation question is paramount in this State. An understanding of the wisdom which has been gained by hundreds of years of study and experience in countries where irrigation has been practiced would do much to clear the minds of all who now seem to think that we should be governed by the law of a country which does not irrigate. Respect for precedent is well enough, but one should seek precedents established under similar conditions to those under which he lives and not under diverse conditions. Mr. Hall's work is an important contribution to the progress of the State.

AN ELECTRICAL TREE has been found in New Guinea by two German explorers. When the explorers reached a spot 12 days distant from the coast they found their compass useless, owing to the presence of a tree which so completely possessed the properties of a highly charged electric battery that one of the travelers was knocked down when he touched it. Analysis showed the tree to consist of almost pure amorphous carbon, and it has been named *elsassia electrica*.

POLAND CHINA RECORD.—We have a note from John Gilmore, of Vinton, Iowa, Secretary American Poland China Record Co., announcing that Vol. 7 will be ready for delivery July 15th. It will be larger than any volume heretofore issued.

## Insuring Live-Stock.

Although there has been something done in insuring the lives of valuable animals, the enterprise has not thus far gained great prominence in the thoughts of breeders. It might be expected that such an undertaking would progress slowly, for we imagine that to secure the statistics upon which risk can be learned with some degree of trustworthiness will require time. However, it may be said that enough has been done to warrant the formation of new companies. The latest we read about is the Central Live Stock Insurance Company, of Indiana, which, according to the *Indiana Farmer*, was recently organized at Indianapolis. It is a stock company, with capital stock of \$100,000, articles for which were filed at the office of the Auditor of State last week. All the members are either importers and breeders of live-stock, or interested in that industry. The president, Hon. Clem Studebaker, is an importer and breeder of cattle, and better known as the head of the great Studebaker Wagon Works, of South Bend, Indiana. The company insures horses and cattle against death from disease and accident.

THE PHYLLOXERA IN AUSTRALIA.—It is about eight years ago, if we remember correctly, since the phylloxera was discovered in the Geelong district and stamped out by thoroughly uprooting and burning the vines. We notice that application is now made by the owners of the land for permission to plant vines again. The phylloxera board recommends that replanting be permitted when the following conditions have been complied with, namely, that the remaining portion of the infected lands be trenched and the vine roots eradicated, and that they shall along with the lands that have been so treated be laid down with grass; that replanting vines be permitted at a distance of not less than 100 yards from the old vineyard sites; that in case of phylloxera again breaking out in the district the whole of the vines be destroyed at the expense of the owner, and that no compensation be allowed by the Government for the loss of such vines. The board also recommends that where the diseased vineyard sites have been laid down with grass no further disturbance of the soil be permitted, unless on recommendation of the board; that after vine-planting has commenced no vine plant, leaf, or cutting, or root of vine, or grapes, be permitted to leave the district till it has been proclaimed clean.

CHINESE FOR PERU.—A recent Chinese graduate of Yale College is said to have made arrangements with the Chinese Six Companies of this city for the colonization of about 10,000 of his countrymen in Peru. He says: "The Government at home favors the project, and it is probable that it will bear a considerable portion of the expense. Peru and Chili are the objective points. The Six Companies are powerful and wealthy bodies. Their interests in this country, as well as the interests of our Government, make it imperative that the friendly commercial relations between this Government and ours shall not be broken or strained, as they promise to be by the complications constantly arising from the presence of so large a number of my countrymen on the Western slope. A way out of the difficulty is now presented. The climate of Northern Chili and Peru is a good one for our people. The soil is rich, but undeveloped, and capable of producing heavily. The whites of that country will not do manual labor, and the natives are naturally a commercial people, and would rather trade and peddle in a small way than anything else. For that reason the Chinese are well received there."

VISIT FROM PROFESSOR HENRY.—W. A. Henry, Professor of Agriculture in the University of Wisconsin, and Director of the State Agricultural Experiment Station, arrived in California about July 1st, on a visit, and for the purpose of informing himself, by observation, on California resources and agriculture. He began his tour of inspection in San Diego, and will, no doubt, take occasion to visit many parts of the State. Prof. Henry is doing excellent work in his home field and indirectly for the general advancement of the agriculture of the country. We trust his visit may be long and pleasant.



## THE VINEYARD.

### Raisin Making.

The following essay, written by Robert McPherson, of Orange, was read before the Pomological Society at its session in Anaheim, July 1st. Owing to the absence of Mr. McPherson in San Francisco, the essay was read by H. S. Knapp. Robert McPherson, of McPherson Bros., is regarded as one of the foremost raisin-makers of the coast, in point of success and volume of fruit packed. The following is the essay:

#### Raisin Grapes.

I need not make an apology for not being prepared to do justice to the subject, as every one acquainted with me knows that I have not the leisure to sit down and take the time that justice to this subject demands. The importance of our raisin industry is such that it should command the careful consideration of the best minds of our country. This importance is felt not only in the fact that it is an industry which may support an immense number of people, but it now has and will have much to do with the health of our whole country. This latter point is well worth the examination and study of the most scientific minds, as the result of their investigation of the subject would be of great benefit, by proving the health-giving properties of our raisin grapes. It is an established fact that where the best raisins are produced there is the best place for people suffering from lung or bronchial affections. It is known, too, that in cases of exhaustion, a handful of raisins will do very much to revive sunken energies; and it is true, too, that where the nervous system has been depressed for a long time, the continued use of raisins will very much improve its tone. There is high authority on this subject, and for the benefit of both producers and consumers this subject should be studied and knowledge acquired should be diffused all over the country. Were this properly understood, the consumption of raisins would be very much greater than at present. Among ourselves and in our own families, if we would put them into more general use, we would more thoroughly realize the benefit. Let any one try them when on a camping trip. A handful of raisins, a piece of bread and a cup of water is relished; and work can be performed on such a diet as easily as upon the diet of animal food. I would not adopt the vegetarian system, but I believe that much benefit would result from a more liberal use of raisins in our diet.

In this essay on the subject of "Raisin Grapes," I do not presume it was intended that I should treat particularly of the different varieties but rather of the characteristics of varieties, and in doing this I shall not pretend to do more than treat lightly of other varieties than the Muscatel, or Muscat of Alexandria, so called.

The varieties included in the list of raisin grapes as cultivated with us here in California are the Muscatel (or Muscat of Alexandria), the Sultana, the White Corinth, Black Corinth and some other varieties not well known and not largely cultivated. The Sultana, White Corinth and Black Corinth are seedless, and the manner of pruning, cultivating and handling differs materially from that of the Muscatel; but as these varieties are not extensively cultivated among us in my section, I will only speak briefly of them, and that more especially as to the manner of pruning, the quantity produced and the profit derived from them. These vines require canes of considerable length to be left, which need to be supported by stakes, growing at the same time, from short spurs, wood for the following year. With us the White Corinth and Black Corinth do not produce in sufficient quantities to make them profitable, though the flavor of the fruit is such that, if it did produce largely, it would be a favorite.

The Sultana is of very recent planting and has not been sufficiently tested here yet to decide whether it will acquire that degree of perfection that it does in some parts of the country where it is grown.

The Muscat of Alexandria, or Muscatel, is considered the raisin grape of the country. It is not only the best grape for raisins, but it is well adapted to shipping and is used to some extent in the manufacture of wine and brandy. It is, with us here in the southern portion of the State, particularly, the favorite, because some of the wine grapes and shipping grapes do not do so well. With us at Orange and vicinity, including Anaheim, Tustin and Santa Ana, and extending up the valley nearly to Los Angeles, it seems to be especially at home. The growth of the vine is abundant and, when the vine has acquired sufficient age, it produces annually a good quantity of fruit. On the higher and warmer lands the fruit ripens considerably earlier, giving it an advantage in the curing, as at that time we have the long, warm days for drying, and the nights are shorter and with much less fog.

In growing the Muscat of Alexandria, during the first years of its cultivation, we found that we were making a mistake in its pruning—that is, pruning it with too few buds, the result being that the growth of the wood was too heavy, causing the fruit to drop from the stem. This falling of the fruit was so extensive that, in the earlier years of the raisin business here, it was considered somewhat of an uncertainty whether

the vineyards would set heavy enough to produce profitable crops. As time rolled on, however, we discovered the fact that the vine must not be pruned too closely; that we must leave a sufficient number of spurs, containing a sufficient number of buds, so that the canes will not make such excessive growth as to produce this dropping of the fruit. We find that, in the earlier years of the vineyards, this dropping of fruit is much greater than it is after the vines have acquired some considerable age. This is proven by the fact that, in all our oldest vineyards, the quantity of fruit produced varies very little from year to year, while that of the younger vines is uncertain, making a difference, one year with another, of 30 or 40 per cent.

In leaving spurs on the vines for the production of fruit, it is a matter of considerable importance what length they are to be grown, as it is a fact that the bud nearest the stock is the bud that produces the finest fruit, and that the one following may produce a larger quantity of fruit on the stem, but yet not so good in quality, and as we go farther from the stock the fruit deteriorates in quality; and while our section of the country has done much in the past to keep up the quality of the grape manufactured, we are arriving at a time when we may go to the opposite extreme. Vineyardists, finding that, by more liberal pruning the quantity is increased, the tendency to-day is that many will prune so liberally that the quality of the fruit will be materially affected. The true policy would be to prune so that the quality is kept up, even if the quantity is not so great.

There is another important point to be observed in the pruning of our vineyards for raisins, and that is to keep the vine low, as it is a fact that our finest fruit comes from the lowest vines. It may be that in localities that require much summer irrigation the heads should be kept up to protect the fruit from dampness caused by irrigating the ground; but, with us at Orange, we have no necessity for irrigating our vineyards in summer, consequently the surface of the ground is sufficiently dry anywhere on the warmer lands, even if the fruit lay entirely upon the ground. On the lowlands this would not be safe, yet the heads should be kept no higher than is necessary to keep the fruit from the effects of the moist soil and escaping evaporation from the same.

I know of no better rule to give a vineyardist not well up in the knowledge of pruning, in regard to the number of buds to leave, than this: Whenever the vine produces canes of large size (for instance, the size of the thumb) it should next year carry a greater number of canes. The canes should not grow much larger than the little finger, as the fruit does not set on the stem when the wood grows too heavy.

#### Suckering and Summer Pruning.

None of us need to be told of the necessity of suckering, as we call it, which consists of taking off the canes that grow under the ground and the canes growing on old wood, or better expressed, we leave the canes that have grown on one-year-old wood which has itself grown on one-year-old wood. Of course, we find it necessary sometimes to leave some of those canes growing in blind bud that we may balance the vine, as we should strive to make the spurs of our vines form the framework of an imaginary basket.

There is yet considerable difference of opinion about the necessity of summer pruning. There is a necessity to do some clipping (not pinching, as some would advocate, for it is too slow), but that is on those canes that are inclined to run out laterally, covering the surface of the ground, and making late cultivation, which is necessary to secure good fruit, an impossibility. These may even require a second cutting, which, like the first, should be done before the cane grows woody or before the cane carries so much sap that the cutting of the cane may throw too much sap where it has not been, and where it is not needed. The cutting of canes that have advanced too far often causes a shock to the vine that seriously affects it to its detriment.

#### Sulphuring.

At the present time one who wants to consider himself an authority on sulphuring should not say anything, as there are so many different opinions on the time and number of applications, and where it should be put. I do not have any authority to say that grapes should be sulphured before the flowering or opening of the blossom, but I can say that until I commenced the use of sulphur I could get no good fruit on account of mildew; but by the use of sulphur I have never failed to produce large and perfect fruit, and I always apply the sulphur before the opening of the blossom. I am satisfied also that sulphuring in the open blossom will effectually prevent mildew; and I have met those of the opinion, and very well founded, too, that it is the time to sulphur, advancing the theory that *couleur* is brought about by insects, and that the sulphur is an insecticide, and hence the benefit. I have met many of that opinion, but, on examination, I have never yet seen sufficient evidence to cause me to believe that such was the case. I am more inclined to believe that the minute insects and flies are attracted by the decomposition of the blossom and fruit, and that the webs seen there so frequently are put there for the purpose of catching the flies and insects that gather around this decomposition. I consider *couleur* as being caused more by changes and conditions of atmosphere than any other cause. Any con-

siderable variation of temperature between day and night produces this result. This can be noticed in sections where the fruit does not stay on, and is especially noticeable where the Muscat is planted on coarse sand, which heats up considerably during the middle of the day and becomes very cold during the night. This class of land does not produce Muscat grapes in such quantities as land not subject to these conditions. It must not be understood that our gravel soils come under this head, as they do not cool off to such an extent, as many a person has discovered by sleeping upon them on a cold night. The manner of applying the sulphur the second time also differs a great deal, some throwing it in handfuls upon the fruit, leaves or anywhere except where it should be. While scientists may say that we should not throw sulphur on the ground—that the ground will absorb it—I say that we can throw it on the ground and pass through the vineyard and feel that it is not all being absorbed, as the air becomes well filled with the sulphur vapor, so much so that it will effectually destroy the fungoid growth when it has taken a pretty strong hold. I have seen a crop saved by throwing the sulphur on the ground, when the owner thought it was ruined. My reason for favoring this method is that, if the fruit is of considerable size, the sulphur should not be thrown on it. I have seen the fruit so strongly impregnated with sulphur at the time of packing to ship fresh that some men could not endure the strong vapor that was escaping from it at the time. The quality of the fruit for raisins is affected, and it really impairs its value in the market. It is much better to avoid this error by scattering the sulphur on the ground when applied the second time. I do not believe that there is danger of mildew even with one application, except for the second crop.

#### Kind of Sulphur.

We have our choice between the native and the French sulphur. We have used the California product except two years, and find that from 15 to 20 pounds per acre will actually prevent this growth, and I see no reason why we should use the foreign product. The gross sulphur can, with sublimation, contain the useful material, and I see no necessity of going to the expense of preparing the native sulphur and removing this gross material from it, as, if we apply it before the opening of the blossom, it does not harm the vine; and especially is this the case in the second application when it is thrown on the ground.

#### Approaching Maturity.

Having now treated in a very crude and disjointed manner of the conditions of the vine previous to the ripening of the fruit, I will touch briefly on the treatment of the grape as it approaches maturity. We have read frequently that on the low-headed vines of Spain the growers dig the dirt away from the stock, that the fruit may hang around it. This I have heard contradicted by what I consider better authority. Our present superintendent, Mr. E. B. Willis, spent considerable time among the vineyards of Spain, visiting the principal vineyards around Malaga, Valencia, Denia, Alacante and throughout the Granada district. He says that, while there may be individual growers who pursue this course, yet most of the producers of the best raisins raise the soil in little mounds around the vine to support the grapes. This preserves the clusters in better shape and renders them much less liable to injury in packing. While we cannot afford to expend so much labor on the growing crops of grapes as the Malaga people do, on account of the great difference in the cost of labor (ours costing four or five times as much as theirs), we can afford to pay proper attention to a few facts. When we see one vine growing an unusual amount of fruit, while its neighbor, eight feet away, appears much stronger, growing a larger amount of wood, we must remember that the roots of the stronger vine are thrown out so as to take away from the weaker one a part of its support (for in common ground they grow out roots several times the distance allowed them), and we should relieve the vine of its surplus fruit, else it will not mature properly. The growers of grapes at Malaga do much more than this. They clip the imperfect fruit from the stem while growing, and thus they secure more perfect clusters. Our grapes do not ripen as early as those of Malaga; hence, those who lose any time after the fruit is ripe lose a good deal, for it requires much more time and trouble to cure raisins that ripen two weeks out of season. While 12 days will suffice for curing early fruit, it often requires three times that period to accomplish the same result later. The later fruit will often carry only 10 per cent of saccharine matter, while rich, sweet, early fruit contains as high as 27 per cent.

Our method of drying by the use of trays is very convenient; but there is no question at all but that the raisin can be cured more perfectly upon the ground if the place selected is free from dust. If the ground is used there is need of a protection of some kind. In raisins dried upon the ground, we find some with the skins perfectly smooth on one side and the seeds settled down near it, having the appearance of rot, the air not penetrating between the tray and the skin so as to cure the fruit on all sides equally.

It is unnecessary to give at length any method of drying, as we all understand that pretty well now. The greatest difference between us now is that we do not all understand when the grape will do to lay down, as we call

it. I do not know that I can tell any one not experienced what that time is. The grape should have taken on its amber color, the seed its natural appearance, and generally the stem will show by its drying up near the cane, and it should contain sugar enough so that the sense of taste will tell us; or if we have a saccharometer and the sugar is measured, it should contain 22 per cent or thereabouts. If the fruit is grown on ground not rich enough to make this amount, that fact would inevitably show itself by the raisin not being plump, the grooves would be deep and few, the corresponding ridges sharp and the raisin would be imperfect and acid. If the fruit is over-ripe, then the raisin will be dark and lose some of its richness, but nevertheless will be sweet and will fill the requirements of a good product; the grooves will be numerous and shallow; the ridges correspondingly rounded and the raisin will have a plump body. It will be pliant and, if pressed, will to some extent resume its shape; and when the fruit is picked just right it is more amber and its flavor richer.

#### The Points of a Good Raisin.

The character of the raisin is made up of a number of points, which are about as follows as regards importance: On layers—size, flavor, bloom, plumpness, thickness of skin, size of seeds, proximity of berries to each other on the stem and color of the stem. No fruit is expected to possess the most favorable side of all these characteristics, but no grape can lay claim to superiority that has few of them. Many locations can produce raisins of good flavor, but the large bloomy fruit with small seeds and thin skin will outsell them, and that really is what determines which is superior. Some of those points can be improved upon, as: bloom is kept on by careful handling; plumpness is secured by picking the fruit when fully ripe; size, by correct pruning, good cultivation and irrigation, if necessary; flavor, by giving the vine all it requires as the fruit is growing. No raisin can attain to perfection if it lacks anything that its nature calls for; as, for instance, a climate suited to its delicate power of resistance during its growing period. If the climate is too severe it will adapt itself to such condition by thickening the skin and growing harder and more seeds. If any material of the soil is too full and abundant, either in vegetable or mineral matter, the flavor is affected. Too much moisture in the soil stimulates wood growth and fills the fruit with water that has to be dried away, leaving the raisin thin and uninviting in appearance.

The method of handling the grape from the vine to the raisin is too thoroughly understood to need more than a passing mention. I have almost entirely left that out of this paper, but will refer briefly to the manner of handling the fruit when taken from the drying-beds. The process called sweating is simply evening the cured fruit. It is not equalizing separate stems cured in different degrees of perfection, but the dried fruit upon the same stem. If a stem is not cured it should not be taken up from the tray or from the ground, but when a portion of the stem is wholly cured and some part is not, then sweating is necessary in order that one part of a cluster may assist in curing the balance of it, which suggests that we do not know how much curing is done by the escape of moisture through the stems. If the weather in curing is not extra hot or dry, but little sweating is needed, but if hastened by extreme heat or hot weather, then the unevenness is greater and the fruit will require more time to equalize. If the fruit is taken up too green, it may sour, or sugar as we call it. In early times they used to tell us that our raisins were not so good as others because they did not sugar, but that complaint is never heard now, as this sugaring is only too frequently observed on account of fruit being taken up too green.

Right here it may be mentioned that we are putting 20 pounds of fruit into too close quarters. If our boxes should be made half an inch higher, with other dimensions the same, we would find that our fruit would keep very much better. Last year we increased the size of our boxes one-quarter of an inch, and will this year add still another quarter of an inch. The manufacturers of boxes do not like this, as it does not admit of the working up into raisin boxes of remnants, not to say refuse stock. The time has come when we must insist upon good lumber for these boxes, as it has much to do with the price realized. We should not only have good boxes, but they should be kept clean and neat, as the purchaser will suspect fruit of any brand which he finds in a dirty or slovenly-kept package.

#### Style of Packing.

The style of packing now generally adopted is to carefully hide the stems, though that style is often criticised. It does the party making these criticisms very much good and makes him feel that he has discovered something that no one else has. The fact is that the present style of packing was adopted after very severe criticisms on the very style of packing which is now advocated in some quarters; that is, that the stems should be packed one above the other so that they show the exact quality of the fruit, size of the stem, and so forth, as they appear in the box. I notice that one of our San Francisco houses, in writing upon this subject lately, sustains the present style of packing, hiding the stems. Certainly a box so packed presents a much more inviting appearance than one packed so that the stems show.

#### Manner of Grading.

Perhaps no two packing houses in the State



grade exactly the same, and no one can present himself as authority on this subject; but the style adopted by us is: London Layers, layers and two grades of Loose Muscatel, with one now and then of a higher grade which we term Dehesa. It is claimed by some that we should have but one grade of layers, which should be London Layers, and that all not packed in layers should be taken from the stems and graded in a Loose Muscatel, making two grades, which they would do by using a mill for assorting, as it is perfectly honest in its work.

## Facing.

It is becoming common to face Loose Muscatels, by which is meant laying the top of a box over with raisins in some design—straight rows, circles, or the form of some object, adding a coat of about 12½ cents per box, but making the fruit present a much more attractive appearance and sell for enough more in the market to pay for the extra work, besides the satisfaction of feeling that the goods are placed upon the market in a more creditable shape.

I cannot close this essay without making some little apology for the crude condition in which I am compelled to present it. The press of important business has rendered it impossible for me to prepare it as I should have liked, but I submit it in the hope that you will take this fact into consideration and be lenient in your judgment of its merits.

## National Temperance Instruction.

The following is the text of a bill which passed the Senate, unanimously, was adopted in the House by a vote of 203 to 8, and was signed by the President May 21st:

## A Bill

To provide for the study of the nature of alcoholic drinks and narcotics, and of their effects upon the human system, in connection with the several divisions of the subject of physiology and hygiene, by the pupils in the public schools of the Territories and of the District of Columbia, and in the Military and Naval Academies, and Indian and colored schools in the Territories of the United States.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled,

That the nature of alcoholic drinks and narcotics, and special instruction as to their effects upon the human system, in connection with the several divisions of the subject of physiology and hygiene, shall be included in the branches of study taught in the common or public schools, and in the Military and Naval Schools, and shall be studied and taught as thoroughly and in the same manner as other like required branches are in said schools, by the use of text books in the hands of pupils where other branches are thus studied in said schools, and by all pupils in said schools throughout the Territories, in the Military and Naval Academies of the United States, and in the District of Columbia, and in all Indian and colored schools in the Territories of the United States.

Section 2. That it shall be the duty of the proper officers in control of any school described in the foregoing section to enforce the provisions of this act; and any such officer, school director, committee, superintendent or teacher who shall refuse or neglect to comply with the requirements of this act, or shall neglect or fail to make proper provisions for the instruction required, and in the manner specified by the first section of this act, for all pupils in each and every school in his jurisdiction, shall be removed from office, and the vacancy filled as in other cases.

Section 3. That no certificate shall be granted to any person to teach in the public schools of the District of Columbia or Territories after the first day of January, Anno Domini eighteen hundred and eighty-eight, who has not passed a satisfactory examination in physiology and hygiene, with special reference to the nature and effects of alcoholic drinks and other narcotics upon the human system.

Section 4. That this act shall take effect on its passage.

UNCLE SAM NOT TO PAY FOR THE DRINKS.—On the 2d instant, the House being in Committee of the Whole, the General Deficiency bill was read for amendments. The clause making an appropriation of \$363 for the deficiency in the expense account of the Board of Visitors to the Naval Academy in June, 1885, having been reached, Barnes of Missouri sent to the Clerk's desk and had read a voucher submitted by the disbursing officer at Annapolis giving an itemized statement of the expenses incurred. The Clerk read a long list of eatables and drinkables, including turtles, spring chickens, old chickens, eggs, squash, beer, cognac, Santa Cruz rum and apollinaris. Dingley of Maine offered an amendment providing that none of this sum or other appropriation made by Congress for the expenses of the Board of Visitors shall be used to pay for intoxicating liquors. The amendment was adopted—79 to 49.

## Don't Fail to Write.

Should this paper be received by any subscriber who does not want it, or beyond the time he intends to pay for it, let him not fail to write us direct to stop it. A postal card (costing one cent only) will suffice. We will not knowingly send the paper to anyone who does not wish it, but if it is continued, through the failure of the subscriber to notify us to discontinue it, or some irresponsible party requested to stop it, we look positively demand payment for the time it is sent. LOOK CAREFULLY AT THE LABEL ON YOUR PAPER.

## GOOD HEALTH.

## Food.

Our bodies are made of what we eat.

An article to be suitable for food must contain at least one of the elementary substances of which the body consists, and this must be capable of a ready separation from all other elements. The latter, if not poisonous, will be rejected from the system without harm.

The best kinds of food are such as contain the most of the bodily elements. Milk contains all, and is hence a perfect food.

A proper diet is such a combination of articles as together furnish all the elements in due proportion, while at the same time these articles please the taste and gratify our love of variety. Starvation would result in time if a single one of these elements were lacking. Not only must muscle, bone, etc., be provided for, but, still more, brain, nerve and every secretion.

The modern fancy for the whitest bread is at fault, for such bread is deficient in the elements that make brain, nerves and bones. Hence the tendency to nervous diseases, dyspepsia and decaying teeth. Absence of vegetable food gives rise to scurvy; the too exclusive use of animal food to gout.

But food must be digested. For this no less than five digestive fluids are secreted by appropriate glands—saliva, for starch and sugar; gastric juice, for flesh, fish, eggs, etc; bile and pancreatic juice, for fat, the latter also aiding in the digestion of starch; and the intestinal secretions, to complete the process. A deficiency in any one of these results in some form of dyspepsia.

The digested food must pass from the intestines into the circulation. Hence myriads of hungry mouths seize it from the former and pour it through countless minute vessels, which constantly unite and form larger, into the right side of the heart. Should these vessels be closed up by inflammation the body would waste away, however good the appetite and vigorous the digestion.

This imperfect blood does not, however, yet go into the full circulation, but passes round through the lungs with the venous blood and then into the left side of the heart, whence it is sent out into the arteries a pure fluid, rich in every element.

But the process of nutrition is not yet finished. Those sleepless workers, the ultimate cells, whether of brain, or bone, or muscle, or membrane, throwing off each moment the waste debris, take from the same arterial fluid each what it needs.—*Ex.*

INOCULABILITY OF YELLOW FEVER.—The Brazilian doctor whose discoveries in inoculation for yellow fever were recently alluded to in this column, according to the *London Lancet*, seems to have a rival in Havana. The *Lancet* says: Dr. Carlos Finlay, of Havana, has published the results of several experiments he has made on the inoculability of yellow fever. He performed the operation, or rather got it performed for him, by mosquitoes, which he caused first to sting a patient suffering from yellow fever and shortly afterward a healthy person who was to be (with his own consent, of course) the subject of the experiment. He found that the disease was only inoculable from the third to the sixth day. When two mosquitoes were employed, so that a double dose was given, the symptoms of the experimental disease were somewhat more severe than when only a single mosquito was used. Of 11 cases of inoculation, six were efficacious, one doubtful and four negative. The period of incubation varied from 5 to 14 days; the symptoms consisted of headache, pyrexia, injection, with sometimes an icteric tint of the conjunctiva, and in some cases albuminuria. The fever lasted, as in the ordinary form, from 5 to 21 days. The author believes that this method of producing artificial yellow fever will ultimately be found very valuable as a prophylactic against the natural and dangerous form of the disease.

STRANGELY POISONOUS LIZARDS.—The heloderma is the only poisonous lizard in the world, as far as known, and is confined to Mexico, Lower California and Arizona. The common name is the Gila monster. The poison comes from poison glands and the teeth are channeled to accelerate its passage into the wound. Brandy and whisky are generally antidotes to rattlesnake poison, but fail in the case of a bite from this reptile. The poison of the heloderma is entirely different from that of a snake. The latter kills by paralyzing the respiratory center, while the poison of the Gila monster paralyzes the heart. Experiments have been made showing that subcutaneous injections cause no local injury, while the action of the heart was seriously affected, becoming slowly contracted, while the spinal cord is paralyzed.—*Salt Lake Tribune.*

IMAGINARY ILLS.—A Philadelphia physician says that a great deal of what passes for heart disease is only mild dyspepsia; that nervousness commonly is bad temper, and that two-thirds of so-called malaria is nothing but laziness. Imagination, he says, is responsible for a multitude of ills; and he gives, as an instance, the case of a clergyman, who, after preaching a sermon, would take a teaspoonful of sweetened water and doze off like a babe, under the impression that it was a *bona fide* sedative.

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ARTIFICIAL WHALEBONE.—The scarcity of whales is seriously felt in reducing the supply of whalebone, which has advanced several times its price of a few years ago. To meet this deficiency several substitutes have recently been introduced; the latest is a mode of producing a substitute for the quills of geese and turkeys. A factory has recently been put in operation in Michigan to furnish the article.

WHAT NATURAL GAS HAS DONE.—Since the introduction of natural gas into Pittsburg, Pa., the output of the mills and factories has been increased 20 per cent, a large number of new plants have been erected, and nearly 10,000 additional men have been given employment.

## About Obtaining Patents.

## Patents are Virtually Contracts.

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The value and even the validity of a patent often depends on the character, clearness and sufficiency of its drawings. There are thousands of existing patents in which the improvements are but partially or poorly illustrated in the drawings. When an attempt is made to dispose of such patents, the vagueness and defects of the drawings often prejudice capitalists and manufacturers against the invention, while in reality it may be of great value, and would meet with ready sale had it been skillfully, completely and artistically portrayed. In all cases prepared by us, the drawings are made under our personal supervision, by skilled draftsmen in our constant employ, and every precaution is taken to have the invention fully and clearly shown by different views, so that the improvement will be readily understood by the Examiners in the Patent Office, and comprehended by the public when the patent is granted.

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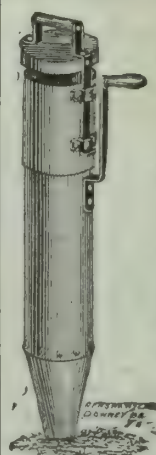
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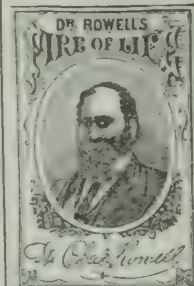
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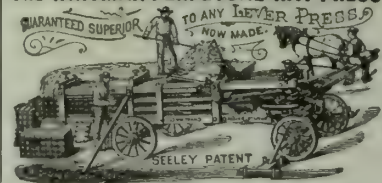
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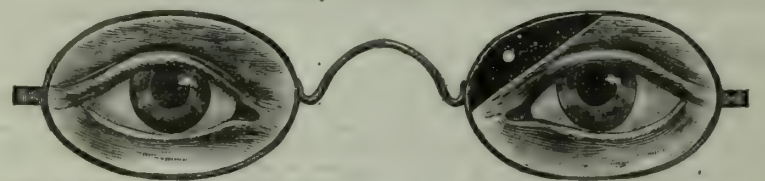
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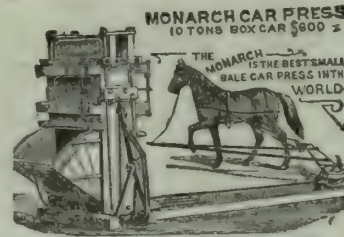
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To those who may have charge of the exhibits, we would call their attention to the fact that these awards will be made for the most extensive, perfect, and varied exhibit of Farm Products (exclusive of live stock) exhibited as a County Production. Thus it will be seen that it is to be wholly devoted to the products of the farms located in the county where the exhibit is made from, and does not include manufactured goods of any kind or character except those grown and raised in the county from whence the display comes.

For the best display, as per explanation above, First premium of \$500, cash. The remaining exhibits shall receive premiums in proportion to their excellence, as compared with that receiving the First Premium. Competition to be between counties only. That is to say, that the entire exhibit made by one county must compete against the entire exhibit of another county. The premium awarded to each county exhibit will be paid to the committee in charge of said exhibit.

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## The Latest Fashions.

## Ladies' Costume.

FIG. 1.—Since lace can now be obtained in all fashionable colors, and in inexpensive as well as costly varieties, the exclusiveness in which it has hitherto been kept has been entered by La Mode, and its use for and upon summer costumes has now become general. It is usually arranged over contrasting silk, satin or surah, and flouncings deep enough for full draperies are obtainable. The costume here illustrated is particularly elegant for lace, and is developed in black lace over colored silk, the lace being Kursheedt's Standard *Matelasse* Spanish *guipure* in flouncing, net and edging, the edging being used for trimming the neck and sleeves. The skirt is shaped so as to hang well over a long or short bustle, or without a bustle, and is of the popular four-gored style. A *balayuse* or fine knife-plaiting of the silk is the only decoration added to the skirt. The draperies are of the flouncing, and are so uniquely arranged that the scalloped edge of the lace is visible at all the loose edges. The front-drapery is laid in deep plaits at the belt and falls in straight folds to the edge of the skirt at the right side. At the left edge it also falls to about the same depth, and three up-turning plaits drape it at this edge, some distance in front of which and below the belt it is caught up in three loose plaits and caught to the skirt below an over-falling fullness, this draping raising it high in a very picturesque fashion. Below these loopings the drapery is caught together, and this completes the draping. At the back the drapery is deep and very full, and is arranged in two seamed *bourous* loops and in many overlapping plaits at the belt, the disposal causing the right side to fall in handsome *jabot* folds. The drapery overlaps the front-drapery at the right side, and several tackings are made to the skirt to retain it in permanent elegance.

The basque is of net over silk, and is superbly fitted by single bust-darts, under-arm and side-



Fig. 3. Ladies' Bonnet.

back gores and a curving center-seam; the side-back seams being left open below the waist-line, and a triple box-plait underfolded at the end of the center seam. Its fronts open in cutaway jacket style over a pouch or Fedora vest of the silk arranged upon smooth fitting vest-sections of lining that close down the center with button-holes and buttons and are attached to the fronts along the bust darts and above the darts. The vest is gathered at the top and bottom, bound at the bottom and under-faced at the top. The right front is extended in a narrow strap at the neck and fastened to the left front under a rosette-bow of ribbon, above which the ends of the standing collar meet. The collar is overlaid with a downward-turning row of lace edging. The sleeves are in coat shape and are shortened slightly; they are trimmed with revers-like cuffs of the silk and frills of the lace edging.

Wool, cotton and silk laces are equally stylish for such costumes, and the silk may be of any preferred hue. Black laces over black or colored silks are very elegant, and white and cream laces are beautiful for afternoon and evening wear. Tissues in all colors are also handsome over silk, and tulle in black and in light and delicate colors is used for very *recherche* costumes, and may be embroidered, studded with beads or perfectly plain. All varieties of seasonable dress goods are adapted to the mode, which in soft wool textures and summer silks is particularly beautiful.

The hat is a frame covered with silk, which is overlaid with the lace net. It is trimmed with ribbon and fancy plumeage.

## Girls' Dress.

FIG. 2.—White nainsook was chosen for the dress in this instance, and fine Italian lace is used for trimming. In front it has a yoke top and a full lower part, while at the back it shows the Princess effect. The material is here tucked for the yoke, and a frill of lace trims the yoke along the lower and arm's-eye edges. A narrow band finishes the neck, and inside it is sewed a frill of lace. The lower part of the



FIG. 1. LADIES' COSTUME.

front is gathered across the center of the top, and a cluster of shirrings is made at the waist-line and secured to a stay arranged under them.

A long dart removes all fullness under the arms, rendering the adjustment smooth and clinging; and the seams joining the front and back come



FIG. 2. GIRLS' DRESS.

quite far to the back and are prettily curved. The closing is made at the back with button-holes and buttons the full depth of the body, which reaches only a little below the hips, the requisite length being made by a full skirt portion, which is gathered to the lower edge. A broad belt section, pointed at the ends and curved prettily at the top and bottom, crosses the front a little beyond the darts, and its ends overlap and join the gathered ends of wide sashes, which are arranged in an immense bow at the back. The belt section is piped at all its edges and trimmed with a ruffle of lace. A piping and a ruffle of deeper lace trim the wrists of the coat-sleeves.

All kinds of cotton textures, including sateens, cambrics, ginghams, mulls, India and Swiss muslins, nainsooks, lawns, etc., also soft woollens, such as serges, nun's-veilings, summer flannels, etc., will be much used for such dresses. The yoke may be of tucked or embroidered material or of lace net, and the sashes may be of ribbon. Embroidery or lace may be ruffled on the skirt or it may be applied in one or several rows.

The pretty hat is simply trimmed with a scarf of crepe and ostrich plumeage.

## Ladies' Bonnet.

FIG. 3.—A *capote* with a tolerably broad brim is here shown. The crown is of black Spanish lace laid over white silk, while the brim is of fine black braid outlined with jet beads. In front are loops of black grosgrain and a rich cluster of flowers, consisting of white chrysanthemums, white roses and maidenhair ferns. This trims the bonnet elaborately, giving it an essentially dressy air. The ties are of black ribbon and start from among the flowers, come down each side and are caught in the usual way. If the ties prove uncomfortable in warm weather, a bridle of black lace could be substituted for them; and it would be quite in harmony with the decorations of the bonnet.

## Ladies' Hat.

FIG. 4.—This hat is decidedly suggestive of a poke bonnet and is of yellow straw. The broad

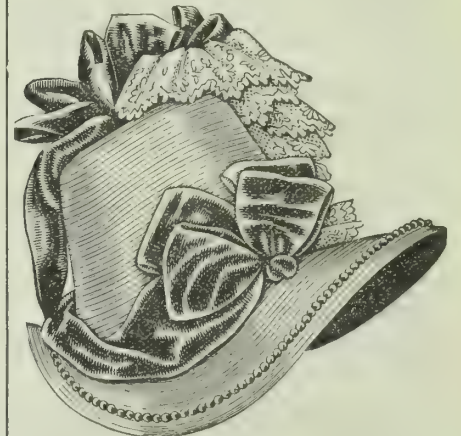


Fig. 4. Ladies' Hat.

brim is underfaced with dark green velvet, and a short distance from the edge is outlined with small yellow pearl beads. Grosgrain ribbon of the new green shade forms the chief decoration. It encircles the crown and is arranged in a four-looped bow just in front. At the back a band of it is drawn to one side of the crown, and terminates in a series of loops just where a cascade of Spanish lace begins, the latter coming down the crown close to the front and forming a unique and simple decoration. Any color preferred may be used instead of the green, which is particularly effective on the yellow straw.

**SHOOTING SPECTACLES.**—We call attention to the illustrated advertisement in this issue of the "Slotterbeck shooting spectacles," for which a patent was obtained through Dewey & Co.'s agency. By reference to the engraving in the advertisement, it will be seen that a diaphragm is placed in the corner of the glass through which one usually looks in taking aim. The object of this diaphragm is to arrest the stray rays of light which tend to blur the sights, and allows only a pure and direct ray to enter through the small hole, and thus offers a distinct image on the retina of the eye. It makes the sights and object aimed at very distinct; can be used on a bright day with no blur, and gives a large field of vision. Aim can be taken very quickly with them, as they are always in proper position. They also relieve the eye and enable one to shoot longer without weariness. The diaphragm does not interfere with the seeing qualities of the glasses, so they may be used for general purposes, reading, as well as hunting. The diaphragm acts as a distant glass, combined with reading glasses, makes a reading and distant spectacle in one. The manufacturers issue a circular giving many testimonials from excellent authorities.

The total value of all property in Sutter county, as shown by the assessment roll for 1886, is \$7,715,428. Of this amount \$6,442,157 is the value of all real estate, and \$1,273,271 the value of all personal property.

**WORKER FOUNDATION.**—In Mr. Muth-Rasmussen's article in the *RURAL* of June 26th, the types say "wooden foundation" in one place. It should read "worker foundation."



## Breeders' Directory.

Six lines or less in this Directory at 50c per line per month.

### POULTRY.

**ALHAMBRA POULTRY YARDS**, J. J. Jones, Prop'r, Martinez, Cal., importer and breeder of the finest strains Wyandottes, P. Rocks, Langshans, Houdans, Crevecoeurs, W. Leghorns, L. Brahmas, Bronze Turkeys.

**E. C. CLAPP**, South Pasadena, Cal. Light Brahmas, Plymouth Rocks and Silver Spangled Hamburgs. Fowls and Eggs. Ex. and P. O. Money Order offices, Pasadena.

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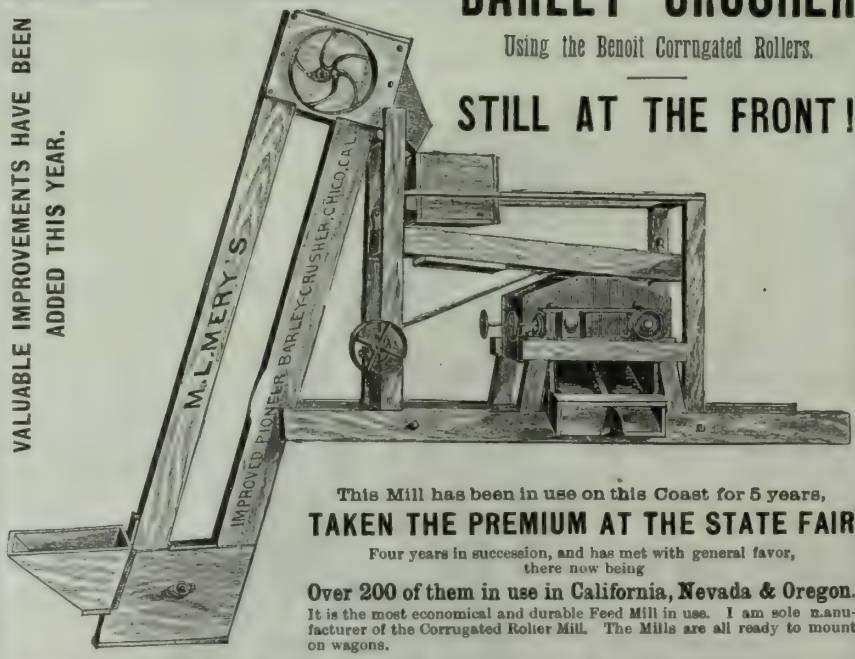
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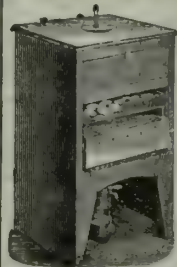
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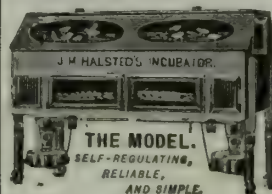
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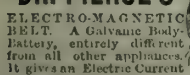
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We Guarantee Satisfaction.

And will send on trial to responsible parties

PRICE LIST OF AMERICAN CHURNS.

No. 1—With legs, 4½ gallons.....\$ 6 00

No. 2—With legs, 7 gallons.....8 00

No. 3—With legs, 9 gallons.....10 00

No. 4—With legs, 12 gallons.....12 00

No. 5—With legs, 15 gallons.....15 00

No. 6—Power, 20 gallons.....20 00

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Dairy and Farm Machinery,  
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In 10,000 Shares of \$100 each.

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Reserved Fund and Paid up Stock, \$21,178.

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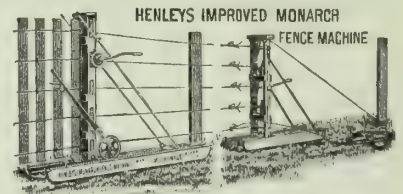
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DRAFT.—Its air currents pass unobstructed by trays over and under all fruit.

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## S. H. MARKET REPORT

NOTE.—Our quotations are for Wednesday, not Saturday, the date which the paper bears.

## Weekly Market Review.

## DOMESTIC PRODUCE, ETC.

SAN FRANCISCO, July 14, 1886.

There is much of interest in the produce markets, as our long reports below will indicate. We give full information from local and distant points.

To-day's cable on wheat is not quite so encouraging.

LIVERPOOL, July 14.—WHEAT—Weaker. California spot lots, 65 5d to 68 8d; off coast, 25 9d; just shipped, 33s 6d; nearly due, 33s 6d; cargoes off coast and on passage, steady; quantity on passage to continent, 580,000 qrs.; Wheat and Flour on passage to U. K., 2,200,000 qrs.; weather in England, fine.

## Foreign Review.

LONDON, July 12.—The *Mark Lane Express* in its review of the British grain trade for the past week says: The weather is fine, favoring blossoming. Wheat trade is firmer. Sales of English wheat during the week were 29,821 quarters at 30s 9d, against 28,491 quarters at 33s 8d during the corresponding period of last year. Flour is very dull. There were 13 arrivals of wheat cargoes; 4 were sold and 3 withdrawn. There was almost nothing doing in trade forward. At to-day's market, wheat and flour were steady and prices unchanged.

## London Wool Market.

LONDON, July 10.—The following is a detailed statement of the wool sales to-day: Victoria—1600 bales, scoured, 10d@1s 8d; do locks and pieces, 9 1/2 d@1s 3 1/2 d; greasy, 6d@1s; do locks and pieces, 6 1/2 d@9d. New South Wales—4600 bales, scoured, 9d@1s 4d; do locks and pieces, 8d@1s 3 1/2 d; greasy, 7d@1s 1d; do locks and pieces, 5 1/2 d@8d; fleeces, 1s@1s 4d. South Australia—1200 bales, scoured, 9 1/2 d@1s 6 1/2 d; do locks and pieces, 9d@1s 3d; greasy, 6d@9d; do locks and pieces, 5 1/2 d@9d. Queensland—500 bales, scoured, 7 1/2 d@1s 7d; do locks and pieces, 1 1/2 d@1s 3d; greasy, 6d@8 1/2 d; do locks and pieces, 3d@9 1/2 d; fleeces, 1s@1s 4d. New Zealand—3400 bales, scoured, 10d@1s 2d; do locks and pieces, 8 1/2 d@1s 6d; greasy, 5d@1s 1d; do locks and pieces, 3 1/2 d@9d. Swan River—800 bales, scoured, 10d@1s 4 1/2 d; do locks and pieces, 10d@1s 1 1/2 d; greasy, 6 1/2 d@7d; do locks and pieces, 4 1/2 d@6 1/2 d. Tasmania—1100 bales, greasy, 10d@1s 3d; do locks and pieces, 3 1/2 d@10 1/2 d; fleece, 1 1/2 d@1s 1d. The sales aggregated 13,200 bales. There was a full attendance and prices were extremely firm.

LONDON, July 13.—At the wool sales yesterday there was a good attendance. The market was active and prices firm. Following are the sales in detail: Victoria—Sales, 3800 bales; scoured, 1s@1s 8d; do locks and pieces, 9 1/2 d@1s 3 1/2 d; greasy, 6d@1s; do locks and pieces, 6 1/2 d@9d. New South Wales—Sales, 2100 bales; scoured, 9d@1s 4d; do locks and pieces, 8d@1s 3 1/2 d; greasy, 7d@1s 1d; do locks and pieces, 5 1/2 d@8d. South Australia—Sales, 400 bales; scoured, 9d@1s 6 1/2 d; do locks and pieces, 9d@1s 3d; greasy, 6d@9d; do locks and pieces, 5 1/2 d@9d. Queensland—Sales, 200 bales; scoured, 9 1/2 d@1s 7d; do locks and pieces, 1 1/2 d@1s 3d; greasy, 6d@8 1/2 d; do locks and pieces, 3d@9 1/2 d. New Zealand—Sales, 600 bales; scoured, 10d@1s 1 1/2 d; do locks and pieces, 8 1/2 d@1s; greasy, 5d@1s 1d; do locks and pieces, 3 1/2 d@9 1/2 d.

## London Agricultural Seed Trade.

[Reported by JOHN SHAW & SONS, Seed Merchants.]

MONDAY, June 28, 1886.

Messrs. John Shaw & Sons, seed merchants, of 37 Mark Lane, E. C., write that the seed market, as usual at this season, was thinly attended, and in fact, presented quite a holiday appearance. Cloverseed of all descriptions consequently exhibit no change in value. No business of importance has as yet passed in new French Trifolium; buyers require lower rates before they will operate. The demand for mustard and rapeseed continues small, on former terms. Less money is taken for hemp seed; but canary remains without alteration. There is a firmer feeling for feeding linseed.

## New York Wheat Market.

NEW YORK, July 11.—The wheat market ended firm, a shade under the best points, but 3/4@5/8 cents above Friday's final quotations, as follows: August, 88 1/2 cents; September, 89 1/2; October, 90 1/2; November, 91 1/2; December, 92 1/2; and January, 93 1/2.

## New York Hop Market.

NEW YORK, July 9.—There is intense excitement in the hop market here, over the reported condition of the crops. California dealers are jubilant, believing that they see an opportunity of placing Pacific Coast hops on the market on more favorable terms. At first many dealers were inclined to regard the reports as exaggerated, believing they were made for the purpose of raising prices. Later dispatches have fully confirmed the first reports, however, and it is believed if one-third of the crop is harvested this year, growers may consider themselves well off. Sales at 18@19c are already reported, and predictions are made of 25c at the end of the week. Unless evil falls to the lot of English or German growers, or those of the Pacific Coast, the failure of the New York crop will not create a famine.

UTICA (N. Y.), July 9.—Reports from Montgomery county to the *Herald* show that the hop crop in that county will be almost a total failure. Many growers say that it will not pay to pick the vines. They are confident that good hops will command 25c or more.

NEW YORK, July 11.—There is no abatement in the strong tone of the market. Hops of good flavor and body are virtually held out of the market, although there is a brisk demand for them. Other grades, except decidedly poor stock, are selling in a moderate way at full prices. No change in the weather has taken place that would improve the crop prospects in this State to the slightest degree, and dealers are already beginning to look to the Pacific Coast for choice goods of 1886 growth. Brewers are somewhat anxious buyers, but dealers outbid them as a rule, and, as a consequence, values generally slip away before brewers make up their minds what to do. Private cables quote American

hops at 56@57 shillings, as to quality, but state that English hops are no higher in view of the favorable appearance of the home crop. The Pacific Coast crop of 1885, common to choice, 15 to 20 cents.

NEW YORK, July 13.—A strong speculative movement is still visible in the hop market, and prices have rapidly advanced. Brewers who but a fortnight ago would not purchase at 15c, are now paying 23@25c in the interior.

NEW YORK, July 14.—The upward movement in hops is still progressing. Brewers yesterday paid 25@28c for the best quality of State. Private cablegrams from London state that American in that market has risen to 78s per cwt. against 45s not long since. Some contracts for Pacific Coast hops of the 1886 crop have been made on the basis of 27 1/2 c delivered here.

## Eastern Wool Markets.

NEW YORK, July 9.—Wool is fairly active and firm. Domestic fleeces, 27@36c @ 1b; pulled, 14@33c; Texas, 9@22c.

PHILADELPHIA, July 9.—Wool is firm with light stocks. Ohio, Pennsylvania and West Virginia, 34@37c @ 1b; New York, Michigan, Indiana and Western fine X and XX, 30@32; washed combing and delaine, 34@38c; tub-washed, 35@38c; medium unwashed combing and delaine, 27@28c; coarse do, 27@28c; Valley Oregon, medium, 24@25c.

BOSTON, July 9.—Wool is strong and higher. Ohio and Pennsylvania fleeces, 33@37 1/2 c @ 1b; Michigan and Wisconsin X and above, 32@33 1/2 c; Michigan No. 1, 35@36 1/2 c; Ohio delaine, fine, 36@37c; unwashed wools, 20@27c; pulled, 27@40c.

NEW YORK, July 11.—There has been little change in the market. Owners are apparently indifferent about doing business except at the advance many of them can now obtain. Buyers complain of the full and increasing cost, but those who can use wool soon are investing when they can find a suitable assortment. Manufacturers are now generally represented in the market, and the improvement in prices seems to have come to stay. Boston dealers are giving more attention to selling than to buying, but manufacturers are not free buyers at quotations and are generally cautious. The business last week, however, was heavy, with prices marked up on some descriptions. Among the sales were 512,000 pounds California spring and Oregon at 23 to 23 1/2 cents. The Philadelphia market is very strong, with an upward tendency. Some sales show an improvement of one-half to 1 cent over last week, but generally the market is not that much higher. Holders are indifferent about realizing except at full prices. Among the sales were 150,000 pounds California at 21 to 22 1/2 cents; 200,000 pounds territory fine medium at 23 cents; 20,000 pounds Nevada fine at 20 cents; 4000 pounds territory medium at 24 cents; 2000 pounds territory medium at 25 cents, and 7000 pounds territory medium at 23 cents.

NEW YORK, July 13.—Wool is in good demand and prices are firm. Domestic fleeces are quoted at 27@36c; pulled wools, 14@33c; Texas, 9@22c.

## Chicago Fruit Market.

[By telegraph to the Fruit Union.]

CHICAGO, July 13.—Early Crawford Peaches are selling at \$2.00, \$2.25, and \$2.50. Fountainbleau grapes selling slow at \$2.25 and \$2.50. Hale's early peaches arriving in poor condition, and selling at \$1.50, \$1.75, and \$2.00. Plums selling for from \$2.00 to \$2.50. Bartlett Pears selling for \$3.50, \$3.75, and \$4.00. Apricots arrive in very bad condition—the weather being very warm and muggy, makes it very hard on fruit.

PORTER BROS. CO.

## Local Markets.

BAGS—The latest on bags come by telegraph this afternoon, as follows:

NEW YORK, July 14.—“The only feature of freight shipments to the Pacific Coast just now,” said a railroad man to your correspondent this morning, “is the enormous quantity of bagging going forward. It has been represented to us that a syndicate was formed in San Francisco for the purpose of locking up all bagging material in California in view of the unprecedented wheat crop. They have evidently exhausted the supply out there, for hundreds of tons are being shipped from the East, and if I am not mistaken, bagging is being imported from England and Scotland at a very low cost, for the purpose of breaking the syndicate above mentioned. The Union Pacific road alone has now 250 tons bagging or about 25 carloads en route to Portland, Or.”

CORN—Corn is scarce and higher.

DAIRY PRODUCE—The market is not over strong, but quotations are unchanged.

BARLEY—Barley is advancing. To-day's call sales were as follows: Buyer 1886, after August 1st, 200 tons, 89 1/2 c; 200, 89 1/2 c. Seller 1886, 200 tons, 83c; 200, 83 1/2 c; 400, 83 1/2 c; 200, 83 1/2 c per cwt.

FEED—Hay is arriving in large quantities and is lower at the following range: Alfalfa, \$6@9; barley, \$5@8; oat, \$7@9; wheat, \$6@12, 50 @ 100.

FRUIT—Full notes are given below and prices in our table.

HOPS—Hops have been reported as contracted up to 27 1/2 c per lb.

OATS—Oats have taken a sharp advance and holders are firm. Prices have been quoted up to \$1.70 for the best.

WHEAT—Wheat is a shade higher with a moderate trade. To-day's call sales were: Buyer season—200 tons, \$1.32; 1300, \$1.32 1/2; 2100, \$1.32 1/2. Buyer 1886—300 tons, \$1.28 1/2; 200, \$1.28 1/2. Seller 1886—100 tons, \$1.21 1/2; 1500, \$1.22; 2000, \$1.22 1/2. Buyer 1886—400 tons, \$1.28 1/2. Seller 1886—2000 tons, \$1.22 1/2 cwt.

WOOL—Wool is still advancing as shown below.

[COMMUNICATED.]

## Market Information.

## Cereals.

It is now authoritatively stated that the India wheat crop is over 38,000,000 bushels below last year's crop. The acreage seeded to wheat in England is below last year's acreage, while owing to cold weather in May and June the crop is from two to three weeks backward.

The visible supply of wheat at the East July 1st

was 35,464,480 bushels, against 48,196,667 at like date in 1884.

That the exaggerated crop report of this State did much to depress and lower the market abroad is shown by the following from the *London Miller*: “California is America's weakness in the wheat world, and is so especially at the present time.” As shown in an article in the *RURAL PRESS* of a recent date, the exaggerated report was made to advance the prices of bags so the pool could unload at high prices; but farmers not buying forced outside holders to sell, and the result is lower prices for farmers.

On July 1st the visible supply of wheat in the United States and Canada with the amount afloat, at that date, amounted to 52,323,665 bushels, against 64,962,625 at the like time in 1885.

On page 55 of this issue is a communication on the wheat crop and prospects in the United States and also in California.

Heavy shipments of wheat to Europe continue to be reported from the Atlantic seaports. The last three weeks in June they aggregated 7,611,612 bushels against 3,808,503 for the like time last year.

Oats have been advancing at a rapid rate under light stocks, light receipts and a good demand. Old choice feed has sold up to \$1.60, and some say even more. New oats have fetched \$1.30. Receipts of the latter are light.

Barley gained strength until an advance of from 2 1/2 to 5 cents per cental was established. The market closed strong with speculators, consumers and shippers buying.

Rye continues to rule dull, with sellers asking \$1.15 for good to choice.

The advance noted last week of one shilling per quarter for wheat cargoes for prompt shipment was maintained up to Saturday, when a decline of 6d was reported by private cables and confirmed by Beerbohn on Monday. Monday's and Tuesday's private cables gave a firm market, with 1d per cental advance in Liverpool spot. To-day's report quotes holders at an advance.

Our wheat market has ruled very strong throughout the week at from \$1.22 1/2 to \$1.25 per cental for No. 1 shipping, with one or two sales of straight lots of strictly No. 1 favorably situated at over \$1.25. Holders, as a rule, are very indifferent, and only advanced bids tempt them to sell, and then only in small lots. There are many farmers whose necessities compel them to sell, and these buyers take the advantage, if possible.

The following shows last year's crop of this State by reducing flour to wheat, on the theory that three centals of wheat make one barrel of flour:

	Tons.
Exports of flour July 1, '85, to July 1, '86, 1,096,693 bbls., equal to.....	164,504
Exports of wheat, like time.....	567,016
“ “ flour by rail.....	12,500
Total exports.....	744,020
Consumption, food and seed.....	350,000
Carried over July 1, 1886.....	77,973
Total.....	1,171,993
Deduct.....	Tons.
Flour from Oregon, 98,670 bbls.....	14,800
Wheat “.....	66,998
Total Oregon.....	81,798
Stock carried over July 1, '85.....	279,765
Total crop of 1885.....	810,430

## Vegetables.

Owing to their early maturing and superior quality over other kinds not fully ripe, Early Rose potatoes are in good demand for both shipping and home trade, and with only moderate receipts prices appreciated until extra choice fetched \$1.25 on the wharf in boxes. While choice sold at \$1.25, poor sold as low as 60 cts per 100 lbs. Garnet Chilis and Peerless remained steady but firm, with now and then sales at over 1 ct a pound from first hands.

Red onions have ruled weak throughout the week with some difficulty in getting over 50 cts on the wharf, but silverskins were strong at an advance; choice fetched 80 cts, and even 90 cts on the wharf.

Green okra, green peppers, cucumbers and tomatoes under free receipts have moved slow at lower prices. Rhubarb also sold for less money. The market closed heavy.

String beans and Summer squash have ruled steady. Receipts about equal the demand.

## Fruits.

The first consignment of whortleberries were sent in by Z. M. Biglow of Occidental to Thurston & Horton, and sold at 12 1/2 cts a pound. The first consignment of huckleberries came from L. Patterson, Occidental, to Eveleth & Nash, and sold at 20 cts a pound.

Blackberries sold to-day at \$3.50 to \$5.00 a chest. Watermelons and canteloupes come in sparingly and, consequently, these warm days, fetch good prices.

Figs, which were a drug for all of two weeks, suddenly started up on Thursday last, and on Monday sold as high as 90 cts for choice in large boxes. Yesterday they were weaker and to-day slightly lower.

Under lessening available supplies and strong demand, apricots steadily advanced until \$1.25 was readily obtained yesterday. Canners paid this price. The market was very strong to-day at full prices.

Choice apples and pears have been and continue to be very scarce. When received they fetch high figures; apples up to \$2.25 on the wharf. Pears might go very nearly as high, but this I cannot positively affirm, as no choice has sought this market yet. The market is quick for all coming in, at from 60 cts to \$1.50 per box for poor to good pears, and 50 cts to \$2 and \$2.25 for poor cooking to choice eating apples.

Peaches have commanded full prices throughout the week, with Early Crawfords selling on the wharf at \$1 to \$1.25 a basket, and in some instances even higher. Common varieties had a wide range from 60 to 90 cts, and in some instances at over \$1. The supply seeking this market is less than last year, and consequently prices hold up well.

Currants are going out, with receipts light and prices higher. The advance this week has been fully \$1 a chest. The range of the market is \$4.50

to \$5, with sales in a retail way up to \$6. The high prices curtail consumption.

Strawberries and blackberries have held to steady but low prices, but now and then sell up to \$7 a chest. But raspberries fluctuated. On Monday they sold at from \$9 to \$12 a chest, yesterday, \$2 lower, and to-day still lower.

Grapes coming in are poor, and, therefore, do not command attention; but as large quantities of empty boxes for packing are being sent to growers, it is quite possible that heavy receipts will begin to come forward next week.

Plums have ruled fairly steady, but at times concessions had to be made to clean up consignments.

## Dairy Product.

Fair to good butter is in oversupply, necessitating concessions to effect sales, which lessens the demand for choice to gilt-edged, compelling the lowering of the latter, so as to keep the market well in hand. There is a very light call for pickled and packed.

Cheese is held firm by dealers advising light shipments. Stocks, under light receipts, have been reduced, but as the supply to come forward is very heavy, with the East sending in considerable, dealers are slow in attempting other advances, for if prices get too high, we will be flooded by heavy shipments of Western cheese.

Eggs have ruled weak under heavy supplies from the East. The price of fair to good is lower, but strictly choice near-by ranch eggs command 24 to 25 cts, with jobbing sales from stores at a slight advance. The consumptive demand runs chiefly on the cheaper kinds, and therefore drags down choice.

Poultry has ruled very strong, owing to light receipts and strong competition in buying, by reason of a larger consumption. It is thought by dealers that farmers are holding back fowls under the impression that prices will be higher next month when the G. A. R. meets. If all hold back and send in, their prices will be apt to rule low in August.

## Bags.

The persistent efforts of the *RURAL PRESS* to break the bag pool is shown in continued sales of Calcutta bags by outside holders at from 8 to 9 cts. On Tuesday an auction sale of 134,000 Calcutta bags was held, and the following cash sales made: 25,000@77.75; 45,000@77.60 and 10,000 local make \$7.70. The balance was withdrawn, as the bidding was slow and lifeless.

## Miscellaneous.

The tonnage movement compares with last year at this date as follows:

	1886.	1885.
On the way.....	325,355	203,005
In port, disengaged.....	30,022	103,924
In port, engaged.....	41,516	17,788
Totals.....	396,893	324,717

The above gives a carrying capacity as follows: 1886, 634,932 short tons; 1885, 518,547 short tons. Increase over last year, 116,385.

Hams and Bacon were advanced the past week 1/2 ct a pound.

There is a strong selling pressure on honey, which causes buyers to be timid and bid down.

Hay has ruled steadier, with a strong tone for choice to extra choice.

Wheat charters are weak and lower. An iron vessel on spot was taken to load wheat at 34s U. K. Havre or Antwerp, which is 1s lower than the last spot charter.

Sterling exchange is lower, which is against wheat bills.

Another drop in silver this week. The price now is 43 13-16d per ounce. The decline allows English wheat buyers to pay for their purchases in India just so much less.

## Livestock.

Beef cattle are strong at an advance, with bullocks that cut to advantage given the preference. Mutton and Lambs are very strong at last week's advance. A persistent effort is being made to depress Hogs, but with Hams and Bacon advancing, are liable to prove a failure. The offerings in the market are not heavy. The horse market is unchanged, although there appears to be more inquiry for single footers and also general utility horses—the latter to match.

Another advance in Mutton and Sheep is liable to take place next week. The following are to-day's meat prices: Beef—Stall fed 7 1/4 @ 7 1/2 c @ 1b; grass fed, extra, 6 1/2 @ 7c; first quality, 6 1/4 @ 6 1/2 c; second, 5 1/2 @ 6c; third, 4 1/2 @ 5 1/4 c. Calves, small, 8 @ 9c; larger, 6 1/2 @ 7 1/2 c; @ 1b. Mutton—Ewes, 4 1/2 c; wethers, 4 @ 5c. Lamb—Spring, 6 @ 6 1/2 c @ 1b. Pork—Live hogs on foot, 4 @ 4 1/2 c for both grain and dairy fed; 2 1/2 @ 2 3/4 c for soft; dressed, 6 @ 7c for hard, and 4 @ 5c for soft. Grass-fed stock sold on foot, gross weight, at one-half the price they fetch dressed; stall-fed, on foot, fetch one-third less than they sell at dressed.

The *Grocer and Country Merchant* of July 9 contains the following sale of livestock for the week as follows: San Francisco Stock Yards.—793 cattle (large); fat, \$36.50; 836 cattle (medium); good condition, \$32.00; 784 calves, \$37.50, \$4.25, \$8.00, \$12.50, \$14.75; 5870 sheep, \$2.00, \$2.25, \$2.50, \$3.00, \$3.25; 3118 lambs, \$1.25, \$1.50, \$1.65, \$1.75, \$2.00, \$2.75; 2346 hogs, 3c, 3 1/2 c, 3 3/4 c, 4c. Oakland Stock Yards.—241 cattle (large; fine condition), \$35.50; 156 cattle (medium; fine condition), \$31.75; 218 calves, \$3.50, \$4.50, \$5.00, \$6.00, \$8.00, \$10.00, \$14.50; 949 sheep, \$1.75, \$2.00, \$2.25, \$2.50, \$3.00, \$3.25; 520 lambs, \$1.25, \$1.50, \$2.00, \$2.25; 245 hogs, 3c, 3 1/2 c, 3 3/4 c, 4c.

## Hops.

The market has had quite a boom, although it is now quiet. A parcel of No. 1, of 1885, not choice, was sold last week at 12 1/2 cts and on Monday resold at 17 1/2 cts. It is said that a parcel of choice '85 was sold the same day at 20 cts for shipping to the East. New crop has been contracted up to 25 cts for choice. Growers are now slow in naming a figure, fearing that buyers will pick them up. Over half the crop is said to be sold and contracts drawn.

## Wool.

The market is very strong, at still higher prices. Sales of choice Oregon have been made at 27 cts and choice Northern California at 25 to 26 cts. Other grades are proportionately higher. The stock on hand is well cleaned up, with all received quickly taken by buyers.

San Francisco, July 14, 1886.

J. R. F.



## Domestic Produce.

WEDNESDAY, July 14, 1886.	
<b>BEANS AND PEAS.</b>	
Bayo, cti.....	1 30 @ 1 40
Butter.....	1 35 @ 1 50
Pastor.....	1 75 @ 1 90
Red.....	1 10 @ 1 25
Pink.....	1 10 @ 1 15
Large White.....	3 00 @
Small White.....	1 75 @ 1 90
Lima.....	1 00 @
Field Peas, blk eye.....	1 00 @ 1 12 1/2
do green.....	1 25 @
do Niles.....	1 00 @
<b>BROOM CORN.</b>	
Southern.....	3 @ 3 1/2
Northern.....	4 @ 6
<b>CHICORY.</b>	
California.....	4 @ 4 1/2
German.....	6 @ 7
<b>DAIRY PRODUCE, ETC.</b>	
<b>BUTTER.</b>	
Cal. fresh roll, lb.....	14 @ 18
do fancy brnds.....	19 @ 24
Pickle roll.....	20 @ 21
Firkin, new.....	15 @
Eastern.....	10 @ 12 1/2
<b>EGGS.</b>	
Cheese, Cal., lb.....	6 @ 7 1/2
Eastern style.....	8 @ 12 1/2
<b>EGGS.</b>	
Cal. ranch, doz.....	25 @
do store.....	20 @ 24
Ducks.....	1 @
Oregon.....	15 @ 17
Eastern, by ex.....	15 @
Pickled here.....	21 @
Utah.....	21 @ 22
<b>FEED.</b>	
Bran, ton.....	14 00 @ 14 50
Commeal.....	24 00 @ 25 00
Hay.....	5 00 @ 12 50
Middlings.....	16 00 @ 17 50
Oil Cake Meal.....	26 50 @ 27 50
Straw, bale.....	@
<b>FLOUR.</b>	
Extra, City Mills.....	3 75 @ 4 25
do Country Mills.....	3 60 @ 4 10
Superfine.....	2 75 @ 3 25
<b>GRAIN, ETC.</b>	
Barley feed, cti.....	50 @ 52 1/2
do Brewing.....	1 50 @ 1 65
do new.....	90 @ 95
Chevalier.....	1 30 @
do Coast.....	@
Buckwheat.....	1 00 @ 1 05
Corn, White.....	@
Yellow.....	1 15 @ 1 25
Small Round.....	1 25 @ 1 30
Nebraska.....	90 @ 1 00
Oats, choice.....	@
do No. 1.....	1 60 @ 1 65
do No. 2.....	@
do black.....	@
do Oregon.....	1 65 @
Rye.....	1 10 @ 1 12 1/2
Wheat, No. 1.....	1 23 @ 1 25
do No. 2.....	1 15 @ 1 20
Choice milling.....	1 27 @
<b>HIDES.</b>	
Dry.....	15 @ 16
Wet salted.....	8 @ 9 1/2
<b>HONEY, ETC.</b>	
Bee wax, lb.....	21 @ 23
Honey in comb.....	8 @ 10
Extracted, light.....	3 1/2 @
do dark.....	3 @ 3 1/2
<b>HOPS.</b>	
Oregon.....	@
California.....	10 @ 12 1/2
<b>ONIONS.</b>	
Red.....	40 @ 45
Silver skin.....	75 @ 90
<b>NUTS, JOBING.</b>	
Walnuts, Cal., lb.....	7 1/2 @ 9
do Chile.....	7 1/2 @
Almonds, hdshl.....	6 @
Soft shell.....	10 @ 12
Brazil.....	11 @ 12 1/2
Pecans.....	10 @ 12 1/2

## Fruits and Vegetables.

WEDNESDAY, July 14, 1886.	
<b>FRUIT MARKET.</b>	
Apples, box.....	75 @ 1 35
do red.....	1 50 @ 2 00
Apricots, bx.....	90 @ 1 50
Bananas, bunch.....	1 75 @ 2 25
Blackberries, ch.....	4 00 @ 5 00
Cantaloupes, cr.....	5 00 @ 6 00
Cherries blk.....	@
do white.....	@
do Royal Ann.....	@
Cherry plums.....	40 @
Cranberries.....	7 00 @ 10 00
Currants chest.....	75 @ 1 25
Fig.....	75 @ 1 00
Limes, Mex.....	9 00 @ 9 50
do Cal box.....	25 @ 50
Lemons, Cal, bx.....	2 50 @ 4 00
do Sicily, box.....	8 50 @ 9 00
do Australian.....	@
Nectarines, box.....	1 50 @ 1 75
Oranges, Cal, bx.....	1 75 @ 1 75
do Tahiti, M.....	@
do Mexican, M.....	@
do Panama.....	@
Peaches, bx.....	75 @ 1 00
do bask.....	75 @ 1 10
Crawfords, bx.....	1 00 @ 1 25
do bask.....	1 00 @ 1 25
Pears bx.....	1 25 @ 1 75
do bask.....	60 @ 75
do Bartlett, bx.....	1 25 @ 2 00
do do bask.....	50 @ 75
Perseimons.....	@
Jap, bx.....	@
Pineapples, doz.....	4 00 @ 5 00
Pomegranates, b.....	2 @ 3
Plums b.....	@
Prunes bx.....	@
Quinces bx.....	@
Raspberries ch.....	8 00 @ 10 00
Strawberries ch.....	4 00 @ 6 00
Watermelons ea.....	25 @ 30
<b>DRIED FRUIT.</b>	
Apples, sliced, lb.....	1 1/2 @ 2 1/2
do evaporated.....	6 @ 8
do quartered.....	1 1/2 @ 2

**CANALS VS. RAILROADS.**—A general but erroneous notion that the day of canals has passed, that they have been superseded by railroads, is vigorously combated by Horatio Seymour, Jr., in a pamphlet called "The Canal Age." He shows that railways never have carried freight as cheaply as canals, and probably never can; that the Erie canal, far from being a tax, is a profitable investment for the State; that Germany, Austria, Russia, England and other countries are rapidly extending their canal systems; and that in the extent of our water routes this country is relatively far behind Europe. Thus, France is engaged on four great waterways, for which \$200,000,000 have been appropriated, and which will cost much more; Germany and Russia are constructing a canal from the Baltic to the North sea; England is making canals from London to Liverpool and Bristol, and from Manchester to Liverpool; while Canada is spending \$1,000,000 to improve the Welland canal.

## List of U. S. Patents for Pacific Coast Inventors.

Reported by Dewey & Co., Pioneer Patent Solicitors for Pacific States.

From the official report of U. S. Patents in Dewey & Co.'s Patent Office Library, 252 Market St., S. F.

FOR WEEK ENDING JULY 6, 1886.

344,892.—ROCK DRILL—C. O. Barlow, S. F.	
344,896.—TRIGGER ATTACHMENT FOR DOUBLE GUNS—C. E. Burgans, Oakland, Cal.	
344,950.—DISK SEEDER—B. C. Dorsey, Portersville, Cal.	
344,830.—GANG PLOW—P. Hansen, Fresno, Cal.	
344,915.—BLOW GUN—Lang & Hart, Stockton, Cal.	
344,916.—GAS CUT-OFF—Chas. Leech, Oakland, Cal.	
345,075.—FENCE POST—J. L. Quackenbush, Portland, Oregon.	
345,177.—MIDDINGS PURIFIER—R. A. Rew, Pomeroy, W. T.	

NOTE.—Copies of U. S. and Foreign patents furnished by Dewey & Co., in the shortest time possible (by mail or telegraphic order). American and Foreign patents obtained, and general patent business for Pacific Coast inventors transacted with perfect security, at reasonable rates, and in the shortest possible time.

## Fairs to Come.

Bench Show of California Kennel Club, San Francisco, July 27th to 31st.  
 Santa Cruz Fair Association, Santa Cruz, August 3d to 7th.  
 Bay District Association, San Francisco, Aug. 7th to 14th.  
 Third District—Butte, Tebama and Colusa counties—Chico, Aug. 17th to 23d.  
 Fourth District—Sonoma, Marin, Solano and Napa counties—Petaluma, Aug. 23d to 28th.  
 Seventeenth District—Nevada and Placer counties—Glenbrook Park, Aug. 24th to 28th.  
 Mechanics Institute Fair, San Francisco, Aug. 24th to Sept 25th.  
 Golden Gate Fair, Oakland, Aug. 30th to Sept. 4th.  
 Thirteenth District—Sacramento, Yolo, Yuba and Sutter counties—Marysville, August 31st to September 4th.  
 Eighth District—El Dorado, Amador, Alpine and Mono counties—Placerville, August 31st to September 4th.  
 State Agricultural Society, Sacramento, September 6th to 18th.  
 Oregon State Agricultural Society, Salem, September 13th to 18th.  
 Eleventh District—Plumas, Lassen, Sierra and Modoc counties—Greenview, September 20th to 24th.  
 Second District—San Joaquin, Calaveras, Tuolumne, Stanislaus, Merced, Mariposa, Fresno, Tulare and Kern counties—Stockton, Sept. 21st to 25th.  
 Ninth District—Del Norte and Humboldt counties—Rohnerville, Sept. 21st to 24th.  
 Fifth District—San Mateo and Santa Clara counties—San Jose, Sept. 27th to Oct. 2d.  
 Seventh District—Monterey, Santa Cruz, San Benito and San Luis Obispo counties—Salinas City, Sept. 28th to Oct. 2d.  
 Tenth District—Siskiyou, Trinity and Shasta counties—Yreka, Sept. 29th to Oct. 2d.  
 Nevada State Fair, Reno, Oct. 4th to 9th.  
 Sixth District—Los Angeles, Santa Barbara, Ventura, San Diego, San Bernardino and Inyo counties—Los Angeles, Oct. 11th to 16th.  
 Santa Barbara Agricultural, October 5th to 8th.

## Boys and Girls' Aid Society.

We have received from E. T. Dooley, superintendent, a circular showing the work of the last year and alluding to the needs of the institution. The society rescues homeless, neglected or abused children of California; receives "juvenile offenders" (by legal commitment or otherwise) who are in danger of being imprisoned; provides for such until suitable homes or employment and oversight are found for them, and continues a systematic attention to their condition and treatment. The society has now moved to the new building of which we recently gave an engraving in the RURAL, and which was donated by James G. Fair and Charles Crocker. It is beautifully situated, nearly opposite main entrance of Golden Gate Park. Mr. Dooley says the new building has only enlarged the opportunities; current expenses are increased thereby and must be met. He asks contributions of money, clothing, etc. During the last year they have received and placed in good homes 323 children; 6650 garments were given; 15,334 lodgings furnished and 49,168 meals given.

## Take a Receipt.

ALWAYS TAKE A RECEIPT from a newspaper agent. Not simply because a few out of many are tricky or careless, but because accidents will sometimes happen to the best of business men. It is a favor due to the publisher that every subscriber shall take a receipt from the agent, or clerk whom they pay. All our receipts have a corresponding stub which agents are accountable for and are required to return.

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A. T. HATCH, President.

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## HORTICULTURAL BOOKS.

Issued by DEWEY & CO., Publishers of the "Pacific Rural Press."

CALIFORNIA FRUIT GROWER.—A practical Handbook for the orchardist (in preparation).

CATALOGUE OF EUROPEAN VINES.—With synonyms and brief descriptions, by I. Bleasdale, D. D. Invaluable to those growing the vine. Price, in pamphlet, 50 cents.

ORANGE GROWING IN CALIFORNIA.—By T. A. Garey, of Los Angeles. The most comprehensive treatise on the growth of this fruit. It contains full instructions for growing the trees, planting and care of orchards, etc.: 227 pages. Price, \$1.

SILK GROWERS' MANUAL.—By W. B. Ewor, A. M. A practical treatise full of useful hints for beginners in this State; 20 pages. Pamphlet, price 25 cents.

REPORT OF FRUIT GROWERS' CONVENTION, 1881, 1882, 1884, 1885, post-paid, 25 cents.

## OTHER WORKS.

THE AGRICULTURAL FEATURES OF CALIFORNIA, by Prof. Hildard, 138 large pages, bound in stiff cloth, with colored maps, \$1.00.

NILES' STOCK AND POULTRY BOOK, pamphlet, 120 pages, post-paid for 50 cts.

KENDALL'S TREATISE ON THE HORSE AND DIS-EASES, post-paid for 25 cts.

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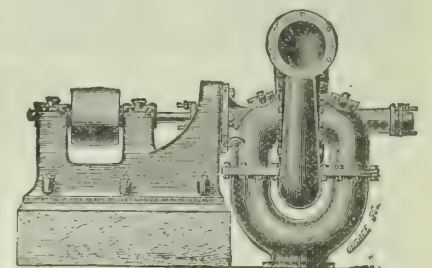
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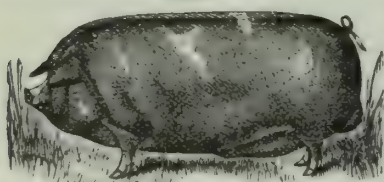
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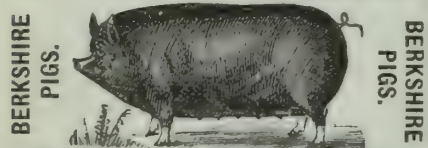
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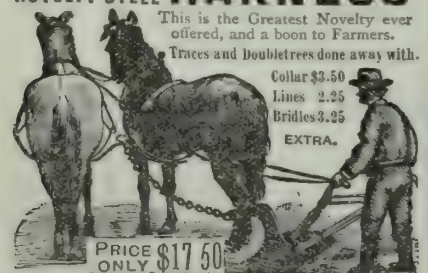
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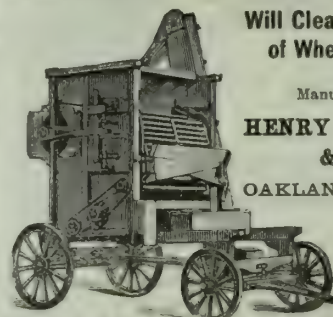
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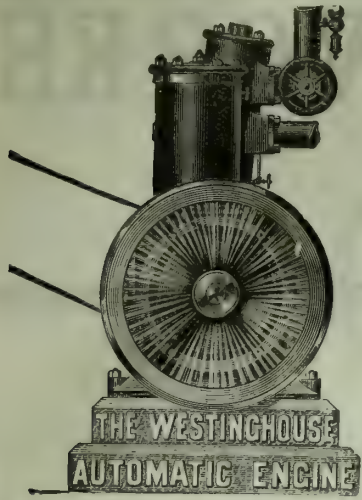
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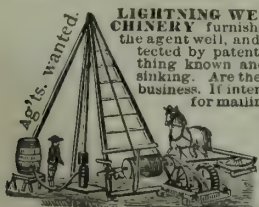
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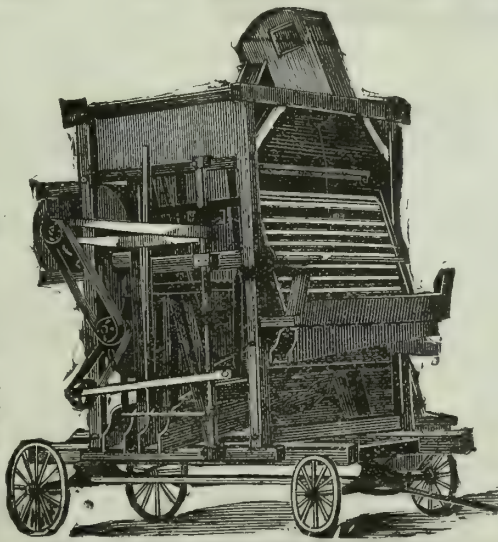
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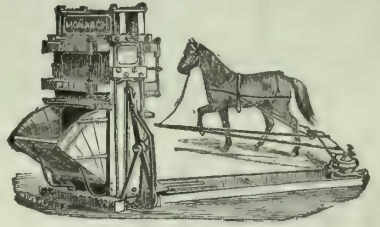
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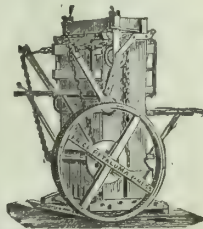
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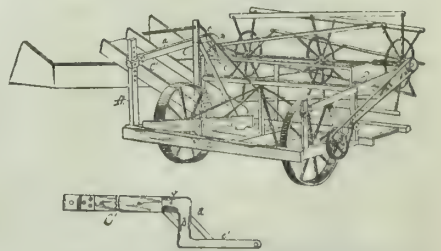
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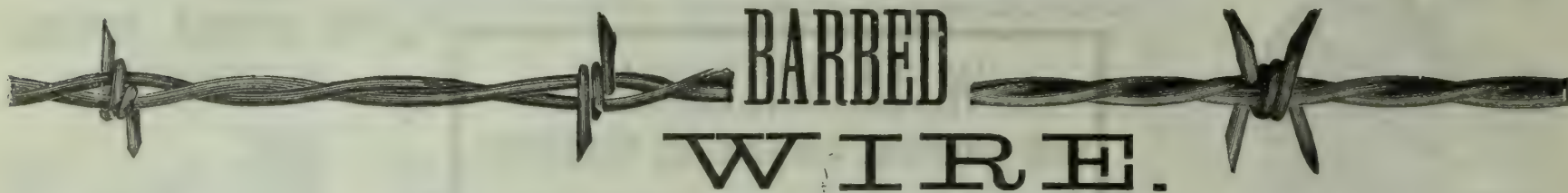
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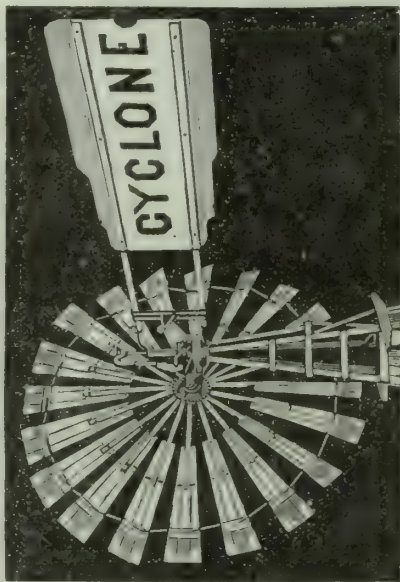


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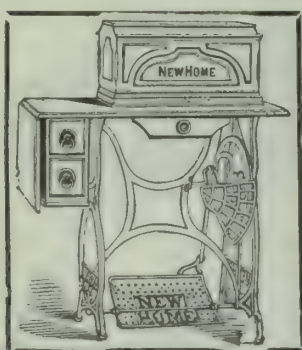
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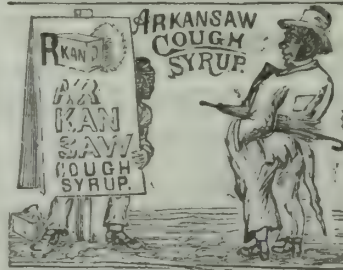
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### DIVIDEND NOTICE.

The German Savings and Loan  
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For the half year ending June 30, 1886, the Board of  
Directors of The German Savings and Loan Society has  
declared a dividend at the rate of four and thirty-two  
one-hundredths (4 32-100) per cent per annum on term  
deposits and three and sixty one-hundredths (3 60-100)  
per cent per annum on ordinary deposits, payable on and  
after the 1st day of July, 1886. By order.

GEO. LETTE, Secretary.



# PACIFIC RURAL PRESS

TWENTY-PAGE EDITION.

Vol. XXXII.—No. 4.]

SAN FRANCISCO, SATURDAY, JULY 24, 1886.

{ \$3 a Year, in Advance  
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## A Fine Shorthorn.

We give on this page a good portrait of a very beautiful and well-bred Shorthorn cow, Roxanna's Rose 2d, owned by W. P. Higinbotham, Manhattan, Kansas. She is the offspring of a blend of the blood of the celebrated Red Rose family of Young Marys with the even more famed Josephines. Imported Josephine was a very fine show cow and a successful prize winner. She was purchased in 1836 of her breeder, Mr. Jonas Whitaker, of Grunhome, Yorkshire, England, by Felix Renick, of Ohio, when less than one year old, and imported to Ohio in that year, where she remained his property as long as she lived. The pedigree of this noted cow excites the admiration of the most fastidious admirer of Collings and Bates' most fashionable blood—for it is only the concentration of the blood of Favorite (252).

The sire of the noted cow Josephine—Norfolk (2377)—was sired by the famous Red Rose bull 24 Hubback (1423), which Mr. Bates used so freely upon his Duchesses, and doubled him upon some of his best. 2d Hubback was full of the blood of Favorite (252). Norfolk's dam was the produce of a full brother and sister, and all of the crosses in them for several generations each way were Favorite's sons and grandsons, and then the pedigree finally ends with Favorite (252) and Hubback (319), for direct crosses to still increase the depth of in and in-breeding, and that too of as good blood as is recorded in the English herdbooks. Imported Josephine's descendants were owned and bred for a number of years by the distinguished breeders, James and Abram Renick, and by these gentlemen greatly prized for individual merit, they being possessed of fine form, good style and robust constitution.

The intervening sire's dams between Josephine and Roxanna's Rose 2d were nearly all bred by the Hamiltons, of Flat Creek, and the Renicks. Her sire was Rose Duke 2d, of Clark's Young Mary tribe, got by 4th Duke of Geneva 7931 (the sire of the \$12,000 2d Duke of Oneida and the \$10,000 7th Duke of Oneida), out of Red Rose 5th by Duke of Argyll 5539; Red Rose 2d (vol. 14) by Clarendon 2634; Red Rose by Pearl 2012, etc. He was bred by B. F. Van Meter. Roxanna's Rose 2d, as shown in the engraving, is described as presenting the form and outline of what all would concede to be a thoroughly good Shorthorn cow. She weighs, in good condition, about 1500 pounds, is a regular breeder, easy keeper, and of an unusually gentle disposition.

GRASSHOPPERS have made their appearance in the Umpqua valley, Oregon.

## Potash From the Eucalyptus.

It may be that some of our readers may desire to stop the eucalyptus from killing their trees and set them to work killing bugs. This may be done by chopping them down and turning them into potash, or rather extracting the potash from their cremation. Baron Von Mueller, Government Botanist of Victoria, states that the woods of the Casuarinas, or she-

mass represents crude potash, more or less impure, according to the nature of the wood employed. A final heating in rough furnaces is needed to expel sulphur combinations, water and empyreumatic substances; also to decompose coloring principles. Thus pearl ash is obtained. Pure carbonate of potassa in crude potash varies from 40 to 80 per cent.

Of course there are few people in this State who would be in a situation to make commercial potash, and those who desire to extract the

## Fine Cuthbert Raspberries.

Mr. W. O. Emerson recently brought us in a beautiful sample of Cuthbert raspberries grown at Haywards, in the garden of the late George F. Crowell, now carried on by his widow. Mr. Emerson called it "a good average box." We found the fruit no less delicious in the eating than it was superb in appearance.

Learning that Mr. E. was a stepson of Mr.

Crowell, and personally interested in caring for the berries, we were glad to catch some notes of his experience in their cultivation. The original plants were obtained in 1880. They must, of course, have plenty of water, and are found to do better if set in an orchard, alternating with or in double rows between the trees. This arrangement gives the shade which is desirable to insure the finest growth, that is, not too rapid. Mr. Emerson runs a ditch between the rows, and wets them thoroughly twice in the season.

The bushes were formerly mulched with old stablemanure; but this has not been used for two years past. There have been some signs of insect depredation on the leaves this spring for the first time. Mr. E. has not yet satisfied himself whether these are due to slugs from adjoining pear trees or to some other source. The only insect he considers dangerous to the raspberry is the currant borer, which likes to begin in the roots and follow the pith up the canes, cleaning it out as he goes. But the

irrigating already mentioned seems enough to keep this nuisance away.

The canes have made as much as nine feet in a season. Such luxuriant shooters, however, are cut back in February to about four feet. The season's growth usually gives a crop, so that they may be said to yield semi-annually. For the sake of seeing what they were capable of, as to continuance in bearing, a little patch near the house was kept last year. From this, on heavy adobe, untrimmed, uncultivated and unirrigated, they had fruit at Thanksgiving, at Christmas and on Washington's birthday.

For firmness and size, as well as duration of crop, the Cuthbert raspberry is unsurpassed. Unlike the Antwerp, they bear travel excellently and are reshipped by San Francisco commission men to the interior of the State. As evidence of their acknowledged superiority Mr. Emerson cited the fact that in the middle of June, when ordinary berries were bringing but 30 or 40 cents, these commanded 50 to 60 cents a drawer. In packing for market he has not been much given to "capping," but has preferred to let the top layers fairly indicate the quality throughout.



SHORTHORN COW ROXANNA'S ROSE 2d, OWNED BY WM. P. HIGINBOTHAM, MANHATTAN, KAN.

oaks, as well as those of the black or silver wattle, are somewhat richer than the wood of the British oak, but far richer than the ordinary pine woods. The stems of the Victorian blue gum and the so-called swamp tea-tree (*Melaleuca ericifolia*) yield about as much potash as European beech. The foliage of the blue gum proved particularly rich in this alkali.

In case some of our readers may desire to experiment with the derivation of alkali from any waste wood they have at hand, we give Baron Von Mueller's prescription, as follows:

The wood, bark, branches and foliage are burnt in pits sunk three feet or four feet in the ground; the incineration is continued until the pit is almost filled with ashes. Young branches and leaves are usually much richer in potash than the stem wood; hence, they should not be rejected. The ashes thus obtained are placed in tubs or casks on straw over a false bottom. Cold water, in moderate quantities, is poured over the ashes, and the first strong potash liquid removed for evaporation in flat iron vessels, while the weaker fluid is used for the lixivation of fresh ashes. While the evaporation proceeds, fresh portions of strong liquid are added until the concentrated boiling fluid assumes a rather thicker consistency. At last, with mild heat and final constant stirring, the whole is evaporated to dryness. This dried

alkali to use in fruit tree washes have but to reduce the trees to ashes and then leach out the lye, being careful to learn by experiment not to apply it too strong.

TULARE WHEAT.—Mr. T. Bacigalupi, one day last week, showed us a bunch of Propo wheat, of which he was pardonably proud, as a sample of what grows in his fields west of Tipton. The heads varied from 6 to 9½ inches in length. Mr. B. has been running a 12-mile ditch from the junction of Tule river and Elk bayou to lands owned by himself, Thomas Creighton and others nearer the lake. The capacity he states to be 600 cubic feet per second during the irrigating season—say from January 1st to August 1st. Land on the line of this ditch can be had for from \$12 to \$25 per acre. The soil there is mostly a dark alluvium, highly productive, on which alfalfa, wheat and various deciduous fruits have thriven finely.

At the recent picking of the ostriches on the farm near Norwalk, 50 pounds of feathers were obtained, worth \$160 per pound, or \$8000 for the pick. The birds are picked once in about six to seven months, and are doing well.



## CORRESPONDENCE.

Correspondents are alone responsible for their opinions.

## Sierra Madre.

EDITORS PRESS:—Along the foothills of the Sierra Madre, in the San Gabriel valley, lies one of the most charming little towns in all Southern California. Five years ago it was part of the famous Santa Anita ranch, owned by E. J. Baldwin. At that time the value of foothill lands had not been demonstrated, and Mr. Baldwin sold to N. C. Carter 1100 acres of foothill land, together with one-half the water of the little Santa Anita canyon. The land for the most part was covered with large oak trees. Mr. Carter at once proceeded to lay out avenues and to pipe the water over the place, and placed it on sale in 5, 10 and 20-acre lots. The beautiful and healthful situation of the place attracted buyers at once, and improvements began. Thousands of sturdy oaks that had held undisputed possession of the soil for centuries and had dropped their leaves on it from year to year, making it rich and fertile, found that they themselves must drop before the axe of civilization and improvement, and give place to the succulent orange and to the varied kinds of delicious fruit. Some of these oaks, however, were spared to grace and shelter the home site and for the avenue. With what contempt they looked down upon the diminutive apricot, peach, orange, and the host of other trees (so called) that were taking the places of their fallen comrades, and to this day they show their contempt for them by hindering their growth if located within the reach of their influence. How hard it has been to subdue this place and make it productive can be told very eloquently by many of the writer's acquaintances, and in the years that have passed since then, acre after acre has felt the stirring influence of the plow and has received into its bosom the roots of thousands of productive trees and beautiful plants. This has been going on steadily and quietly; the waiting has sometimes been discouraging, but at last the harvest is here and the fruit has appeared, and Sierra Madre furnishes this year an abundance of fruit to the market, with the promise of a large increase.

The fruit industry here, however, is menaced by one great danger. I will attempt to describe it. One and a half miles to the west of it and on the same altitude is the world-known Sierra Madre villa; joining it on the south is the previously-mentioned Santa Anita ranch. These are objective points to the great mass of tourists in this country. Traveling from one to the other brings Sierra Madre in the direct line of travel. Its entrancing beauty has captivated many, and they want to stay; they want to buy, not a ranch but a home. This desire is helped along by the enterprising spirit of the community, for their first care was to build a schoolhouse, a very common-looking affair at the first, and with hardly enough of a school population to warrant it; but both have grown, and at the present writing a fine school costing \$3000, on a spacious lot nicely ornamented, graces the town and requires the services of two teachers, which it has. A steady church service was obtained. First it took the form of a Sunday-school; then an occasional sermon from some minister or other; then ministers of the different denominations, alternating, gave it steady preaching service. To Miss Fanny Hawks belongs the honor of the first church building. She gave a lot to the Episcopal church for the purpose of a building, and through her untiring efforts, in which she was aided both at home and abroad, a fine church stands to the credit of that denomination. The Rev. Mr. Trew is its rector. Direct postoffice communication also was obtained, and a store. There is also a church organized by the Congregational denomination, and the Sunday-school is in a flourishing condition. Then, conspicuous by its absence, is the saloon. Long may it be hindered from asserting itself at Sierra Madre.

The literary tastes of the people here have made the want of a public library felt. The public-spirited Miss F. Hawks generously offered to donate a lot for the building. Mr. Abbot Kinney, whose home is two miles west of here on the foothills, feeling his interests identical with this place, took it under his fostering care with an offer of a donation of \$500 on certain conditions. Mrs. Ross, whose husband was a respected citizen of this place, but died before he had accomplished the improvements he contemplated here, desirous of erecting some fitting monument to his memory, saw in this project a most practical way, and offered to donate a lot and \$1000 for the purpose, the building to be called the "Sierra Madre Library, erected to the memory of R. E. Ross." Mr. Kinney was seen, and advised its acceptance and offered a generous subscription to it. A meeting was called, and the offer accepted. At the meeting Mrs. Ross doubled her original offer, making a gift of \$2000 and one acre of the most advantageously situated land in the town. The citizens of the place, as far as could be got at that time, responded most nobly to the effort, and this library will start out with a building costing \$3000. What has been done and is being done by the residents of this place, added to its great natural beauty and healthfulness, will make it impossible for holders of 10, 20, and 40-acre

lots to hold them against the pressure for building lots. Already some have yielded, and the surveyor has come and lots have been sold. So, Mr. Editor, if you don't receive a box of fine Navel oranges from here next picking, make up your mind that there is not one ranch left large enough on this place to produce it.

Another menace to the future of fruit raising here is the ease of getting to it and from it to the outside world. The L. A. & S. G. V. R. R. brings it in direct communication with Los Angeles, 15 miles distant. The stage has gone its last trip; verily the world does move. OTTO.

Sierra Madre.

## Napa County Notes.

EDITORS PRESS:—This month is a very busy one with the farmers of Napa county, and most of the daylight hours are utilized. Haying was long since finished, but much work is now being done by stackers and by balers, for the hay crop was unusually heavy and considerable time will elapse before it is all cared for. The first consignments of the crop sold in our local markets for \$10 per ton, baled, but within a fortnight thereafter the price for a No. 1 article had dropped to \$7 per ton, and it now stands at about that figure. Farmers who can do so will store their hay in permanent or improvised barns, hoping for a rise in prices by next spring.

## Alfalfa.

"Sow more alfalfa on your moist land," says a neighbor. "When once it is well rooted it requires little attention, yields two or three cuttings per season, besides a considerable amount of pasture; and you can well afford to sell the hay \$3 or \$4 per ton cheaper than your oat or wheat hay, for it costs as much or more than the difference mentioned. Plow and seed your land to the cultivated grains."

Heretofore, one great enemy of alfalfa fields in this valley has been the gopher. The cost of trapping these rodents was considerable in large fields, but now that "gopher smokers" have come into use, fields are readily, effectually, and at small cost, cleared of the pest. Where fields are subject to overflow in the spring, gophers can make but little headway. Very few fields of alfalfa are irrigated in this county.

## The Harvest.

Threshers are busy in our barley, wheat and oat fields. On account of the ravages of the Hessian fly, very little wheat was raised in the lower Napa valley this year. The yield of barley per acre is fair, some fields producing 20 bags per acre, heavy, plump grain. Oats have done well, though the aggregate acreage is comparatively small. Corn, of which there is quite a large acreage, looks remarkably well, is growing fast, and will evidently yield well. Some fields are already tasseling.

## Fruit.

Fruit is rapidly ripening, and much that has in years gone by been sent to San Francisco or to the evaporators will, this season, be sold to the local cannery. At this institution, which is now an assured success, quite a large amount of fruit, of good assortment, will be canned this season. At present a large force is busy putting up apricots and other fruit.

## Making the County Known.

Committees have been appointed to make arrangements to entertain those delegations of the G. A. R. expected to visit this valley next month, and the visitors will receive a genuine Californian reception. No doubt there will be a large display of the products of our soil, and our Eastern friends will return to their homes with many pleasing and lasting impressions of Napa county. "How did you learn of Napa and its beauties?" a tourist from the East was recently asked. "By one of your real estate advertising papers," he answered, "and the half has not been told." It has been the endeavor of those interested in the welfare of the county to understate its beauties and resources rather than overrate them, thinking—rightly, too—that it is far better to happily disappoint our visitors than otherwise.

The population of the entire county is annually increasing, and real estate often changes hands. Subdivisions of the larger farms find ready purchasers, and yet in the near future many more will follow. One result of the subdivision of farms is better cultivation and increased profits. This is especially noticeable in the upper Napa valley, now almost one solid vineyard from Yountville northward. Ten years will bring the lower portion of the valley to a position second to no section of the State. In this locality more attention is paid to orcharding than in any other portion of the county, and interest in this pursuit will increase.

An increased interest in the development of the county, especially of the large and very productive Berryessa valley and the smaller ones of Chilis, Pope and Conn, will result from the completion, in whole or in part, of the railroad now building, to connect with the Napa Valley Railroad at Rutherford, thence running through portions of the valleys named to Lake county. Earnest efforts are being made to complete this road at an early date. Not only will this county be benefited by this new road, but Lake will awake to new life and increased prosperity. For that county this road means increase of popu-

lation, rapid development of resources, far better facilities for marketing produce than ever before enjoyed, and a continual increase in taxable valuation. The same remarks will apply to the northeast portion of this county. The road has been waited for long and anxiously, and now that it is an assured fact, new life pervades places heretofore quite isolated.

Napa, July 11th.

R.

## HORTICULTURE.

## Summer Washes for Fruit Trees.

The State Inspector of Fruit Pests, W. G. Klee, has just issued Bulletin No. 3 of the State Board of Horticulture. It is divided into two parts—first relating to the cactus ladybug, a beneficial insect as already mentioned in the PRESS; and second, on "Summer Washes." The second part we give in full as follows:

Attention has been drawn to the usefulness of the ladybug and other insects, and to the advisability of protecting them as much as possible. And here, let it be stated, that we believe no less in the usefulness and the absolute necessity of winter washes as well as summer washes for infested orchards, especially the latter for young, growing orchards, not yet in bearing. The numerous summer washes used by different parties nearly all contain more or less whale-oil soap and owe a great deal of their efficacy to this compound. Sulphur, perhaps, comes second in general use, and a little soda, or potash lye, is often added. Kerosene is being constantly used in various combinations, and if rightly prepared and applied is an excellent insecticide, particularly in soap emulsions; yet we would not advise those unaccustomed to it to use it, as too often, through a little oversight of the workmen, much damage may be done. Buchach, in combination with glycerine diluted with water, has been found a good wash for certain insects, especially the saw-fly larva and pear slugs. Phenyl and pyroligneous acids have also been used, but they, as well as many others too numerous to mention, seem too costly. In recommending a rather different wash, that has been used in somewhat different proportions by some Sacramento fruit-growers, on the suggestion of Matthew Cooke, it should be understood that in order to be effective it must be thoroughly applied. And it is only by thorough and repeated applications, persistently kept up, that good results can be obtained, otherwise there may be failure. And if any one has tried any given remedy to his entire satisfaction and has become familiar with its workings, it would be advisable to hold fast to that until some other remedy, clearly more economical and equally efficient, be found. The changing about from one thing to another, before any one given remedy has been thoroughly tested, is only of too common occurrence, and has been the cause of many bad results.

The wash we recommend is very simple, and comparatively easily prepared. Dissolve 30 pounds whale-oil soap (80 per cent soap, at the most costing five cents per pound) in 60 gallons of water, by heating the two together thoroughly. Boil three pounds of lye (American concentrated lye is what we have used) with six pounds of sulphur and a couple of gallons of water. When thoroughly dissolved, it is a dark-brown liquid (chemically sulphide of soda). Mix the two, the soap and the sulphide of soda, well, and allow them to boil for about half an hour, then add about 90 gallons of water the mixture, and it is ready for use. Apply it warm, at about 130° Fahrenheit, by means of a spray pump. Used warm its effect is better, and less material is required than when cold. We have found this wash effectual in destroying the following insect pests:

Olive, or black scale, *Lecanium oleae*; laurel scale, *Lecanium Persea*; white pear scale, *Aspidiotus rapae*; pernicious scale, *Aspidiotus perniciosus*; cottony cushion scale, *Icerya purchasi*; pear slug, *Selandria cerasi* (here killing eggs and larva); aphides of all kinds.

In fact, judging from the effects on these insects, we believe it will destroy all kinds of scale insects infesting trees, if used during the summer.

## Effect on Fungus Life.

As a destroyer of fungus life we have found it excellent, and believe it will effect a sure cure of different mildews, as well as for the black pear fungus. The exact time for application will vary somewhat, according to the variety of trees and severity of the blight. An application of the compound was made to the trees in the experimental orchard of the College of Agriculture, the present season, with great success. Among the great varieties of pears, many were more and more subject to the black fungus, and the disease seemed to extend gradually to all varieties. They were all more or less affected this spring, but the application of the wash checked it immediately. All the pears are now perfectly smooth, instead of being smutty and cracked. Last year was an unfavorable one for the development of the fungus, but varieties worthless, even through fungus, are perfect now. For all pears not attacked by fungus previous to the time of the fruit setting, the application can be made any time after the setting, as long as the fruit is growing, but, of course, the sooner it is done the better. As regards the

Winter Nelia, which seems to be attacked at the time of blooming, and generally is what might be termed the secondary stage of the disease, the stage in which branches as well as foliage are affected, the spraying should be given during the early part of the summer, and again shortly before their blooming. A very similar fungus, if not identical with the pear fungus, is spreading in our best apple regions, attacking the white Winter pearmain and yellow Newton pippin, few varieties being totally exempt from it. So serious is this trouble that I have seen fine young apple orchards for several seasons almost barren, or the crop almost worthless. Judging from the good effect of the wash on the pear trees, we would recommend it to be tried thoroughly, by spraying in the summer and in the early spring, at the same period suggested for the Winter Nelia.

Finally, this mixture will be found equally as efficient as the so-called codlin moth wash, to kill the larva of the codlin moth. It seems also to act as a preventive against the same in the case of later broods. It is quite as effectual as any of the other whale-oil soap washes, if, indeed, they are very reliable remedies. As to this latter point, we have not facts enough to prove anything very definitely yet, but we hope to collect a sufficient number this season, whereby we can arrive at some conclusions.

W. G. KLEE.

July 5, 1886.

Inspector of Fruit Pests.

## The Orange Crop of Florida.

EDITORS PRESS:—In a recent editorial the Jacksonville Times Union, the leading paper of the State, collated some figures in relation to the coming orange crop, which were obtained in reply to circular letters sent out by its agricultural editor. The figures of these estimates range from 25 to 75 per cent of a full crop in different counties, the larger figures generally being given for the southern counties of the "orange belt." This county, which is very nearly, if not quite, the northern limit of successful orange culture, returns an estimate of 25 per cent, and it is about right for Lawtey groves at any rate. This will give something like a half crop for the whole State, or about 600,000 boxes of a bushel each.

A decided check has been given to orange planting in the northern part of the "orange belt," and a corresponding impetus imparted to diversified fruit-growing and truck farming; to strawberries, early peaches, Japan persimmons, early Irish potatoes, cabbages, watermelons, etc. This will, in the end, be a great benefit to Florida.

It is amusing to see how secretly some of these proud orange planters, who have about used up their Northern money, are going about to get ready to plant strawberries. "Well, yes, I'm going to put out a few," in reply to a question, generally means from two to four acres.

It is estimated that 50 acres of strawberries will be set at this point this fall. Last year there were about 20. The sum total shipped North was 21,735 quarts, which netted the growers 22 cents a quart for the entire season. The highest price received was \$1.50 a quart; the lowest, eight cents net.

One grower with whom I am well acquainted received a little over \$700, clear of all expenses whatever, for his labor on his strawberry crop. This he estimated at 100 days, thus receiving seven dollars a day for his personal labor. He had about two and a half acres, on which were about 48,000 plants. He shipped North only 5304 quarts before the price fell too low to warrant further consignments. Thousands of quarts rotted on his vines. Visiting his beds one day, in company with a party of gentlemen, we found, according to the unanimous opinion, fully 2000 quarts in sight. All these rotted, and many more afterward.

The unaccountable caprices of the cold in its effects on the trees illustrates the Scripture, "The one shall be taken and the other left." The injuries inflicted were of two kinds—first, those caused by the wind in the tops; second, those caused by the frost proper upon the bark, generally within a foot or six inches of the ground. There is a certain amount of regularity observable in the first kind; but the second are phenomenal for the absence of all laws governing their occurrence. A patch of "scalded" bark is liable to be found on any side of any tree.

There are two facts which show that the effects of the frost originally extended only bark deep and did not reach the wood. In my grove a considerable number of very thrifty trees had patches of bark frozen, generally only one on a tree, and the frozen place puffed out in a little blister, but remained air-tight, and new bark formed underneath, so that there is no scar. The second fact occurred on one tree only. Last spring, as soon as I discovered that a few trees had rings of bark frozen completely around them, I banked them up with earth a foot deep, as an experiment. Not long ago, in looking at them, on this one tree I found new roots starting out into the bank at least six inches above the old collar-roots, and the singular thing was, these new roots started right out from the wood which had been completely decorticated by the frost.

It is pathetic to see how roughly some planters use their unfortunate trees. At the time when they needed the tenderest care they



treated them as if they were to blame for their troubles.

A vast amount of good money was offered on the altar of incensation, and ascended to heaven in flame and smoke. Your correspondent had the high honor of burning a \$100 brush-pile. But the trees, when properly helped, are working mightily to recoup these losses. There are some in my grove which have gorgeous shoots on them, a few which I know are over seven feet long already. The winds and the rains make wreck of these fine fellows, beating their heads pitifully in the sand, unless they are tied up.

The great freeze taught us several things. One is, that the greater part of the soil immediately about Lawley is sufficiently adapted to oranges to make them a safe investment. But even this favored spot, which only extends three or four miles east of the railroad (westward there has not been sufficient experiment to determine), has belts and patches on which no orange tree ought to be set hereafter. But happily, the Le Conte pear and the Japanese persimmon are flourishing and fruitful in places where the orange is a proven and pronounced failure. Happily, also, the strawberry will do well everywhere, as soon as the soil has been sunned and seasoned. S. P.

Lawley, Bradford Co., Fla.

### Notes on Fruit Dryers.

EDITORS PRESS:—As I saw some time ago a letter in the PRESS soliciting information in regard to the use of sulphur in bleaching fruit for drying, I have been thinking that I might add a little in that direction, as I have had some experience. In the first place, many do not understand its use, and they had better leave it alone, as it will ruin their trade and give a worthless article to the consumer. I saw fruit on exhibition at the fair in Sacramento last fall that had been sulphured so much that it looked blue. I would not purchase such an article for any price, and no one need be surprised if the Eastern people are of the same opinion. The want of better methods in handling our dried fruits is apparent, still there are some who produce a good article, and they get well paid for it.

The process of evaporating fruit by artificial means takes the lead, but there are many that are not able financially to build such appliances as are in use, but have to resort to the aid of the sun. To such the use of sulphuring is of more importance, as the sun has a tendency to blacken fruit when drying more than in a dry-house. Chemistry teaches that when fruit is cut and exposed to the air, the oxygen in the air commences to destroy it, and to arrest that decomposition, sulphur is applied. It is concerning the wrong use of sulphur that I wish to call attention in the first place, as the fruit business has many novices (like the writer) and they are all anxious to succeed, and, of course, there is nothing left undone by a man of energy to attain the highest possible results in his calling.

When he picks his fruit and cuts it and puts it out to the sun, and it turns black and stays so, and thereby injures its sale, he begins to cast about him for a remedy. He reads in some paper that sulphur will bleach it out. So, without consulting any one that has had experience, he builds himself a box big enough to hold his trays and gets an iron pot and builds a fire in it, throws his sulphur in, shuts it up, and feels in his heart that success is his; but when his fruit is put on the market he is surprised that it grades so low. He will continue to be surprised under such a "hit-or-miss" management. He would do better if he put the sulphur in a strong iron pot and put it on a stove and melt it till a foam forms on top as you stir it, and then take rags, stripped up two inches wide and two or three feet long (made from any kind of cotton cloth or sacks; old sacks are as good as anything), dip them in the sulphur, holding on to one end, and dip one-half at a time, and then hold them straight till they stiffen up so as to keep them straight. Be careful of getting the sulphur afire, as you might have trouble, and don't let it get cool; the hotter the better, so that it does not ignite. I don't know how high a temperature it will stand before it will catch fire. I have never had any trouble with it, however, and I used a pot last summer which I found (when I was nearly through dipping) had a crack clear across the bottom, and the sulphur oozed out and burned while it was over the fire. That may or may not be careless, I am not prepared to say, but I don't care to repeat it. If the sulphur is too cool, too much of it will adhere to the cloth.

Having these sulphur strips, you are prepared to do the bleaching properly. In the first place, there can be no rule to go by in regard to the quantity to be used; everything depends on the condition of the fruit. That which is very ripe requires fully twice as much as that which is just ripe. When the fruit is being prepared, it can be readily seen which is the ripest by its commencing to color up as soon as it is cut. To avoid building two sulphuring boxes I would put the ripest fruit in the bottom, as I think the bleaching is a little more thorough there, because the gas is generated in the bottom first and has to rise. Leave a space of at least a foot between the fire and the first tray.

The box should be made perfectly tight, so

as to hold the gas, and the fruit should not be left in too long. As soon as the fire is out, the door should be opened, or as soon as the fruit is bleached enough, and that is when it is brought back to its natural color. When it is bleached more than that it is too much, and that can be told by the ashy whiteness it presents. One of the sulphur strips, two inches by two feet, is enough for 10 trays of fruit just ripe, and more for overripe. Your eye must be your judge; if you find by opening the box that it is still colored, put more under it till it is all right. Set the strip afire at one end and it will burn gradually, and the sulphur will all be converted into sulphurous gas, which leaves no trace of itself afterward. Of course it is necessary to have earth or gravel in the bottom to burn the rags on. Of course the fruit should be put on the trays rind side down. As for the size of the sulphuring box, build according to your wants. A box that will hold 10 trays will keep eight or ten men at work cutting if kept going all the time.

I can say I am not entirely satisfied with this article, and if any one will take the matter up and discuss it more thoroughly, I would be pleased. I have only given the result of my experience. J. R. SPRINGER.

Woodland, Cal.

### Apple and Olive.

EDITORS PRESS:—Frank Bray, of Santa Clara, thinks that too much importance cannot be attached to the matter of pruning apple trees. That after a limb has grown say two inches in diameter, it cannot be cut off without killing the tree. The tree may linger along for a few years, but will do no good and will generally die soon. Whatever pruning is deemed necessary should be done during the first or at least the second year of growth, and the younger the better.

The same remarks apply to the apricot. Of those of his apricots from which he cut off large limbs, five out of six are gone. He has two remarkably fine apricot trees, now 24 or 25 years old, which have never been pruned in this way. They are vigorous and full of fruit—the variety not known. He is opposed to indiscriminate pruning and is practicing, it would seem with good success, no pruning at all.

Mr. B. has been experimenting on the propagation of olives by cuttings, and has succeeded admirably. The best-sized cuttings are an inch or more in diameter. Both ends should be waxed over. Very moist or very dry ground should be avoided. The method of placing perpendicularly, with lower end extending some 8 or 10 inches below surface into the cold ground, is condemned. To secure good results, lay down horizontally three inches below surface. They will thus sprout vigorously and grow right off. Those who wish to grow olives from cuttings should try this method, at least on a limited scale, and, from what Mr. B. says, look for good results. McD.

Santa Clara Co.

## THE DAIRY.

### Treatment of Milk Fever.

The London *Field* has an article on this deplorable disease, from which we quote the following:

Dropping after calving is a very fatal disorder, and no kind of treatment has been found to act with uniform benefit in all cases. When the disease is observed in the first stage, before the cow has dropped, tincture of aconite, in doses of 20 drops in half a pail of water, given three times in the course of 12 hours, has acted very effectually in allaying fever and preventing the further progress of the disease. It is usual to give a purgative dose of Epsom salts to a cow immediately after calving, and it would be a good practice to follow this at once with a few doses of aconite, certainly for all cows which have calved twice before. Bleeding is advised by some practitioners, and there is no doubt that the operation would be beneficial in the early stage of the fever, particularly in the cases of cows in good condition; and in the same circumstances a full dose of purgative medicine may be given at once, to be followed by small doses of tincture of aconite, as directed. When dropping has actually occurred, the treatment becomes much more complicated and difficult and the stock-owner will find it the best plan to put the sick beast in the care of a veterinary surgeon. If veterinary aid is not within reach, something must be done; but the chances of success are few indeed. First, attention must be directed to the cow's position, and, by the aid of trusses of straw, she must be propped up and made as comfortable as circumstances will permit; and in giving fluids, care should be taken to find out if the cow can swallow; otherwise the medicine may run down the wind-pipe and suffocate the patient. If the power to swallow is lost or much impaired, the stomach-pump must be employed. Stimulants are usually given, and the aromatic spirit of ammonia is a very good agent for the purpose; or, as a domestic remedy, whisky, in doses of four to six ounces, in an equal quantity of water, may be given instead.

A stream of cold water, applied to the spine from the poll to the loins, is a method of treatment which has been used with great success in

France; and a still more novel plan of cure has recently come under our notice—the injection into the uterus of a solution of carbolic acid in 50 parts of water. It happens, however, unfortunately, that the method which succeeds in a few cases fails in others, and the breeder has yet to deplore that there is no certain cure for an affection which does serious damage to his dairy stock.

Means of preventing milk fever are almost as varied as the means of cure. Some breeders assert that milking right up to the time of calving is certain to afford security; others advocate low diet and purgatives a short time before parturition; and others advise that after the third calf the cow should be fattened for the butcher. This system promises the best results, but would in many cases involve inconvenience and loss where pedigree stock are concerned.

### Another Holstein Record.

EDITORS PRESS:—As so much is now being said regarding the value of the various breeds of dairy cows for butter, we will mention a recent test of our Holstein-Friesian cow, Mottled Beauty, No. 2828. She was five years old January 5th last. She dropped her last calf June 9th. She had been fed no grain of any kind for over a year. On the 12th we commenced feeding very little grain, the amount being increased daily until her test commenced on the 15th, when she was fed 3½ pounds per feed three times per day. Her test was for one week, June 15th to 21st, inclusive, and during the time her feed was gradually increased until, at the close of the trial, she was eating 6½ pounds at a feed three times per day, in addition to good pasture. The feed was composed of two-fifths wheat bran, two-fifths oatmeal, one-fifth peameal. She made 21 lbs., 13 ozs. of very fine butter, which was weighed after being thoroughly washed and drained and before salting. For the whole time her average was a pound of butter to 18 36-100 pounds of milk. When we consider that this cow had no previous preparation of any kind, we feel well pleased with the result. We wish all Holstein-Friesian breeders would test their cows for butter and give the result through the PRESS, with the feed given. We think the results would show the Holstein-Friesians to be very superior for butter.

SMITHS, POWELL & LAMB.  
Syracuse, N. Y.

### A Humboldt Dairyman's Views on Cows.

H. S. Woods gives the *Ferndale Enterprise* his opinions on desirable dairy cows, as follows:

As some of our dairymen have given their views regarding dairy cows, and as I have had 40 years' experience in dairying, I will contribute my mite with the rest. First, the Jerseys have the best butter record of any known breed, but there are poor ones among them as well as other breeds, and the young stock are too scrubby and not salable for beef. Therefore I quit breeding them. The shorthorns are, many of them, excellent milkers, and when one is not good it is ready sale to the butcher. The Herefords are coming to the front as beef cattle, but they are nothing extra for the dairy. The Holsteins are the greatest milkers in the world, but their milk is too thin. For cheese there is none to equal them. For beef they are not as good as the Durhams or Herefords. I prefer a cow that will make two pounds of butter a day from 30 pounds of milk to one that gives 60 pounds of milk for the same amount of butter. The best cows I have ever tried or seen for the dairy, and for beef, are the red polls (or red muleys); they are just what the dairymen of Humboldt want. Being hornless they are nicer to handle. We can fill a stable without their injuring one another. Twenty of them can lie under a shed in a stormy night and take comfort, when three or four with horns would monopolize the whole thing. With a stableful loose, there is no danger. They have been bred for the dairy in England for more than a hundred years, and will give milk the year round. Those that have visited the herds of red muleys in England say it is a rare thing to see a dry cow among them any time of the year, and the steers compete with the shorthorns at the fat stock show. In the *National Stock Journal* there is an account of a herd of red polled cows in Illinois that tested from 18 to 28 per cent cream. Our cows in this county don't average 15 per cent. The dairymen here have not taken the pains to raise good butter cows that they have in the older States. I have bought about 60 cows in four years, and many of them would not make butter enough in a year to pay for their keeping. I don't like to work for nothing and board myself, so all such cows go to the butcher. It is worth \$20 a year to keep a cow in this valley, and I have two or three now that we have just tested, and find they will not make that amount of butter. It is poor policy to keep such cows and raise heifers from them, when a person can get a cream-tester for a dollar that will tell them at once whether a cow is worth keeping. Much depends upon the quality of grass. On Bear River ridge, from the native grasses, 18 pounds of milk made a

pound of butter, and with the same cows in the valley it takes 24 pounds to a pound of butter. I think it would be a good thing for this county if the directors of the Agricultural Society would offer premiums on muleys the same as grades, to encourage the raising of them. Last winter I wanted to buy 15 cows, and thought I would buy all the muleys I could find. I succeeded in getting a few by paying 40 per cent more for them than they asked for horned cows, and gave it up. The best muleys I found I could not buy for \$75 a head, while equally good-looking cows with horns I could buy for \$40. Now, I would ask, if they are no better, why do they hold them so high? We see directions in the papers to prevent young calves' horns from growing. One says burn them down close and it will kill them; another says dissect them out. It is all bosh. I will give any one \$100 who will tell me how to prevent a young calf's horns from growing without injuring the calf. If I could do it I would never raise another with horns. In a domesticated state, they have no need of them. Give a drunken man a revolver, and he will frequently do some mischief, when without the revolver he would be harmless. So with a cow. Give her horns, and she will frequently do harm, when without them she would have been docile.

## THE STOCK YARD.

### Santa Cruz Stock Farms.

EDITORS PRESS:—F. W. Scofield, near the coast two miles west of Santa Cruz, has thoroughbred Duroc or Jersey Red swine. At the time of my visit he had a few extra fine sow pigs one month old. They were of fine size, very healthy and active and real beauties. He has some of the same stock full grown and some only partly grown, and all showing extra fine qualities as to size, form, color and many other good points. The limbs are large and flesh appears to be solid. Mr. S. says pigs of the Duroc can be made to weigh, at 12 months old, some 400 or 500 pounds.

Martin Kinsley, on the coast three miles east of Santa Cruz, has tried various kinds of swine—the Berkshire, Poland China, Chester White and Essex. He says that with him white hogs "skin crack." That at this place the white spots of black hogs often do the same. He attributes this defect to climatic influences. He prefers the Essex to any other variety he has thus far tried, and regards it as the easiest kept and with least expense. So thrifty is it that it will fatten even on grass. Mr. K. has quite a variety of stock. His sheep are the Southdown and are pronounced to be healthy, very productive and profitable. For mutton it is regarded as the best. In fact, this is the only variety that he could raise with profit.

F. J. Laird, of Davenport, up the coast 15 miles from Santa Cruz, takes much pride in the production of fine stock. His young thoroughbred, shorthorn, Durham bull, Duke of Orleans, three years old, weighs 1850 pounds, very active, of deep red color with some white in face, very small head, very heavy in shoulders, brisket and hind quarters. He has a seven-months-old, thoroughbred, Poland China boar pig, of deep black color, with some white in face and on feet; first class. Mr. Laird has a fine advantage in pasture lands clothed with rich and abundant grass, kept green by the mists of the ocean so near at hand. The coast lands along here furnish most nutritious pasturage for dairying purposes, and many well-supplied and productive dairy farms are seen for the 20 miles we traveled up the coast.

G. McD.  
Santa Cruz Co., Cal.

### The Mohair Industry.

EDITORS PRESS:—I would respectfully inform Mr. Bailey and your readers generally that my statement concerning Mr. Bailey's premium goats had no malice connected with it. If the statement is "false," as Mr. Bailey declares it to be, it was easy enough to fall into the error, for the rumor is not only prevalent all over this county, but if I remember rightly, one of the premium goats bore the name, "Mariposa Chief"—certainly an odd name for the "Herald of Monterey." If the gentleman will give my article a more careful perusal, he cannot fail to perceive that my desire is to call attention to the latent advantages of this county for the production of mohair, which has hitherto, in a great measure, been overlooked, and not to detract from his celebrity as a breeder.

MARTIN KIRBY (73).

Darrah, Mariposa Co., Cal.

### The Coming Goat Ranch.

EDITORS PRESS:—In your issue of April 17, 1886, under the head of "The Mohair Industry," the statement is made by Mr. Martin Kirby that "the model mohair goat ranch of the future" in California is not even started as yet. Would you be so kind as to allow me to ask him, through the PRESS, if he will describe the model mohair goat ranch of the future in California?

MRS. M. E. CONGDON.  
Mariposa, Cal.



## PATRONS OF HUSBANDRY.

Correspondence on Grange principles and work and reports of transactions of subordinate Granges are respectfully solicited for this department.

## Farmers' Conference Meeting.

A joint meeting of members of Eden and Temescal Granges was held (during an intermission of the Grange session) at Oakland last Saturday. A. T. Dewey was elected chairman and H. G. Babcock secretary. The call of members of Enterprise Grange for a farmers' convention, to meet at Sacramento, August 5th, was discussed. A motion by Judge Blackwood prevailed that three members of Eden and three of Temescal Grange be elected as delegates to represent this meeting in the convention—called by members of Enterprise Grange—with authority to withdraw, if in their judgment they think best, and with power to fill out the delegation or any vacancies. Judge Blackwood, O. Dennis and J. Chester, members of Eden Grange, and Messrs. Kelsey, Sewell and Dewey, of Temescal Grange, were elected delegates.

The subject of irrigation was ably discussed by Messrs. Blackwood, Russell, Kelsey, Frink, Adams and Goodenough.

A proposition was made, but not voted on, to request the Executive Committee of the State Grange to hold a meeting at Sacramento during the extra session of the Legislature, and invite all other Granges to send in views or plans for the distribution of the irrigating waters of the State. Mr. Adams offered resolutions which he asked for time to reduce. Mr. Adams has since furnished the following for publication:

## Grange Resolutions on Irrigation.

WHEREAS, The question of irrigation is assuming a magnitude of such immense proportions as to induce the Governor of the State to call an extra session of the Legislature to solve the problem, if possible; therefore be it

Resolved, That it is the opinion of this convention that the State should inaugurate a general system of irrigation, wherever it is necessary and practical, within the State, to be wholly under the control of the State and not in the interests of either the appropriators or the riparianists, but entirely in the interests of the irrigator.

Resolved, That to enable the State to put in force the above resolution, it may acquire by purchase or by right of eminent domain, any or all of the water of the various lakes and running streams, when necessary for irrigation; provided that in no case shall water be taken from streams so as to interfere with the navigation thereof.

Resolved, That to enable the State to reimburse itself for the indebtedness incurred in carrying out these resolutions, the irrigated portion of the State shall be divided into irrigation districts, and when the system of works for irrigation are completed in a district a tax may be levied to keep the works in repair and to pay a sum equal to 4 per cent on the cost of said irrigation works in said district; provided that at the end of 20 years from the completion of the system in a district an annual tax may be levied on lands benefited thereby, to gradually extinguish the debt incurred by the State in perfecting the system of irrigation.

The following resolutions were passed at the last meeting of Plymouth Grange:

Resolved, That we are in favor of the State taking control of all the innavigable waters of the State and passing laws for the equitable distribution of the same for agricultural purposes.

Resolved, That we oppose the monopoly of water in any form, and that an equitable distribution of the waters of the State is indispensable to the progress and development of the resources of the same.

And Magnolia Grange, at its regular session on the 10th, discussed and indorsed the report of Eden Grange's Committee on Irrigation.

**HARVEST FEAST.**—Last Saturday was a pleasant day in Oakland, and Temescal Grange meeting proved a very interesting session. The third and fourth degrees were conferred upon Mr. Kelsey, a young farmer of Merced county, and a recent graduate of the State University. Several Granges were represented from abroad, and a goodly number of the members of Eden Grange were present, and added largely to the interest and success of the meeting. It was very much regretted that there were not still more members of the Granges mentioned present to enjoy the pleasures and benefits of the occasion.

Remarks for the Good of the Order were made by Brothers A. Adams, Joel Russell, O. Dennis, W. C. Blackwood, Buell, Rev. S. Goodenough, L. Frink, E. Kelsey and son, A. T. Dewey, and Sisters M. A. Sheldon, C. E. Kinney, Smith, W. C. Blackwood, S. H. Dewey, N. E. Babcock, R. Dennis, Jessie Weed and others. The labors of the day closed late, and some unfinished business was laid over for the next meeting, which occurs Saturday evening, August 7th.

**MRS. L. M. NICHOLAS**, of Magnolia Grange, who recently passed from earthly life, is spoken of in memorial resolutions by her late associates as a most earnest, conscientious and faithful member, whose devotion to the Order was such that she often attended when it was almost beyond her power.

**SCHOOL BOARD.**—We notice by the Modesto News that Bro. V. E. Bangs and John York have been chosen members of the county board of education. Bro. Bangs is an experienced educator and a firm friend of educational interests, and has served his county well in these matters.

## AGRICULTURAL NOTES

## CALIFORNIA.

## Alameda.

**WHOLESALE HOUSE-HAULING.**—Livermore Herald, July 15: Geo. O. Stanley has begun the work of moving all his farm buildings to a central point on North avenue, near Almon Weymouth's. They will then be nearly in the middle of his 1500-acre ranch, and directly on the main road. Almon Weymouth will have charge of the work, which will be the most extensive building-moving operation ever conducted in this valley. There are three farm-houses, one being among the largest and best in the valley, four large barns, one grain warehouse, two tank outfits and numerous sheds and other outhouses. The distance is about a mile from either of the present establishments.

**GALLOWAY CATTLE.**—Haywards Journal, July 17: On the Cook ranch are 100 head. Major Wiley has one particular graded Galloway calf, only five months old, which kicks the beam at 560 pounds. Another eight months old weighs 820 pounds. The greatest gainer in flesh was one that increased 169 pounds in 30 days. The average increase a day, however, is about three pounds.

**AGED BEARERS.**—The Neilson place, originally owned by Clayton Winton, can boast of some of the oldest fruit trees in this valley. Almost covering Mr. Neilson's residence are three monster fig trees—there were originally seven, but four were cut down to make room for the house—that were planted by Mr. Winton in 1853. They are giants, and no mistake, and bear three crops of figs every year. We were also shown a number of prune and one cherry tree planted at the same time—just 33 years ago—that are flourishing and bear a good crop every year. This goes to show the age fruit trees will attain, and the chances are these will yet outlive the rising generation.

## Contra Costa.

**STOCK POISONED.**—Antioch Ledger, July 17: On Tuesday night two cows, one belonging to F. W. Peters and the other to Jas. Nolan, died from the effects of some kind of poison. It is supposed to be wild parsnip, a rank weed growing in the pasture below town where the stock has been running. Those having cows have taken them out as a measure of precaution.

## El Dorado.

**MESQUITE GRASS.**—Republican, July 15: Last week J. P. Cleese brought into our office a bunch of mesquite which measured five feet eight inches, and said he did not select the tallest grass, either. It stood so thick and heavy on the ground that when a swath was made the fallen grass had to be raked aside before another swath could be cut. Although fully headed out and rather too ripe for hay, the stocks of the sample shown us were soft and apparently tender. It is said this grass makes good forage for cattle and horses, and they like it exceedingly.

## Fresno.

**TO STOP STOCK-STEALING.**—Expositor, July 14: The stock-raisers on Upper King's river have issued a call for a meeting, to take place August 7th, for the purpose of organizing a stock-raisers' protective association. The object particularly in view is to put a stop to stock-stealing, a malady that has been very fatal to their business for some time past.

**DIDN'T SUIT HIS LIVER.**—Last week a man applied for work at the office of one of our downtown merchants, telling a tale of starvation, want, destitute family, etc. The tender passions of the aforesaid merchant being aroused by the piteous recital, he gave the man a quarter and a letter to a prominent vineyardist east of town. It being Saturday afternoon, the searcher after work walked out to the vineyard, arriving there just about supper time. He was given his supper and the way he put himself outside the edibles was a caution. Next day being Sunday, the man had no work to do but eat three square meals. Monday morning he ate again as though he had fears of the near futurity of a famine. After finishing his breakfast, the "starved" laboring man edged toward the door with the remark that "he kalkulated hard work didn't suit his liver and he thought he would walk to town." Well, he didn't walk, he ran, in fact, he ran a Maud S gait, with the foreman after him with a pitchfork helping him along for a mile. Any Saturday afternoon applications for work will be received with suspicion at that ranch in future.

## Humboldt.

**GLANDERS.**—Ferndale Enterprise, July 17: Messrs. Pine, Rolloy and Hall, the committee appointed by the supervisors to look after glandered horses, were in Ferndale on Monday. Mr. Pine informs us that about 30 cases have been found in the county, some of which were exceedingly bad. The committee is keeping up a diligent search.

**FINE GOOSEBERRIES.**—Standard, July 17: We have frequently mentioned in these columns the superior adaptability of this region for growing berries of every description. Yesterday we were shown a small branch cut from a gooseberry bush in the garden of Mr. Richard Sweasey, on G street, not more than five inches long, upon which were 11 gooseberries, any one of which was an inch in diameter, and some even larger. This branch was only a sample of the

whole bush. The berries were perfect and ripe, without blemish of any kind. We have never seen anything to approximate to it, and do not believe the world can beat it.

**A THRIVING REGION.**—H. L. Ford says that the spring wool clip in that section was excellent. The farmers on the South Fork have raised good crops, and the fruit is unusually fine. Mr. Chadbourne, who has a fine orchard, has peaches now ripe which for size and flavor can hardly be surpassed in the State.

## Los Angeles.

**POLICE AFTER THE SCALE.**—Times, July 13: Council met in regular session yesterday. Special committee on fruit pests reported that at a joint meeting of the committee, the police commissioners, the county commissioners and city inspectors, it was decided, without dissent, to recommend to council the appointment of three additional inspectors, on the understanding that the county commissioners also appoint three more inspectors for the city district; that police commissioners be authorized to appoint a chief inspector from among the then 12 inspectors, who shall act under direction of the police commissioners; and that three of the inspectors shall be allowed \$15 each per month for keeping their horses. The police commissioners indorsed this report. Inspector Mulard's report for June, and Inspector Badham's report, were also inclosed. Report was adopted. As to the alleged defectiveness of the present statute, City Attorney McKinley showed that there was no trouble with the ordinance. It provides that cleaning of orchards must not only be begun, but also completed. Failure to clean is a misdemeanor, even without notice. The trouble has been that the inspectors have made no attempt to prosecute under the ordinance. If they had made complaint when parties failed to clean up, the guilty parties would have been duly punished.

## Merced.

**BIG THRESHING.**—Free Lance, July 9: J. W. Spader's outfit threshed 2063 sacks of grain at the Marshall ranch, in Merced county, Wednesday, June 30 h. of which 1233 were barley, and the balance, 830 sacks, wheat. There may have been bigger day's runs made this season, but we have yet to hear from them.

## Napa.

**BUGS AND ACACIAS.**—Register: Miss Darling is having the acacia trees in the seminary grounds cut down and destroyed, because of the presence on them of the scale bug. The acacia seems to be a breeder of these pests and to prevent their spread this summary course is pursued.

## Nevada.

**CATTLE POISONED.**—Independent: Russell & Bradley of Elko sold 1300 head of cattle to the Promontory Cattle Company, and lost over 50 head from poison and drought while driving the band from their ranges to Promontory. Of 1600 head of cattle, which were being driven east by Keogh Bros., 300 head died from eating poisonous weeds.

## Sacramento.

**GLANDERED HORSES.**—Record Union, July 14: An item to the effect that horses afflicted with glanders come to the city every morning, hauling vegetables to the early market, attracted the attention of Dr. Cutler, appointed by the supervisors to inspect horses afflicted with that disease, and yesterday morning between four and five o'clock he visited the market at Third and J streets, and found that the information was correct. Both horses of a team owned by a Chinaman, who has a ranch below the city, were found to be badly afflicted, and some other horses had the disease in its earlier stages. He had the Chinaman drive to the station-house, and Health Officer Atkinson was summoned. It was decided that both horses ought to be killed—one, that was very far gone, should certainly be killed at once. Local officer Carter Jackson was instructed to go to the Chinaman's ranch and attend to the matter. The horse that was suffering most was shot and buried; the other survives until the Celestial has a chance to replace his team.

**AN EXTENSIVE CUCUMBER.**—Bee, July 14: Sam Blair exhibited in the Bee office this morning a specimen of cucumber grown in his garden at Twenty-sixth and K streets, that for monstrosity takes the prize. It is what is known as the "snake cucumber," and looks like a large green serpent, being three feet four inches in length and about two inches in diameter. It would appear to contain in its area colic enough to last a family of half a dozen for a week.

## San Bernardino.

**IRRIGATING RAISIN GRAPES.**—Ontario Record, July 14: Wm. McBain, the Etiwanda packer, was in Ontario, Saturday, looking up the prospects for the raisin crop, with a view of buying in the sweat boxes. He accounts for the great diversity of results here on the ground of a failure to irrigate properly. He advocates a heavy irrigation soon after pruning to keep the vines back so that the fog will not blight the blossoms, another irrigation when the grapes are set and a third when about half grown. The good crop on some vineyards here and the very light crop on others would indicate that we have something yet to learn in dealing with the Muscat.

**PRECOCIOUS DATE PALM.**—W. B. Chaffey has a date palm on the grounds of his residence on

A street, set out two years ago, which is now in bloom. This we believe is an unheard-of occurrence, as the date palm doesn't usually bloom until about five years old. All who will take the trouble to examine the palm can satisfy themselves that it has a cluster of flowers just opening. The blossoms began to appear just after a heavy irrigation. We suppose this freak must be counted as one of the results of the marvelous fertility of Ontario soil.

**ARLINGTON FRUIT.**—Valley Echo, July 15: Early apples and peaches ripened last week, which is nearly five weeks later than the same varieties ripened last season. Late plums are now ripe, but the crop, like that of apples and peaches, is a light one. Flemish Beauty pear trees are full of fruit, which seems to be the only variety this season which has a full crop.

**ORANGE-LEMONS.**—Press and Horticulturist, July 17: Colonel W. R. Tolles, of San Bernardino, sent to this office three orange-lemons, which are very peculiar. They look like oranges but taste like lemons, only, if anything, the acid is stronger and the flavor not so pleasant. The fruit appears to have good keeping qualities, as it is in a perfect state of preservation, having been picked four months. This fruit may yet develop into something very valuable, but its flavor seems at present to be against it.

**RIVERSIDE APRICOTS.**—The crop of apricots now being gathered is much larger than at first supposed. Dr. J. Jarvis will dry about 125 tons of fresh fruit. F. R. Hall buys enough at \$1 75 per hundred pounds to enable him to dry 100 tons. The Crawford Company is buying and shipping to Colton, to can, a considerable portion, and many growers are drying on a small scale. It is probable that the crop will reach 500 tons.

## San Diego.

**HORTICULTURAL FAIR.**—Union, July 15: The Horticultural Society held a meeting with President Asher in the chair and a fair representation of members present. It was decided to hold the county fair on October 6, 7 and 8. The question then arose as to the feasibility of combining a live-stock show with the exhibit of fruits, and after a warm debate it was agreed that the society lacked the means to make a success of this double exhibition, and the idea was abandoned for this season. The Executive Committee, consisting of Messrs. Asher, Swain, High, Chapin and McLure, were given full power to act in the matter of making permanent arrangements for holding the fair. The committee then held an informal meeting to discuss the advisability of getting grounds and erecting a building in this city in which to hold their fairs in the future. It was agreed among them that it could be done, and after the coming fair steps are to be taken in that direction.

## San Joaquin.

**WATERMELONS.**—Lodi Sentinel, July 17: E. McIntire & Son shipped the first carload of melons from Lodi on the 9th instant. Mr. McIntire informs us that his crop is the finest he ever saw. Many of his melons now measure 24 inches in circumference and 20 inches in length. Up to the end of this week there have been probably 15 cars shipped to the city. One or two shippers have crated quite a large quantity of melons for shipment direct to Los Angeles. Two weeks hence watermelon will be king in Lodi; from 10 to 20 carloads will be shipped daily during the harvest.

**MELON PEST.**—On Monday one of our largest melon-raisers informed us that a pest, in the form of little black and blue bugs, has come on the vines and threatens to destroy the entire crop unless they are killed or driven away. Mr. McIntire has tried sulphur and thinks it good. Every field in the vicinity is infested with them, and in one day's time every pound of sulphur in Lodi was bought up and carried out to the melon fields. The bugs are about the size of a pin head. The black one is a regular jumper and goes at his work like an old acclimated hopper; the other is the same size, blue in color, and crawls about his labor leisurely. Our State bug-catchers should be advised of this pest. They might be able to classify the little wretches and tell us what species or order they belong to; that would be some satisfaction, even if they had no remedy.

## San Luis Obispo.

**HOLSTEIN CALF.**—Tribune, July 16: The seven-months-old bull calf of E. W. Steele's imported Holstein cow, Anna Duytra, was weighed on the 8th inst. and turned the scales at 775 pounds. The increase during the last month was not equal to the usual monthly increase, but he is going forward at the present, and under favorable circumstances will add his hundred pounds monthly for some time to come. The calf has not been forced by any extra attention or patent or scientific food, but has had all the milk he would drink and all the hay he would eat. The Holstein herd of Mr. Steele is doing exceedingly well, and in every way satisfactory. His premium cow, Anna Duytra, has given an average of over 50 pounds of milk a day since December 9th last.

## Santa Barbara.

**INSECT PESTS.**—There was an active discussion on the scale bug and its destroyers, some new theories being advanced. The water remedy is declared a failure by Mr. D'Urban. Mr. Holden has found the ladybug to be an exterminator of the iceria. Mrs. Delaney suggested a trial of an infusion of the fishberry, which is



a certain destroyer of insect life. Mr. Ellwood Cooper introduced Mr. Lelong, of Los Angeles, who has a new bug-destroyer which he proposes to make win the \$1000 prize offered for the best remedy for the white scale. Mr. Lelong claims that he can kill the cottony-cushion without injury to tree, fruit or person handling the poison, and at a cost of from eight to ten cents per tree. He has examined the principal orchards in Santa Barbara and found but few of the white scale. Carpinteria, he says, is quite free from them. Mr. Cooper stated that the kerosene emulsion was the only effectual remedy he has so far tried, but it costs from 50 to 60 cents per tree. He hopes that the new remedy will be all that its originator claims.

**HORTICULTURAL MEETING.**—*Press*, July 15: Despite the long distance from town, a large and merry party gathered in the cool shades of Tecolote canyon at yesterday's horticultural meeting. The spot chosen was about 300 yards above the residence of Mr. Harold Sturges, in a grove of spreading sycamores.

**CROP REPORTS.**—Messrs. Hogue and Cadwell, of Carpinteria, and Bliss and Holden, of Goleta, from the committees on fruits, made a discouraging report. Citrus trees have made a slender crop. Deciduous fruits throughout the county will only yield about one-fifth of the usual crop. Walnuts will bear about an eighth of a crop. Grapes are badly affected with mildew; raspberries are short, currants doing badly, but blackberries in good condition. The report was indorsed by all fruit-growers present as quite true about the crop all over the county. Mr. Cooper reported the olive crop as also suffering the same as deciduous fruits. He advanced a theory accounting for the walnut crop failure. His trees bore heavily in places where protected from wind. He accounts for the walnut failure by the hard north wind in mid April and the following cold spell. Such a thing had not happened before for 16 years. He thinks all our fruit orchards will in time be surrounded by forest trees to protect them from the north winds.

**COUNTY FAIR.**—*Independent*: Our county fair opens on the 5th of October. The grounds are being put in good condition, and the Agricultural Society are already commencing to outline their work. Unanimity of action seems to prevail throughout the county, and by all working together there will be such a showing as was never witnessed in Santa Barbara before.

**MELON SHRUB.**—*Santa Maria Times*, July 17: On Saturday last we spent an hour in W. H. Findley's place in the Arroyo Grande bottom. His trees are loaded with fruit and comprise every variety raised on this coast. Of rare varieties he has the Japanese persimmon, melon shrub and liquorice root. The melon shrub is fruiting this season and is probably the only one in bearing in this section of the State. It produces a melon about the size of an orange which has an agreeable lemon taste. He has succeeded in propagating the plant from the original shrub and has quite a number that will bear next year.

#### Santa Clara.

**BLENHEIM APRICOTS.**—*Los Gatos News*, July 16: Mr. L. Hill has the finest apricot orchard in this section; that is, it has the best fruit. His Blenheims are large, evenly ripened and of good flavor. Those who contemplate setting apricots should examine his orchard and see what this variety will do. We will state that Mr. Hill cultivates very thoroughly. He is disposing of this crop at a very good price.

#### Solano.

**WELL TRAVELED 'COTS.**—*W. E. Fry* writes to *Judicion* from Williamsport, Penn., July 8: I am a dealer in fruits and berries. I have been handling apricots, and in one of the boxes I found your fruit circular. I have been buying my fruits in Philadelphia, the parties there having bought them in Chicago. On opening the boxes I found the fruit all right and in good condition. The circular stated that the fruit was from the ranch of L. W. and F. H. Buck, at Vacaville, Solano county, Cal. So you can let them know how far their fruit has come, and the condition in which it arrived.

**FRUIT SHIPMENTS** from Vacaville for the week ending 17th inst. footed up 515,817 pounds. The heaviest day's load was the 14th, 112,640 pounds. On the same day, says the *Winters Express*, G. W. Thissell shipped five and a half tons of dried apricots to San Francisco, a sample of which he left at this office. They were fine, just as natural in color as the fresh fruit, and not dried too much. Mr. Thissell got 18 cents per pound for the apricots. They will go to the Eastern markets.

**PROFITS IN HORTICULTURE.**—*Vacaville Reporter*, July 15: To prove that our orchardists and vegetable-raisers are making money this season, we produce some statistics: M. Fox has taken from 35 acres in fruit and vegetables—only part in bearing—\$3000 clear of all expenses; Dr. Cargill from 39 acres in vegetables, raised among young trees, has cleared \$2000; Mrs. R. Schroder rented her place for \$1500 cash, which has been paid, besides netting at least \$1000 clear to the parties who had the place; A. J. Lyon from 125 plum trees realized \$222, from 25 trees of another variety \$100 clear, and from 150 apricot trees about \$400. He has contracted his entire peach crop to Strong & Co., Sacramento, at 80 cents for 44-inch boxes (boxes furnished). Mrs. M. Jagger sold this year from 400 six-year-old trees over 2000 boxes of apricots—netting about \$1500 from less than four acres. H. and W.

Brinck had on about 25 acres of apricots 100 tons of fruit, which they sold at 2½ cents per pound—they picking the fruit, everything else furnished. They also sold their crop of early peaches at six cents per pound net, and their late varieties of peaches and entire grape crop at 55 cents per crate of 20 pounds each, crates and packers furnished. F. B. McKevitt has just finished shipping his apricots from six acres of five-year-old trees and four acres of four-year-old trees, the net profit on which is \$3000. These are no exceptional cases produced for sugar-coating, as we know that all our fruit and vegetable-raisers are doing extra well.

#### Sonoma.

**NO GLANDERS IN THE COUNTY.**—*Humboldt Standard*, July 17: The following acknowledgment has been made by the Board of Supervisors of Sonoma county: "A communication having been received from the Honorable Board of Supervisors of Humboldt county, read by the clerk at the morning session, asking this board to co-operate with it in the extirpation of the loathsome disease of glanders, Mr. Coulter moved that the clerk be directed to acknowledge the receipt of the communication, and say that the board has no knowledge of the existence of such disease among the horses of this county, and should the disease make its appearance among the horses of this county, every power of this board will be exerted for its extirpation. So ordered."

#### Tehama.

**CLEAN ORCHARD.**—*Red Bluff Sentinel*, July 10: E. Croizer completed pruning Gen. N. P. Chipman's orchard a few days since and found it in excellent condition, and entirely free from insect pests. This speaks well for Tehama county, because there are but few counties in the State where fruit is grown to any considerable extent that the trees are not infested with several kinds of fruit pests. The General has 1000 three-year-old and 1000 two-year-old apricot, 4000 prunes, one and two-year-old, and 2500 bearing peach trees. There are also 500 other trees—pear, apple, etc., bearing fruit this year. There are 15 acres of vineyard, 10,200 bearing vines, comprising Muscat, Malaga, Muscatel and Zinfandel. The vines are full of grapes and the quality promises to be very good.

**TRUE SUNSTROKE.**—*People's Cause*, July 17: A man named Leslie, who was bucking straw on J. S. Cone's ranch, fell insensible yesterday afternoon, at about 3 o'clock, from sunstroke. Soon after sundown he was placed in a wagon and brought to town, arriving at the county hospital at about half-past 9 o'clock, where he was placed under treatment. He, however, remained unconscious, and died about two hours afterward. Dr. Fife, the county physician, informs us that he seems to have been a temperate man and that it was undoubtedly a veritable case of sunstroke, due to excessive heat and exertion, and not occasioned by intemperate habits. This is only the fourth fatal case reported this season in the State—one or more of the other cases being partly due to the excessive use of stimulants. Considering the severe exertion necessarily required of harvest hands, it is only surprising that cases of sunstroke are not of more frequent occurrence.

#### Yolo.

**GRASSHOPPERS.**—*Democrat*, July 15: Samuel Hiller brought in a number of fig leaves the other day to show the destruction wrought by grasshoppers. Only the framework of the large leaves remains. Mr. Hiller says the hoppers have attacked everything green on his place, including both trees and vines. The clover fields of Mr. Reynolds, which join his, are literally alive with grasshoppers. They made their appearance about two weeks since.

#### Tulare.

**WIND THRESHED WHEAT.**—*Times*, July 15: Edward McCauley, who farms a portion of Mrs. Eaton's ranch about 10 miles west of town, finished heading 700 acres of Sonora wheat on Friday last. The crop was headed with a 10-foot header in 34 days. Mr. Blaine says that it was the cleanest field of wheat he has seen in the county, a stalk of barley or oats being rarely found in it, and there were but very few alkali weeds to be seen. The yield was not large—about 5000 sacks. He says that while heading there he had occasion frequently to get down in the field to oil the machine and noticed on the ground a great deal of wheat which had been whipped out by the wind. Jas. Carlisle is farming 1400 acres of land on the same ranch. The damage done to his crop by the wind is about two sacks per acre. Bacon and Edmiston have been running their Houser harvester in the Sand creek country for several weeks. They have also harvested some grain in Stokes valley and also at the Cottonwoods. Mr. Bacon says the yield is falling short about a fourth on the estimate made earlier in the season. At the ranch of Mr. Wroughton on Sand creek 200 acres were harvested—180 acres of wheat and 20 acres of barley. The yield was 830 sacks of wheat and 180 sacks of barley. The wind damaged this crop considerably, the ground being double seeded from the effects of it. Three hundred and fifty acres of wheat in Stokes valley belonging to the Boyd family yielded seven sacks to the acre. Their barley and oats yielded 10 sacks to the acre. Two hundred acres of barley at the Cottonwoods belonging to Mr. Bacon and Allan Edmiston yielded 10 sacks to the acre. The grain in this section is well filled out and

of good quality, but there are only two grains to the mesh where there should be three and four. Sixteen miles north of Visalia, near Smith's mountain, Mrs. W. J. Crow farmed this season two sections of land that belong to her father, L. Haas. The crop is now being harvested. It is Sonora wheat and is yielding 13 sacks to the acre. This is the heaviest yield reported to the *Times* thus far.

#### NEVADA.

**SMALL FRUITS.**—*Reno Gazette*, July 16: Dr. George R. Hutchinson brought into the *Gazette* office this morning some of the largest and most delicate-tasting raspberries that the reporter ever saw. They are of the "Superb" variety, which originated in Miami county, Ohio. The doctor is making a specialty of small fruits, and has demonstrated that Nevada can produce not only as large but as delicate berries as California. He claims that Nevada can discount California in both flavor and color. He has seven varieties of raspberries, five of strawberries, two of blackberries and dewberries, a number of currants and gooseberries, and a large variety of apples, pears, peaches, plums and cherries. All are now growing on what was 12 years ago a sagebrush waste. Experiments in Washoe valley and other sections have established the fact that both the soil and climate of Nevada are especially adapted to fruit growing.

**BLOODED OR COMMON STOCK.**—*Reno Gazette*, July 14: Some years ago W. J. Marsh, the Mason valley cattle breeder, had a thoroughbred Durham cow. Through an oversight she became with calf by a scrub bull, and the calf was sold for \$35. A half-sister to this calf was sired by a thoroughbred bull, and when three years old sold for \$500. The difference in favor of thoroughbred stock can be easily figured out.

#### WASHINGTON.

**CROPS AND PROGRESS.**—*EDITORS PRESS*:—The crops in this upper country are going to be very light. On the 1st of May the prospect for a bountiful harvest was never better, but the continued dry weather from the middle of April to the 20th of June will make the yield fully one-half less than it was last year. The Palouse branch of the Northern Pacific Railroad is now nearing completion. The track is already laid some 20 miles. The grading is being done rapidly, and is to be finished so that the balance of the track can be laid within the next 30 days. The road extends from Marshall, on the trunk line, to Palouse City, passing through Spangle, Rosalia and Belmont, and tapping the richest part of Eastern Washington north of Snake river. The citizens of Spangle and surrounding country had a booming time the 5th of July on the strength of their independence, and because they are so centrally located. It isn't claimed that the place is the center of the universe, but it comes so near it that the railroad passes through the center of the corporate limits; and while the outlying villages, like Rockford, Cheney and Spokane Falls, are dividing their variances and splitting up their communities over the county seat question, Spangle goes in unanimously for a "whole cherry," and the talk is now of having the capital moved over here as soon as Washington is admitted into the Union. Farmers would be truly happy over the grand prospect and increase the size of their fields right away if they could get a fair price for grain; but wheat is only 38 cents a bushel here, and that doesn't pay for cultivating the ground. The best of land can still be had at \$10 an acre, but will quickly advance in value when the time comes that there will be a profit in raising wheat.—*GEORGE FELLOWS, Spangle.*

**EVAPORATED APRICOTS.**—We have received a sample of apricots dried by Mr. James Marshall, of Vacaville, in the Acme Steam-Heat Evaporator. They have a fine, bright color, and the substance of the fruit seems to be preserved in a jelly form, with all its natural flavor and richness. An article of such superior quality should find a ready market. The manufacturers of the "Acme" claim that it will produce from five to seven per cent more dried fruit than can be obtained by any other process. This, and absolute safety from fire, are very strong points which should at least be carefully considered by fruit-growers.

**FRUIT-DRYER BURNED.**—*W. T. Coleman & Co.*'s fruit-dryer at San Buenaventura, an account of which appeared in our Agricultural Notes last week, was burned to the ground on the 15th. The fire originated in the north furnace. The establishment cost about \$5000 and was insured, but for what amount we are not now informed. There were about four tons of dried fruit and nearly the same quantity of green fruit on hand, all of which is a total loss. Thirty-five or 40 hands are thrown out of employment.

**ORANGE-CLIPPER.**—We learn from the Pasadena Union that Dr. Congar has made another invention for the benefit of fruit-growers—this time an orange clipper, being a pair of shears with short blades, so curved as to cut the stem within the projection of the orange. Clipping is absolutely necessary now, as the pulling off of the fruit is found to unquestionably injure it, and no prudent grower will hereafter take chances of loss in that way. The doctor has just received a model and hopes to have them made so as to sell them for a dollar apiece.

#### Grand Army Festivities.

The coming campfire of the Grand Army of the Republic, which takes place in San Francisco from August 2d to August 12th, will be an enjoyable occasion, not only to the comrades but to the general public. Great preparations are being made for the festivities. An immense arch is being built on Market street, near Kearny, and 80 blocks of streets will be handsomely decorated on the route of the procession. Large numbers of people will come from the interior to the city on the occasion, and thousands are coming from the East, also. San Francisco will be in holiday attire for a couple of weeks. It is a good time for those who can leave their homes to make a visit to the city. The committee having the affair in charge have laid out an elaborate programme of entertainment for the visitors, and the neighboring cities and towns will do their share also. Altogether, the occasion will be a very enjoyable one for citizens and visitors. In next week's *RURAL* we shall have more to say on the subject, and give the programme thus far arranged.

**DEATH OF MRS. EDWARD FRISBIE.**—Mrs. Phoebe A. Frisbie, wife of Mr. Edward Frisbie, of Anderson, Shasta Co., died in this city, on July 17th. Mrs. Frisbie was a native of New York, and something over 58 years of age. She was a person of more than ordinary character, possessed of a well-balanced and highly cultivated mind, and lived and died a model Christian woman, wife and mother, respected and beloved by all with whom she came in contact. Her life has been one of much and varied vicissitudes, both in city and country. She formerly resided in Vallejo, but of late years has been a resident of Anderson, in the northern part of the State. She was the mother of a large, grown-up family, which she ever fondly held together by love and force of character. Her last days were attended with much bodily suffering, which she ever bore with true Christian fortitude, and finally passed peacefully away in the presence of her husband and other members of her family. Her funeral was attended at Vallejo, July 19th, by a large circle of relatives and friends. Previous to her residence in Shasta county, Mrs. Frisbie was a highly esteemed member of Vallejo Grange. There are few whose departure from life can be so deeply and sincerely deplored by the survivors.

**THE WORLD'S WOOL INDUSTRY.**—It appears from careful statistical information that the number of sheep in Europe is steadily decreasing. In Belgium, Hungary, Germany and Austria the decrease is large. There is also a small decrease in France, but there is a large increase in Italy and a small improvement in Russia. In Australia and New Zealand there was the large increase from 59,000,000 to over 80,000,000 during the 10 years preceding 1884. In the United States, during that time, there was also an important increase, but there has been a decrease since. Our imports of wool increased from 344,000,000 pounds in 1874 to over 519,000,000 in 1884. Quite a large per cent of our imported wool is re-exported. In 1884 the amount of wool manufactured in this country was 357,000,000 pounds. That figure, however, includes all the wool that was reworked as shoddy and mungo, as the amount of wool manufactured is estimated by the goods turned out, and not by the wool as it goes to the mill. The cotton and silk which goes into woollen goods is also counted as wool.

**THE WOOL-GROWING INDUSTRY.**—The exportation of unwashed wool from the Argentine Republic last year was to the value of \$32,000,000. Wool growing in that country is rapidly increasing in importance, while here it has been so hampered that as an American industry it is rapidly going to decay.

**SAN FRANCISCO AND THE STATE.**—This city is growing much faster, in proportion, than the State at large, as the following statistics of the growth of population abundantly show:

	STATE.	CITY.
1880	379,994	66,892
1870	590,247	149,473
1860	864,694	283,059

The fruit and vine products of Santa Clara county are to be shown at the New Horticultural hall, at San Jose, throughout the second week of August. We gratefully acknowledge the receipt of a complimentary ticket to this, the second annual exhibit.

The directors of the San Joaquin District Fair propose having a pavilion display at the next fair. The old Hauser harvester manufacturing building will probably be used as a pavilion.





### Where Do You Live?

I know a man, and his name was Horner,  
Who used to live on Grumble Corner—  
Grumble Corner in Cross-Patch Town—  
And he was never seen without a frown.  
He grumbled at this, he grumbled at that;  
He growled at the dog, he growled at the cat;  
He grumbled at morning, he grumbled at night;  
And to grumble and growl were his chief delight.

He grumbled so much at his wife that she  
Began to grumble as well as he;  
And all the children, wherever they went,  
Reflected their parents' discontent.  
If the sky was dark and betokened rain,  
Then Mr. Horner was sure to complain;  
And if there was never a cloud about,  
He'd grumble because of a threatened drought.

His meals were never to suit his taste;  
He grumbled at having to eat in haste;  
The bread was poor, or the meat was tough,  
Or else he hadn't had half enough.  
No matter how hard his wife might try  
To please her husband, with scornful eye  
He'd look around, and then, with a scowl  
At something or other, begin to growl.

One day as I loitered along the street,  
My old acquaintance I chanced to meet,  
Whose face was without the look of care  
And the ugly frown that it used to wear.  
"I may be mistaken, perhaps," I said,  
As, after saluting, I turned my head;  
"But it is, and it isn't, the Mr. Horner  
Who lived for so long on Grumble Corner."

I met him next day, and I met him again,  
In melting weather and pouring rain,  
When stocks were up and when stocks were down;  
But a smile somehow had replaced the frown.  
It puzzled me much; and so, one day,  
I seized his hand in a friendly way,  
And said: "Mr. Horner, I'd like to know  
What can have happened to change you so?"

He laughed a laugh that was good to hear,  
For it told of a conscience calm and clear;  
And he said, with none of the old-time drawl:  
"Why, I've changed my residence, that is all."  
"Changed your residence?" "Yes," said Horner,  
"It wasn't healthy on Grumble Corner,  
And so I moved. 'Twas a change complete,  
And you'll find me now on THANKSGIVING STREET."

Now, every day as I move along  
The streets so filled with the busy throng,  
I watch each face, and can always tell  
Where men and women and children dwell;  
And many a discontented mourner  
Is spending his days on Grumble Corner,  
Sour and sad, whom I long to entreat  
To take a house on THANKSGIVING STREET.

—Josephine Pollard.

### Vacation at Pacific Grove.

[Written for RURAL PRESS by L.]

Away from the hot white glare of summer  
skies, away from the dazzling sweep of yellow  
stubble-fields, away from the ranch with its  
long days of toil—ah, what a contrast between  
San Benito valley, at this season, and Pacific  
Grove. What vigor pervades one's frame with  
each inspiration of the delicious air, damp from  
ocean's dewy lips, and fragrant with the breath  
of pines; but more invigorating than this is the  
intellectual feast of the C. L. S. Assembly.  
We would that every rural housewife might  
step from the clatter of kettles and stove-lids,  
the baking of bread and boiling of meat for hun-  
gry hay balers and headers, into the Chautauqua  
Assembly; no one needs the change more; no  
one would more highly appreciate its benefits.  
This is our fourth year of attendance, and of it  
we have had but four days; but the memory of  
even these will brighten many days of toil.  
We have traveled in Italy with Dr. Spinning;  
have visited the Indians with Prof. and Mrs.  
Lemmon; heard such eulogy of Robert Brown-  
ing that we feel we may find him in truth the  
husband of our favorite poet; have listened to  
Dr. Stratton's eloquence—thoughts so high, yet  
given in language so clear we all may grasp  
them; but we will not try to report, not only  
because we feel our incompetence but because  
we hope our worthy secretary, Mrs. Field, will  
want all this news for the use of her fertile pen  
in a report to the RURAL. How her kind heart  
loves the "country folk," especially its maidens  
and its mothers.

To-day is the last of our session, to-morrow  
comes the sad flitting, although the good-byes  
are softened by the thought of next year's re-  
turn. Few of the many are friends in the  
usual acceptance of the term, still in the inter-  
est of true culture, in the love for and longing  
to help one another, we feel that from the high-  
est to the most lowly, all the assembly members  
are friends.

Our place of meeting is a plain wooden build-  
ing, but transformed into a perfect bower of  
beauty with its garlands, trailing vines and  
flowers that nowhere are so perfect as in this  
favored clime. I stole into the deserted hall  
this evening, and as I lingered amid this beauty  
—being, like our "Girl of Twenty," fond of draw-  
ing lessons from all about me—this thought

came to me: Yes, these flowers are beautiful,  
but it is all owing to the conditions of their  
growth. Our flowers in the heated interior are  
not like these, and yet they are the same spec-  
ies, governed by the same laws, capable of the  
same perfection; 'tis but the circumstances that  
differ. So it is with mind; it is almost impos-  
sible to estimate how much one owes to one's  
surroundings, and how little to anything of  
superiority within one's self; hence, may we not  
only receive inspiration from the rare loveli-  
ness of these flowers, but as we contrast them  
with those of less favored regions, learn too a  
sweet lesson of charity? Yet, while our benevo-  
lence thus receives new impetus, it were well  
that we forget not the more beautiful lesson  
the dusty leaves and sun-parched blossoms of  
the plains would teach us, that of noble, un-  
complaining endeavor to make the most of cir-  
cumstances given in obtaining to the highest  
possible perfection of life's mission of growth.

The future of Pacific Grove is almost beyond  
the spirit of prophecy to foretell. It is beauti-  
ful now, but its infancy is nothing compared  
with what the years shall surely bring. No  
place on the coast has such natural advantages  
or so readily seconds man's improving touch.  
Witness Del Monte, its charms like nothing so  
much as the castles and enchanted groves of  
childhood's fairy land.

You will go with us this afternoon to Cyprus  
point. Leaving the grand stand, our horse's  
feet beat loudly upon the cement road, smooth  
as a floor, as we enter a pine avenue reaching  
before us straight as a line, a mile away. A  
turn in the road reveals pretty little vistas to  
right and left. Here we have a glimpse of the  
great sand domes, glistening like snow, and  
here is quite a clearing where once a mill stood;  
but now we see the trim beds and bright green  
of "John's" vegetable patch. Here a road  
branches off to Moss Beach, and we hear the  
mighty roll of breakers upon its waste of sand.  
Now the shade grows more dense, and in its  
damp air the moss hangs from the trees in most  
delicate lacework. We snatch a yard or two  
as we ride on.

Suddenly the forest is left behind and we come  
out upon a knoll bereft of every kind of ver-  
dure; not a shrub, not a blade of grass; just in  
front is Seal rock, its top black with hundreds  
of birds, and beyond the broad sweep of the  
Pacific. The remainder of our road lies almost  
at the feet of the blue waters. Reaching the  
point, we drive out upon the bold promontory,  
nor can we tell, no matter how often we may  
come, the mood in which we may find old ocean  
here. To-day it seems like a soul lashed to  
frenzy by passion and remorse, as the great  
waves, beating against the gray rocks, dash the  
spray high above the bluff, and anon sinks back  
in dark whirlpools of grief and low sobbings  
of despair, to be met by another burst of wrath.  
To-morrow its deep calm seems to speak of vic-  
tory, of struggles that have

"Ranged the scale of passions till the soul  
Is deep, and wide, and soft with sympathy."

We feel that the power and might are still  
there, but obedient to a blessed peace.

We turn aside and find ourselves in the grand  
old cypress grove, that ancient congregation of  
priests who, "bearded and hoar, with voices  
sad and prophetic," have grown old in their  
vigils; for hundreds of years they have chanted  
their masses and whispered to each other the  
tales of the hungry deep caught from the blue  
waves that mutter secrets to the cliffs below.  
Oh! how we enjoy this hour amid the shadows,  
the sunlight falling upon us through the moss-  
grown trees with a subdued and pleasant light.  
To-morrow we must go to Point Lobos. We  
will pass through the old town, and make a long  
ascent from which we descend into a quiet val-  
ley; now we are again upon a height where the  
vision which bursts upon our sight is one to  
make even the quietest lips vocal with delight.  
Peaceful little dales there are, with little farms  
green as emeralds in their setting of brown  
hills; dark pine forests moaning in harmony  
with the restless roar of the waves—on, on, to  
where the blue of earth is not discernible from  
the blue of heaven, save by the glittering sheen  
painted by the sunlight upon the ocean's heaving  
breast. Entranced we ride, until suddenly our  
road seems to dip into the blue waves of Carmel  
bay, and just beyond stands Point Lobos, a  
rocky promontory jutting into the sea. Its  
ascent is considered quite a feat, whose ample  
reward is the grand view obtainable from its  
summit. The climb we accomplish, nor fail to  
realize ere we place its granite boulders be-  
neath our feet that it is quite an undertaking.  
We carve our names upon the solitary cypress  
that "grand, gloomy and peculiar, sits upon his  
throne like sceptered monarch wrapped in the  
solitude of his own magnificence." The view is  
lost, as over us hangs a veil of mist whose gray  
folds shut us in.

Verily, the delights of Monterey are endless,  
of which who can better testify than one who has  
enjoyed not only its principal but minor charms,  
as happy child, "poetic maiden," wife and  
mother? May its blue waves chant an anthem  
of peace and rest to the ears of old age.

But stay! We cannot close without a word  
for our RURAL, whose wisdom and friendly  
cheer have made it a welcome guest at our house  
for 13 years. It has watched its roof tree root,  
branch and blossom; seen the bachelor's cabin  
enlarge to the proportions of home, and  
watched the babies grow, until now two bright-  
eyed little maidens look with pleased anticipa-  
tion for next week's "Young Folks' Column."  
Long live the RURAL!  
Pacific Grove.

### Work of American Women.

From a very exhaustive article by May  
Wright Sewell, on the exhibit of women's work  
at the recent New Orleans Exhibition, we ex-  
cerpt the following paragraphs:

According to the United States census of  
1880, the number of our women then engaged in  
registered occupations was 2,647,157, and the  
number of occupations among which these were  
distributed was 218. The work done and being  
done by these millions of women in these hun-  
dreds of occupations was suggested rather than  
shown at New Orleans; more forcibly suggested,  
perhaps, in the displays in the main building  
and in the State exhibits than by those in the  
women's department. In the former, one found  
only the serious work of women side by side with  
the serious work of men; in the latter, one found  
the products of amateurs rather than of profes-  
sionals, the fruit of woman's leisure rather than  
of her toil; or, more justly, one found here the  
fruit of her leisure side by side with the fruit of  
her toil, and preponderating over it.

The first factories of America were in the  
kitchens and chambers of homes where the  
spinning, dyeing, weaving, tailoring, millinery  
work, boot and shoe making, etc., were wholly  
or mainly done. When, therefore,

#### Factories were Eliminated

From dwelling-houses and consolidated, women  
soon re-entered them; but having lost individual  
proprietaryship, they usually resumed manufac-  
turing as subordinates. The number of women  
registered by the census of 1880 in "manufac-  
turing and mechanical industries" was 631,909.  
The marvelous displays made by many of the  
large manufacturing firms, while representing  
the enterprise, generalship, executive force and  
inventive genius of men, presented the actual  
work of as many women as men—in many in-  
stances, of more.

The last census assigned 594,510 women to  
agriculture. A much larger proportion of the  
women in agriculture are owners and proprie-  
tresses than of the women in manufactures. The  
agricultural exhibits entered in the names of  
women were proportionately numerous, and  
held many surprises for the observer. In the  
State exhibits of Nebraska, Dakota, Minnesota,  
Iowa, California, Colorado, Florida, Mississippi,  
Louisiana, Tennessee and New Hampshire  
were very notable entries by women. No finer  
cereals; no sweeter, better grown, better cured  
hay, grass and clover; no larger vegetables; no  
more tempting fruits; no whiter, cleaner cot-  
ton; no longer wools; no finer mohairs, were to  
be seen than those from the farms, plantations  
and ranches owned, superintended and, in some  
cases,

#### Exclusively Worked by Women.

From Pennsylvania, California, Florida and  
North Carolina were sent the results of women's  
experiments in silk culture. Exhibits showing  
every stage in the process, from the egg to the  
exquisite fabric, were made. Silk culture has  
been attempted in most of the States with a  
success which warrants the belief that it will  
ultimately rank among the productive interests  
of our country.

Deducting the number of domestic servants  
from the number of women registered in 1880  
in "Personal and Professional Services," we  
find 422,385 women distributed among the pro-  
fessions and other occupations not included un-  
der agriculture, trade and transportation, man-  
ufacturing, mechanical and mining industries.  
In this number are women following scientific  
pursuits. One's ideas of women's activity in  
science were much enlarged by a careful sur-  
vey of the exposition. Several State exhibits  
contained classified lists of native animals and  
plants prepared by women. In some instances  
the lists were illustrated by herbariums and by  
cases of animals, birds, insects and fishes, in-  
dicative of woman's scientific attainments and  
of her skill in taxidermy. The Pacific Slope di-  
vision of the woman's department was rich in  
botanical exhibits. These included very com-  
plete collections of Pacific Coast ferns, marine  
cryptogams, and California lichens and mosses.  
All of these were scientifically named and de-  
scribed. Kentucky showed prepared drugs and  
medicines from the School of Pharmacy for  
Women. The woman's scientific department  
exhibited many applications of chemistry to do-  
mestic science. Here were samples of food  
tested to show adulterations; samples of silk  
tested to reveal foreign fiber; here was "the  
housekeeper's laboratory"—a box containing  
phials of chemicals, measuring glasses, and di-  
rections for numerous tests desirable in house-  
hold economy. Most of the science exhibits,  
excepting in pharmacy, botany, and zoology,  
were

#### Entered by New England Women.

In art, the best work shown by women was  
in the decorative and illustrative orders. The  
New York, Philadelphia and Cincinnati schools  
of technical design, the art department of  
Spring Garden Institute, the Cincinnati Pottery  
Company, and scores of less famous institu-  
tions, were represented by the work of women  
students. These exhibits included studies from  
nature, followed by conventional designs for  
carpets, wall-papers, friezes, tapestries, tiles,  
stained glass, etc., accompanied in many cases  
by fabrics in which these designs had been re-  
produced; elegant examples of wood carving,  
potteries, decorated china, moldings, artistic  
embroideries, and hammered metals. The  
number, size and variety of these displays in-  
dicate that the furnishing and interior decora-

tion of dwellings will soon be in the hands of  
women. Collections of the original designs  
made by women for illustrations, cards and  
calendar publishers. In some cases these were ac-  
companied by the original drawings, and by  
the engravings or chromos, the pictures in their  
latest, as well as in their earliest, phases being  
women's work.

### About Novel-reading.

[Written for the RURAL PRESS by F. A.]

In the March number of the *Chautauquan* I  
came upon some remarks in regard to reading  
that pleased me much, and I shall preface my  
own views about the reading of novels with  
those expressed by the editor of that magazine.

"Reading," he says, "has two objects—the  
lower one is amusement and the higher one is  
instruction. \* \* \* Some persons never or  
seldom read except for entertainment or amuse-  
ment. The idea of having some solid gain for  
their reading does not occur to them. Fiction  
exists—an immense amount of it—to furnish a  
time-killing recreation. There are said to be  
persons who consume three novels a week. The  
novel is not a thousandth part as bad as the  
novel habit. There are plenty of good  
novels, but one a month is a very large sup-  
ply—probably an overdose—for a well-orga-  
nized mind. One a year would probably be a  
safer prescription. The world is full of inter-  
esting facts. Knowledge abounds and grows.  
A man or woman with a mind wants this  
knowledge, as much of it as time and means  
will permit."

And again: "What do they (people) mean  
when they ask for easy and entertaining read-  
ing? Do they regard life as a picnic and the  
mind as a music-box to play with? Have they  
seriously reflected on the deadening effect of  
easy reading? One ought to get a discipline  
out of a book. \* \* \* Fiction kills the appe-  
tite for wisdom and it gives nothing in its  
place. The reader has had the pleasure, the  
emotional experience, of the reading, but not-  
ing of any value is left over. Useful reading  
requires brain work. We cannot expect to  
acquire knowledge without patient attention  
and careful thinking. The habit will be grad-  
ually formed of reading for profit, and then  
such reading will become a pleasure. But it  
will be a very different sort of pleasure from  
that of swallowing fiction."

The most pernicious result of indiscriminate  
novel-reading is well known: it engenders a  
mawkish sentimentality and unfits young peo-  
ple for the practicabilities of life. As the poet  
said:

"Life is real, life is earnest."

Facts are what is needed, not fiction. Who  
would be willing, to speak metaphorically, to  
live entirely on cake? It is bread that gives  
strength and vigor: cake does very well for  
dessert; but who would want the dessert alone?  
True, the children might, but children never  
know what is best for them.

Another bad result of such reading is that it  
enervates the mind, and makes it torpid and  
listless. The owner of such a mind is more  
dead than alive. It is the amount of thinking  
we do that is the measure of our intellectual  
life. In Carlyle's "Life of Sterling" is to be  
found a splendid pen-picture of Coleridge. The  
habit possessed by this poet of delivering him-  
self in monologue is dwelt on and Carlyle ex-  
claims vehemently and humorously against  
having to sit, as he expresses himself, "like a  
bucket and be pumped into." Novel-reading  
produces passivity; what we want is just the  
opposite. But I must not be understood to  
decry fiction altogether. To put it  
trite, there are novels and novels, and some  
(I can count the authors of them on my ten  
fingers) I consider it very essential to read.  
What I deprecate is the reading of novels the  
contents of which may at once be inferred by  
the sensational and high-flown titles that belong  
to them.

In the first quotation above given, the writer  
believes one novel a year should be enough.  
To many this may seem too much of an extreme,  
but persons of intellectual caliber will judge  
differently. Fiction, even at its best, does not  
satisfy the hunger that is experienced by minds  
that have come to the realization of how much  
there is to learn. I find in one of my note-books  
something I copied from the autobiography of  
the great but unfortunate painter, R. B. Hay-  
don, apropos to this point. It is as follows:  
"What a vast quantity of knowledge I am ig-  
norant of—astronomy, natural history, botany,  
navigation, etc., etc. I shrink within myself  
when I think of all I do not know."

If young people were early taught to read bi-  
ography and autobiography there would be little  
danger, it seems to me, of the "novel habit"  
gaining a foothold in their minds. In the pages  
of the lives of great men—poets, painters, au-  
thors, statesmen, and others—is to be found an  
incentive to great and noble action that cannot  
be found in the work of even the greatest nov-  
elist, and for the best of reasons: because in  
the former we have the life, heart and brain  
experience of living men and women; in the  
latter, merely an ideal conception. To be sure,  
a high ideal even in fiction has its merit, but  
put beside actual experience it seems tame in-  
deed. The contemplation of the lives of great  
spirits in whatsoever department of life will, as  
Thomas Carlyle says, inspire the reader "to  
lofty emulation, cheering the solitary thoughts  
with hope, and teach him to struggle, to en-  
dure, to conquer difficulties."



## Agriculture a Fraud.

The following "modern fraud" is from the Cincinnati Times:

The basest fraud on earth is agriculture. The deadliest *ignis fatuus* that ever glittered to beguile and dazzled to betray is agriculture. I speak with feeling on this subject, for I've been glittered and beguiled, and dazzled and destroyed by this same arch deceiver.

She has made me a thousand promises and broken every one of them.

She has promised me early potatoes, and the rain has drowned them; late potatoes, and the drouth has withered them.

She has promised cherries, and the curculio has stung them, and they contain living things, uncomely to the eye and unsavory to the taste.

She has promised strawberries, and the young chickens have devoured them, and the eye cannot see them.

No wonder that Cain killed his brother. He was a tiller of the ground. The wonder is that he did not kill his father, and then weep because he had not a grandfather to kill. No doubt, his Early Rose potatoes, for which he paid Adam \$7 a barrel, had been cut down by bugs from the headwaters of the Euphrates; his Pennsylvania wheat had been winter-killed and was not worth cutting; his Norway oats had gone to straw, and would not yield five pecks per acre, and his black Spanish watermelons had been stolen by boys who had pulled up the vines, broken down his patent picket-fence, and written scurrilous doggerel all over his back gate. No wonder he felt mad when he saw Abel whistling along with his French merinos worth \$8 a head, and wool going up every day. No wonder he wanted to kill somebody, and thought he would practice on Abel.

And Noah's getting drunk was not at all surprising. He had become a husbandman, and drowned his sorrows in the "flowing bowl."

The fact is, agriculture would demoralize a saint. I was almost a saint when I went into it. I'm a demon now. I'm in war with everything. I fight myself out of bed at 4 o'clock, when all my better nature tells me to lie till 7. I fight myself into the garden to work like a brute when reason and instinct tell me to stay in the house and enjoy myself like a man. I fight the pigs, the chickens, the moles, the birds, the bugs, the worms—everything in which is the breath of life. I fight the docks, the burdocks, the mulleins, the thistles, the grapes, the weeds, the roots—the whole vegetable kingdom. I fight the heat, the frost, the rain, the hail—in short, I fight the universe, and get whipped in every battle.

HE SAW HIS FATHER.—"Father," he began, after taking the old man out back of the barn, "your years are many."

"Yes, my son."

"You have toiled early and late, and by the sweat of your brow you have amassed this big farm."

"That's so, William."

"It has pained me more than I can tell to see you, at your age, troubling yourself with the cares of life. Father, your declining years should be spent in the old arm-chair in the chimney corner."

"Yes, William, they should."

"Now, father, being you are old and feeble and helpless, give me a deed of the farm and you and mother live out your few remaining years with me and Sally."

"William," said the old man as he pushed back his sleeves, "I think I see the drift of them remarks. When I'm ready to start for the poor-house I'll play the fool and hand over the deed, William!"

"Yes, sir."

"In order to dispel any delusion on your part that I'm old and feeble and helpless, I'm going to knock down half an acre of corn stalks with your heels."

And when the convention finally adjourned, William crawled to the nearest haystack and cautiously whispered to himself:

"And Sally was to broach the same thing to me at the same time! I wonder if she is mortally injured or only crippled for life."

RENTING DRESSES.—While chatting with the proprietor of a well-known Long Branch hotel the other day, I remarked that I could already see signs of the coming summer exodus. He laughed and said: "Well, my dear boy, I fear that the more signs you see the less visitors we'll have. I have just dropped on to one or two of the latest wrinkles of those people who pose as swell summer tourists on excessively small incomes. A dressmaker whom my wife went to see to-day told her that she had a great variety of dresses for the summer season, which she would hire out on reasonable terms, and change for others once a week. Now, ain't that an idea? You see, Miss de Smith can go to Long Branch with seven morning and seven evening dresses, and after a week she secures another fourteen, and can bloom out in an entirely new set for the following week. All these costumes are made upon a sliding scale basis, with big seams and wide flounces, which facilitate their being changed to fit many sizes. You see that with four sets of dresses the customer can change them from one watering-place to another, and thus serve four people simultaneously, giving each a constant succession of new toilets. For about \$25 a week the girls can have the use of a wardrobe that cannot be duplicated under \$2000. Think of that for American enterprise!"—Baltimore American.

## YOUNG HOLKS' COLUMN.

## The Fairy Sunbeams.

[Written for RURAL PRESS by THEODORA HOLLY.]

It had been foggy several days, but one perfect morn the sun arose above the horizon in all its glory, and the bright little sunbeams were glad to be free again. They went into the country where sunbeams love most to dwell. Here they frolicked with the water-nymphs, danced on the green-sward, kissed the dew off the flowers, and rode on the butterflies; and they delighted in the songs of the birds.

Joy, Cheerfulness and Merry-Heart were always together; they were fast friends, and on this day they were in the best of humor. They strayed away from the other sunbeams, as was their wont, and entered a flower garden. "Oh! what a delicious perfume," cried Joy, seating herself on her pet blush-rose. "I think the rose is the very sweetest of all flowers." "I love my pale lily the best," said Cheerfulness, peeping out of a calla-lily, "if she does lack perfume." "Oh, look at my bright-faced darlings," said Merry-Heart. "are they not the sweetest of all?"

After they had called on all the flowers they went into the forest. While wandering by a winding brook, Merry-Heart, spying some ferns, said: "Come, let us play at see-saw," and they all joined in the sport until they were weary. Then they bathed in a shallow pool. "How refreshing," said Joy, and then they joined hands and lightly danced around a sweet-scented bed of violets, and then they braided wreaths and crowned the naiads.

"Come," said Cheerfulness, "we must not forget our friends in the city." They bade adieu to the forest and they mounted the backs of three beautiful butterflies. Joy rode on a rich maroon butterfly, spotted with purple and gold, Cheerfulness rode on a creamy white one, and Merry-Heart on a gorgeous yellow butterfly, spotted with all the colors of the rainbow. They were a pretty sight as they rode away with their shining crowns of gold and their floating golden robes. They left the forest dark behind them. They were soon there, for you know that sunbeams can travel at the rate of thirteen millions of miles a minute.

They went to the hospital. "Oh, what a gloomy place this is," said Merry-Heart. "How I do pity the little children shut up in these black walls." "If it were not for us," said Cheerfulness, "it would be gloomy all the day long."

"Oh, here are the dear little sunbeams," cried the children as they entered, and they put out their thin little hands to catch them; but the sunbeams were too quick for them and they played hide-and-seek with the children for hours. The sunbeams made that grim old hospital so bright that you would not have known it, and even the children's hair seemed to turn golden and their eyes sparkled, and the color came into their cheeks and their laughter rang out, for where the sunbeams are it is always gay.

The children said, "Oh, that the sunbeams could always live with us." But at least Cheerfulness said, "Look yonder; the sun is setting and we must join our comrade sunbeams on their journey to other lands;" and as they slowly departed they softly kissed the children's hands, lips and hair. "We will come again," they murmured. On their way Merry-Heart lingered behind to chat a few moments with a water nymph that lived in a fountain, and told it of the beautiful country, of the sweet flowers and murmuring brooks, and a city sparrow lit on a bough near by to listen.

Woodland, Cal.

## The Oriole.

[Written for RURAL PRESS by H. R. C.]

The oriole is a very beautiful bird, especially the male, which is black and yellow. The nest of the oriole is swung up in a tree like a small basket. It is generally made of dry grass. When the nest is done it looks very pretty. The oriole lays four eggs. It does great damage in the orchard by eating fruit, and papa has to poison fruit every year for the orioles and other birds. Please excuse all my mistakes, for I am a little boy eight years old.

Poway, Cal.

[This certainly is a very nice little article. Eds. Press.]

A PECULIAR FAMILY.—The Santa Rosa Democrat says that a lady recently came to that city from the East, bringing with her a pet canary which was setting on five eggs. On arriving at Omaha one of the dainty little shells was rent asunder, and forth came an addition to the little mother's family. After the good work had commenced it continued, and as the lady and her little bird family were whirled westward over prairie, mountain and plain the little birds kept hatching, one in each State, as they passed through Nebraska, Wyoming, Utah, Nevada and California, the last bird hatching at Sacramento. She has named each of her little feathered pets after the States they were born in.

WHAT A QUEER KITTEN.—The Auburn Republican tells this funny story: L. N. Lothrop, who lives a mile below Newcastle, had a little

black-and-tan not long ago which gave birth to a litter of puppies. About the same time the family cat dragged into the house a litter of kittens. The mother of the puppies died, and, being anxious to rear one of the dogs, Mr. Lothrop sacrificed the kittens and presented the cat with a pup. The cat accepted the situation and has nursed the dog until it is bigger than herself. Every day she lays before it an offering of mice and gophers.

## GOOD HEALTH.

ADVANTAGES OF LOW CEILINGS.—Rooms with low ceilings, or with ceilings even with the window-tops, says the *Popular Science Monthly*, are more readily and completely ventilated than those with high ceilings. The leakage of air which is always going on keeps all parts of the air in motion in such rooms; whereas, if the ceiling is higher, only the lower part of the air is moved, and an inverted lake of foul and hot air is left floating in the space above the window-tops. To have the currents of fresh air circulating only in the lower parts of the room, while the upper portion of the air is left unaffected, is really the worst way of ventilating, for the stagnant atmospheric lake under the ceiling—although motionless—keeps actively at work under the law of the diffusion of gases, fouling the fresh currents circulating beneath it. With low ceilings and high windows no such accumulation of air is possible, for the whole height of the room is swept by the currents as the dust of the floor is swept with a broom. Low ceilings have also the advantage of enabling the rooms to be warmed with less expenditure of heat and less cost for fuel. The above does not agree with the generally accepted idea of the height of rooms in dwellings, but the authority is good and well worthy of consideration by persons about to build.

ICED DRINKS IN DYSPESIA.—And now a few words as to the beverages to be taken. Americans are a dyspeptic people; they drink much iced water at meals; ergo, iced drinks at meal-times are bad. They may be when carried to excess; this is not denied. But iced drinks are not the cause of the widespread dyspepsia in the United States. There are other potent factors in action. Iced drinks are very grateful to the thirsty, but too much indulgence therein produces a torturing thirst, as the person who indulges in eating snow in the Arctic regions discovers quickly. Just as snowballing causes the hands first to feel cold and then to glow with heat if continued, so the constant application of an iced fluid to the fauces, at first grateful, become a source of intense discomfort; for the blood-vessels are first contracted and ultimately paralyzed, and then the fauces glow with warm blood, like the skin of the snow-baller's hands. Iced fluids are not desirable for dyspeptics, to say the least of it. Ordinarily at dinner the iced pudding is followed by a glass of liquor—"to correct it." A certain temperature is requisite for digestion, and too much cold is undesirable.—From Dr. J. M. Fothergill's "Indigestion and Bilio-sness."

THE POISON OF THE SCORPION.—Apparently no very complete exhaustive analyses of the poison of the scorpion have yet been made. The best on record are those by Jousset, presented to the French Academy in 1870 and published in the *Comptes Rendus* of that year. He gives no definite statement of the chemical constitution of the venom, but does state the mode of its action upon the blood, by which in severe cases it causes death. It affects the red corpuscles, paralyzing them so that they cohere one to another, thus becoming agglutinated until they are unable to pass through the capillaries, and may cause fatal obstruction. So far as known, there is no chemical antidote which can neutralize the poison, but inasmuch as, like all animal poisons, the action on the nerve force, or in other words, the vital force, is in the nature of depression, a remedy which stimulates that force temporarily is plainly indicated. Alcohol is always available for that purpose, and being easily obtained, is perhaps more serviceable than any other. Bromide of potassium is of high value, but can be used safely only by the physician himself.

IMAGINARY ILLS.—A Philadelphia physician says that a great deal of what passes for heart disease is only mild dyspepsia, that nervousness commonly is bad temper, and that two-thirds of the so-called malaria is nothing but laziness. Imagination, he says, is responsible for a multitude of ills, and he gives as an instance the case of a clergyman who after preaching a sermon would take a teaspoonful of sweetened water and doze off like a babe, under the impression that it was a *bona fide* sedative.

INSANITY IN CHINA.—With a population of about 300,000,000, China has not a single insane asylum. Is this indicative of freedom from insanity in China or of the proverbial indifference of that race to the sufferings of its individuals? In this State we believe that the proportion of insane among the Chinese is nearly as great as among other nationalities.

COMPULSORY REVACCINATION of the soldiers was established by the German Government 11 years ago, and since then not a single death from smallpox has occurred in the German army.

## DOMESTIC ECONOMY.

FISH PUDDING.—A fish pudding easily made and nice is prepared with one can of salmon, two eggs, one cup of bread crumbs, one tablespoonful of melted butter, minced pickled cucumber and pepper and salt to taste. Turn the fish in a colander to drain off all the liquor, which is to be kept for the sauce. Then break the fish in pieces with a fork, removing all the bones; mix it thoroughly with the eggs, seasoning and melted butter. Put the mixture in a buttered pudding mold and set it, tightly covered, in a pan of boiling water to cook for one hour. For the sauce put one ounce of butter in a saucepan on the fire; when melted stir in a teaspoonful of cornstarch mixed with a little water; add slowly a cup of boiling water and stir until it is rather thick. Add the beaten yolk of an egg, the liquor from the can, a teaspoonful each of minced pickled cucumber and parsley, pepper and salt to taste, and let all boil once. Serve with the pudding.

STRAWBERRY VINEGAR.—For this purpose select the freshest, full-flavored fruit, and see that it is fully ripe. Hull the berries, place them in wide-mouthed glass jars, and pour over them the best white wine vinegar, allowing one quart for each pound of the berries. Then cover the jars tightly, and let them stand for three days; then drain the vinegar off, refill the jars with fresh berries and pour the vinegar back over them. When it has stood as before, three days, repeat the process for the third time; then drain off the vinegar, straining it through a muslin bag; now measure it, pour it into an enameled saucepan, and for each pint of it add one pound of broken or crushed white sugar. Stir the sugar until nearly dissolved and then set the saucepan on the fire, where the contents may boil very gently for five minutes. Then pour the liquor into another vessel, and, after standing 10 minutes, skim it well, when it may be bottled and set away for use.

THE WAY TO CLARIFY SOUP.—Just before the soup boils the scum that has risen to the top during the process of heating should be carefully removed; a little cold water poured in will assist the particles that compose the scum to rise. After the soup has been boiled it should be strained; this may be repeated; then, if the soup is not as clear as you would like to have it, mix one egg and its broken shell with a teacupful of cold water, then to this add about a teacupful of the hot soup, then stir it all into the boiling soup; let it boil up well, then set the kettle upon the back part of the stove, and when somewhat cool, strain it.

LEG OF MUTTON WITH CAPER SAUCE.—Wash with vinegar, peeling off as much of the tough outer skin as will come away easily; boil 12 minutes to the pound in a pot of hot salted water; take out, wipe all over with a clean cloth and rub with butter. For the sauce, take out a large cupful of the liquor half an hour before the meat is done; set the vessel containing this in cold water, to throw up the fat; skim carefully, strain into a saucepan, bring to a boil, stir in a great spoonful of butter rubbed in as much flour. When it has cooked three minutes add two teaspoonsful of capers.

TO CRYSTALLIZE FRUIT.—Pick out the finest of any kind of fruit, leave in the stones; beat the whites of three eggs to a stiff froth; lay the fruit in the beaten egg, with the stems upward; drain and beat the part that drips off again; select them out one by one, and dip them into a cup of finely-powdered sugar. Cover a pan with a sheet of fine paper, place the fruit on it, and set it in a cool oven. When the icing on the fruit becomes firm, pile them on a dish and set them in a cool place.

RICE PUDDING.—One-half cupful rice, one and one-half pints milk, one-half cupful sugar, large pinch of salt, one tablespoonful lemon rind chopped fine. Put rice, washed and picked, sugar, salt and milk in quart pudding dish. Bake in moderate oven two hours, stirring frequently first one and a quarter hours, then permit it to finish cooking, with light-colored cream, disturbing it no more. Eat cold with cream.

COTTAGE PUDDING.—Either of the following will be found good: 1. Two cups of flour, two teaspoonsful of baking powder, one cup of sugar, one tablespoonful of butter melted, one cup of milk and the grated rind of a lemon. Bake in a good oven and serve hot, with sauce. 2. One pint of flour, two teaspoonsful of baking powder, two cups of sugar, one cup of butter, one cup of milk and two eggs. Serve hot, with a hard sauce.

COFFEE CAKE.—One cup of brown sugar, one cup of butter, one-half cup of molasses, one cup of strong, cold coffee, one teaspoonful of soda, two teaspoonsful of cinnamon, one teaspoonful of cloves, one cup of raisins or currants and five cups of sifted flour. Add the fruit last, rubbed in a little of the flour. Bake about one hour.

LEMON CREAM.—Peel three lemons and squeeze out the juice into one quart of milk. Add the peel, cut in pieces, and cover the mixture for a few hours; then add six eggs, well beaten, and one pint of water, well sweetened. Strain and simmer over a gentle fire till it thickens. Serve very cold.





A. T. DEWEY.

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Published by DEWEY &amp; CO.

Office, 252 Market St., N. E. cor. Front St., S. F.  
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SAN FRANCISCO:

Saturday, July 24, 1886.

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## Business Announcements.

Agricultural Implements—Baker & Hamilton.  
New Music—Oliver Ditson & Co., Boston.  
Windmills—Pacific Manufacturing Co.  
Fruit Evaporators—Bachelor & Wylie.  
University of the Pacific—San Jose, Cal.  
Hay Presses—Byron Jackson.  
Haywards Hotel—F. A. Wilder, Haywards, Cal.  
Pain Killer—Perry Davis & Son, Providence, R. I.

See Advertising Columns.

## The Week.

As the time draws near for the arrival of our  
veteran visitors, the notes of preparation, both  
in San Francisco and outlying towns, are heard  
in ever-loudening chorus. The skirmish-line of  
the friendly invading army has already crossed  
our borders.

The fervid solar heats of last week have  
abated somewhat and been followed by un-  
wonted summer showers—refreshing, yet not  
wholly welcome to the hay-farmers in various  
portions of California and Nevada.

But the political mercury is mounting fast  
among the hurriedly-gathered legislators and  
lobby at Sacramento, and cannot be expected  
to pause below fever heat. As we write, Wed-  
nesday afternoon, matters have hardly begun  
to take form at the capitol, and it is too early  
to venture any confident prediction as to the  
results of this sudden session. We hope, how-  
ever, that amid all the clash of interests at this  
important juncture, cool judgments and wise  
counsels will prevail.

## Government Aid to Agriculture.

It does not appear that the Government is  
ready to advance agricultural experimentation  
in the different States as has been asked, for we  
do not hear of the progress of the experiment sta-  
tion bill as was expected. It may be that it  
will come up later, but the session must be ap-  
proaching its end.

The agricultural appropriation bill which we  
find in our Eastern exchanges, provides for  
considerable extension in the work of the De-  
partment of Agriculture, and equips it for in-  
vestigation in several special directions which  
certainly need careful study. We propose to  
describe as briefly as possible the work which  
is to be provided for:

First, there has been established a pomologi-  
cal division with a pomologist at \$2000 per  
year, and for the collection and dissemination  
of pomological information, \$3000; in all, \$5,-  
000.

Second, the entomological appropriation is  
increased to \$20,000, and it is charged with con-  
sidering also the subject of economic ornithology.

Third, an appropriation of \$10,000 is made for  
collecting and disseminating information relat-  
ing to silk-culture, for purchasing and distribut-  
ing silkworm eggs, and for conducting, at some  
point in the District of Columbia, experiments  
with automatic machinery for reeling silk from  
the cocoon; also, for the encouragement and de-  
velopment of the culture of raising raw silk,  
\$5000, to be expended under the direction of  
the Woman's Silk Culture Association of the  
United States, located at Philadelphia, and to  
be paid directly to said association.

Fourth, an appropriation of \$100,000 to pur-  
chase the best sugar machine, to conduct ex-  
periments in sugar making; all the machinery,  
if possible, to be made in this country.

Fifth, appropriating \$100,000 for establish-  
ing a bureau of animal industry. The com-  
missioner of agriculture is authorized to use  
any part of this sum he may deem necessary or  
expedient, and in such manner as he may think  
best, to prevent the spread of pleuro-pneumonia,  
and for this purpose to employ as many  
persons as he may deem necessary, and to ex-  
pend any part of this sum in the purchase of  
diseased animals whenever, in his judgment, it  
is essential to prevent the spread of pleuro-  
pneumonia from one State into another. Thirty  
thousand dollars are appropriated for the estab-  
lishment of quarantine stations, and to provide  
proper shelter for and care of such neat cattle  
as are imported, at such ports as may be deemed  
necessary.

Other appropriations, mainly in extending  
work already under way, are as follows:

The appropriation for the division of agricul-  
tural statistics, for collecting foreign and do-  
mestic statistics and compiling special reports,  
was increased from \$55,000 to \$70,000. For in-  
vestigation upon the subject of forestry, and  
the collection of valuable tree seeds and plants,  
\$7000 is appropriated, and \$1000 for the pur-  
chase for the library of books and other publi-  
cations relating to forestry.

Two thousand dollars is appropriated for the  
distribution of the tea plants now on the Gov-  
ernment tea farm in South Carolina, or such  
number of them as are in proper condition for  
transplanting, with the understanding that the  
experiments in tea-growing are to cease, and  
that the place is to be disposed of.

One hundred thousand dollars is appropriated  
for the purchase and distribution of seeds, trees,  
shrubs, vines, cuttings and plants—two-thirds  
of them to be distributed by members of Con-  
gress, the other third by the commissioner. It  
is also provided that the commissioner shall re-  
port the place, quantity and price of seeds  
purchased, from whom purchased and the day  
of purchase.

**BOGUS BUTTER FACTORY SHUT UP.**—The  
creamery at New Hampton, Orange county,  
N. Y., which was rented last spring by France  
& Co., and equipped with machinery for work-  
ing over and improving the quality of rancid  
butter, under a patent process, has suspended  
operations. It was the intention of the lessees  
to manufacture oleo oil into imitation butter; it  
is thought that the announced purpose of work-  
ing over inferior butter was only a pretense to  
divert public attention from the real nature of  
the business. Those who advance this theory  
explain that the sudden suspension of operations  
was due to the vigilance of the State Dairy De-  
partment, who paid frequent visits to the  
creamery.—*Telegram to Associated Press, 20th.*

It is said that more grain has been burned in  
Merced county this season than in the previous  
20 years put together.

## The Wheat Crops Abroad.

We are giving considerable space to wheat  
matters, but it is just the time of the year when  
such information is of most service to our read-  
ers, and this year it seems more than usually ad-  
visable that our grain-growers should know  
what is the condition of crops in all parts of the  
world. Our advices are by mail up to the last  
of June. H. Kains Jackson writes to the London  
*Farmer* as follows:

The agricultural outlook is by no means so  
favorable as the state of the market would ap-  
pear to infer. The weather in England has be-  
come very unseasonable. On the night of the  
16th the thermometer fell to 34° on the grass,  
and the air since then has been so chilly by day,  
as well as by night, that fires have made their  
reappearance, and residents in cities have diffi-  
culty in believing that it is midsummer, and not  
the later autumn or very early spring. This  
sort of weather will not bring on the already  
backward wheat, neither will it stimulate a  
healthy, vigorous growth in any cereal.

Mr. Jackson thinks there may possibly be a  
surplus of wheat this year and says: "It is  
the good promise of the American yield which  
continues to dominate the market." But, since  
he wrote, the crop outlook has much changed  
for the worse in this country, and if his opinion  
was based upon the early estimates, he will have  
a chance to modify it upon later returns. The  
facts looking in this direction have already ap-  
peared in our columns.

On the continent there promises to be some  
reduction in the yield. Russia, we notice, may  
have a considerable reduction this year. In  
France the wheat plant passed through the  
stages of earing and flowering in unfavorable  
conditions; and while the stalk has perceptibly  
lengthened the ear remains short, and the crop  
will be deficient in weight.

In Germany there has been much complaint  
of drouth. It is generally understood that  
Australia cuts no figure in the wheat supply  
this year, except it may be as a buyer.

Since the foregoing was prepared we find in  
the *Mark Lane Express* of June 28th a para-  
graph which presents the situation in a nut-  
shell:

There is every reason to expect that the year  
1886 will have to be counted among the lean  
years—thus making an addition to a black list  
long enough already as far as this country is  
concerned. More than this, I fear it will be a  
lean year for the world as a whole. Certainly  
the world's wheat crop will be much below the  
average. In England, France, Holland, Den-  
mark and South Russia there can scarcely be a  
doubt upon the subject. In America, where  
prospects a little time back were described as  
full of promise, the winter and spring wheat  
crops together will probably be barely an  
average, if not considerably below, as may be  
judged from a report in another column. The  
spring wheat crop has suffered seriously in  
some States, and the winter crop had previously  
been discounted from a "bumper" crop to an  
average one. Reports published last week from  
India show that the wheat crop there is much  
smaller than that of last year, and it is well  
known that the Australian, New Zealand, and  
South American crops were extensively de-  
ficient. Will the price of wheat rise, then? It  
ought to have risen long ago, if the probabilities  
of future supplies had ruled the markets. But  
many of us thought there would be a rise in the  
spring, and we were wrong; so I will not ven-  
ture upon a prophecy on my last occasion of  
writing in these columns. One thing seems  
certain—namely, that the yield likely to be ob-  
tained here and in many other European coun-  
tries at current prices would be ruinous to ex-  
tensive growers.

## Death of D. M. Osborne.

Fast, indeed, the pioneers of the present era  
of advancement of agricultural machinery are  
passing away. They have done a great work  
and very many of them have lived to see the  
vast enterprises which have grown from the  
small beginnings of their early lives. Such a  
one was D. M. Osborne, who passed away on  
Tuesday, July 6th, at his home in Auburn, New  
York. Thousands of farmers on this coast will  
hear of his death with deep regret, for his  
name has entered much into their thought, and  
no doubt many had formed his personal ac-  
quaintance, for he made two visits to this coast  
in the upbuilding of his business here.

David Munson Osborne was born in Rye, New  
York, in 1822, and consequently had passed the  
scriptural limit of active human existence. We  
have not space for a full sketch of his life nor  
mention of his many honors and successes. He  
was a farmer's son and the support of the fam-

ily was early placed upon him by the death of his  
father. After a few years of farm work he en-  
tered a hardware store as clerk, and became,  
finally, sole proprietor. In 1853 he began his  
career as a manufacturer of harvesting ma-  
chinery, and for a third of a century his en-  
terprise has grown until his firm's work is known  
and his offices are established in all parts of  
the world.

Mr. Osborne enjoyed the honor and full con-  
fidence of his fellow-citizens in Auburn, and  
was twice Mayor of the city and their repre-  
sentative in important political conventions.  
He had no time for political office aside from  
the Mayoralty and declined all such honors.  
He gave, however, much of his time and means  
to the support of educational and charitable  
societies. He was a fellow-workman among his  
men, and always considered and ministered to  
their interests as well as cared for his own. One  
of his workmen seemed to express the general  
sentiment when he said of Mr. Osborne: "We  
older workmen loved him as a brother; the  
younger among us revered him as a father."

## The Exceptional Weather.

King David said in his haste: "All men are  
liars." We imagine the many Eastern people  
who are now in California, and who have been  
told so many times that there are no thunder  
storms and no sunstrokes in this State, must  
have reached the same conclusion as did the  
old King of Israel, but rather more deliberately  
than he did. It is something of a strain upon  
our reputation for truth to say that there is no  
dangerous prostration from heat, except in the  
case of chronic alcoholists, and then before the  
week is out to have a heat wave pass over the  
State and prostrate half a dozen or so, all of  
whom cannot certainly be believed to be intem-  
perate. So with thunder and lightning; they, of  
course, do play around the mountainous por-  
tions of the State more or less; but this year  
the electrical phenomena have appeared in  
places where the records show no precedent for  
it. For example, San Francisco was treated on  
the morning of Friday last to peal after peal of  
thunder and vivid flashes of lightning, the play  
of the elements lasting for about two and one-  
half hours, with rain falling heavily at inter-  
vals. Similar phenomena have appeared over  
the State during the last few weeks. The elec-  
trical displays have come after very warm  
spells, and have cleared and cooled the air after  
the accepted Eastern fashion. In one or two  
cases, we believe, the lightning has shivered  
trees and ignited buildings.

But the heat of last week proved a much  
more serious matter than the lightning. Aside  
from the several cases of dangerous prostration  
there was occasioned general discomfort and  
loss of time, for it was so hot in the interior  
that all who could sat listlessly in the shade  
and refrained from taking out their horses for  
road or field work. We give a few of the high  
marks reached by the mercury (in the shade),  
according to the dispatches to the associated  
press and notes in our country exchanges:

	Deg.
Anderson, Shasta Co.....	108
Shasta, Shasta Co.....	100
Cloverdale, Sonoma Co.....	104
Santa Rosa, Sonoma Co.....	95
Concord, Contra Costa Co.....	106
Copperopolis, Calaveras Co.....	117
Ione, Amador Co.....	100
Lincoln, Placer Co.....	103
Merced, Merced Co.....	115
Red Bluff, Tehama Co.....	109
Sacramento, Sacramento Co.....	107
Colusa, Colusa Co.....	110
Wheatland, Yuba Co.....	106
Winters, Solano Co.....	106
Mission San Jose, Alameda Co.....	110
Midway, Alameda Co.....	112
San Jose, Santa Clara Co.....	92
Hollister, San Benito Co.....	100
Tres Pinos, San Benito Co.....	110
Ukiah, Mendocino Co.....	113
Los Angeles, Los Angeles Co.....	98
Orange, Los Angeles Co.....	106
San Diego, San Diego Co.....	81
Fort Yuma, Arizona.....	108

These figures are not presented as exact  
records. There is so much difference in ther-  
mometers and in conditions governing their  
exposure, etc., that picked-up records are  
subject to wide variation. The reports show,  
however, that there was an unusual heat spread  
over a great area.

There has been some damage done to grapes  
and to orchard fruits by the torrid heat, but  
it is too soon to measure its extent. It is  
probable now that the weather has spent its  
force and will be moderate during the great  
events of next month.



### The Red-Spotted Black Ladybug.

We alluded recently to the fact that Mr. W. G. Klee, State Inspector of Fruit Pests, had made some very interesting observations upon an insect which is very beneficial because of its appetite for scale pests—the cactus ladybug—*Chilocorus Cacti*. We stated also that Mr. Klee was preparing an illustrated bulletin which would give his observations on this insect and other important matters. We have just received an advance print of Mr. Klee's publication. On another page of this issue will be found that portion of it relating to "summer washes," an exceedingly important subject, concerning which Mr. Klee writes from long experience, gained during his care of the trees in the University orchard at Berkeley, his own trees on the Santa Cruz mountains, and his wide observation of the work of others. We have watched his results very closely and can fully approve his conclusions.

The other matter which we would present to our readers is the illustrated description of the beneficial insect, which we hope many will be able to find upon their scale-infested trees. The following is Mr. Klee's description, in which will be found allusions to the engravings on this page:

#### The Cactus Ladybug.

It seems very desirable that all fruit-growers should become fully acquainted with the predaceous insects, which must be considered their friends, as it is through their agency that all the worst pests are kept in check, and what naturalists term the "balance of nature" is preserved. Unfortunately by the propagation of certain trees, the food plants of these insects, pests often increase to an alarming extent, and generally so fast that their enemies are far from being able to cope with them. Such has been the case in California for the last few years, and without washing and spraying of the trees with antidotes, many orchards would have been totally destroyed. Gradually, it seems, however, that the law of nature is asserting itself, and parasites and predaceous insects are making their appearance in vast numbers. The Ichneumon flies are making war on the scales and on many other insects. Of the more conspicuous insects, the Syrphus flies have been very numerous; this season their green, blind larva having, apparently, totally annihilated the aphids in the plum orchards, formerly badly infested. The ladybugs have kept them company, and have also destroyed vast numbers of woolly aphids and grain aphids, appearing in many instances, as it seemed, at the eleventh hour, just in time to save the latter from destruction. The lace-winged flies (*Chrysopa*), so conspicuous by their large, delicate wings and large, lustrous eyes, have appeared in vast numbers, and their larvæ have made havoc with the scale insects. But, perhaps, the most striking acquisition in this line is the so-called "Cactus ladybug," the *Chilocorus Cacti*, whose principal food is the various scale insects.

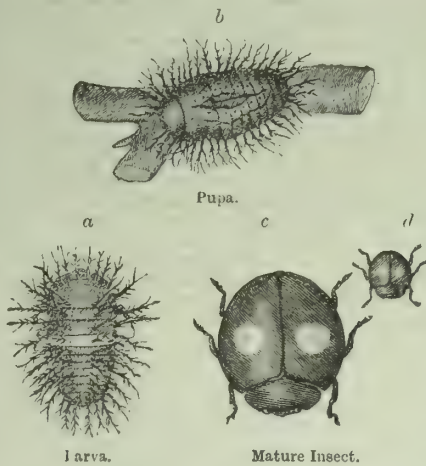
Some four weeks ago, when in the town of Santa Cruz, I found the *Chilocorus* feeding on the Olive scale (*Lecanium oleæ*) on trees badly infested. At Los Gatos they were noticed by me, at Mr. Yocco's place, feeding on soft Orange scale. However, the most striking case presented to me was in the Willows, at San Jose, where Mr. Newhall, the nurseryman, directed my attention to it. We found at an old orchard five large pear trees, which, by the rough appearance of the bark, clearly showed that they had been once badly affected by scale—in this case by *Aspidiotus perniciosus*. In patches all over the trunk could be seen the mature insect, with its black, shiny body and two conspicuous red spots, and numerous pupæ still partly covered with the black, soft spines of the larval skin. No live scale could be found, and the last two years' growth was clean and smooth. It was stated to me that the orchard had not been washed for three years, which seemed to point strongly to the conclusion that at least the final subjugation of the scale was due to the ladybug.

Another case in question, the orchard of Messrs. Winton and Webster, in Castro valley, near Haywards, Alameda county. A number of plum trees were some years ago found to be badly infested with *Aspidiotus perniciosus*, and from them spread to the currant bushes close by, which previously were badly infested with another species of scale, and by the united efforts of those pests a good many were killed. The plum trees were sprayed with a strong solution of lye, which, although killing most scales, did not kill them all. The currant bushes were not sprayed, but, although showing by the thick coating of dry scales that they had been once fearfully infested, no live scale could be seen on them, while the trees were absolutely clean. In looking around on the trees I found a number of larvæ of *Chilocorus*, as well as mature beetles; and on the currant bushes I found quite a number. On the whole, all evidence indicated that here, also, the ladybugs had been instrumental in killing the scale bugs.

In view of these personal observations, and from the reports of similar experience by different parties in other parts of the State of the good work by this species, or, perhaps, by the

closely allied species, the twice-stabbed ladybug, *Chilocorus bivulneris*, we have caused a colored cut of the insect to be made, which is here appended. These cuts show the insect in various stages. They are partly borrowed from Professor Comstock's report to Professor Riley, where he described this species, having found it to be a native of this coast.

The larva is shown magnified at *a*; it is black, crossed by a light yellow band about the middle, and is armed with many soft, long and branching spines. The pupa, also magnified, at



THE CACTUS LADY-BUG.—*Chilocorus Cacti*, Linn.

*b*, in the figure, is formed within the larval skin, which splits open along the back sufficiently to show the inclosed chrysalis, which is black, with a few scattered tufts of hairs. The beetle, which is seen magnified at *c*, and of the natural size at *d*, is of a shining black color, with a red spot on each wing case, much resembling the *C. bivulneris*, mentioned above.

We have found a few of these insects in our garden at Berkeley upon an orange tree badly infested with the black scale. We shall be glad to have our readers examine their trees and report to us if they find it, as we would like to know how widely it is distributed in this State.

### The Stockton Fair.

We understand that especial effort is to be made this year to extend the exhibit of farm products at the San Joaquin valley fair, which will be held in Stockton, September 21 to 25. The excellence of the Stockton fairs from a turf point of view has always been recognized, and the stock show has been fair, but there has been a deficiency in field and fruit products and domestic materials because there has been no pavilion. We are informed that this year there will be provision for an indoor display of such exhibits, and we trust the interest among producers and manufacturers will be so great, and the display so fine, that a pavilion worthy of the rich San Joaquin district may be secured next year even if this year's provision should be of a temporary character. Every city of the size of Stockton should have a grand industrial building which would accommodate the fairs, and be very useful for other grand display occasions. San Jose and Marysville have fitted themselves this year. Stockton does not generally let other cities outstrip her in any commendable enterprise. Let all who believe the work of the fair society should be extended in this direction rally their exhibits this year and show how imperatively such an edifice is needed, and it will be forthcoming.

We understand that the live-stock features of the coming fair will be extended, and that the premium list, which will be issued in a week or two, will show inducements for breeders to bring out their best animals. We have no doubt that the secretary, J. M. La Rue, of Stockton, would be glad to furnish all information to any one who feels disposed to aid the enterprise by making exhibits this year.

WHAT ARE PRISONS FOR?—At the conference of Charities and Corrections, lately held in St. Paul, a paper by General Brinkerhoff, of Ohio, embodied such principles of prison reform as are now recognized by leading penologists. The dominant idea in the creation of prisons should be the protection of society by the reformation or permanent detention of prisoners. Vengeance is not tenable under the Christian dispensation, and experience has shown that it is not effective. In the reformation of prisoners one of the requirements is an indeterminate sentence, under which criminals are sent to prison, as to a moral hospital, from which they are not to be discharged until they are cured.

### The Extra Session and the Irrigation Question.

The call of Gov. Stoneman for the extra session of the Legislature, which has just commenced at Sacramento, for the purpose of effecting more definite legislation in regard to matters of irrigation, and to refer to the voters such amendments to the Constitution of the State as may be thought necessary to secure to the people a more direct and perfect right to the use of flowing water for irrigation purposes, has proven something of a surprise to all, and precipitated a discussion which might otherwise have been much prolonged, and, perhaps, largely mixed up with other and irrelevant matters. Under this call the question of irrigation will be made to stand out by itself, unmixed and unbiased by any other issue. This, perhaps, is well; the only objection which can be urged against the call is the unexpectedly hurried manner in which the question must be met, and the fact that it must be largely acted upon and influenced by men who were selected a long time ago, and at a time when the questions at issue presented quite a different phase from that under which they are now being considered. In the form which the discussion has now assumed, the first question to be decided by the Legislature will be:

Shall California Have Water For Irrigation or Not?

The Supreme Court says she cannot have it without a change in the Constitution. If that decision is to stand it will be equivalent to an abandonment of nearly all the improvements and property valuations of the State, whether derived from mining or agriculture; but as the people are almost unanimous in their opposition to that decision, they will surely find some way to reverse the same and save the State from the disaster and ruin which the effectual carrying out thereof would involve. The Legislature will undoubtedly reserve the waters of the State for beneficial use to their greatest possibilities. It cannot permit the English common-law doctrine, giving the riparian owner a right to the flow of water in its natural channel upon and over his land, even though he makes no beneficial use thereof. Imperative necessity in this State, a necessity unknown to the country which gave birth to such a law, compels the recognition here of an entirely different ruling with regard to the use of flowing water. A law enacted for the regulation of a rainfall of 80 inches cannot be made applicable to regions where the rainfall is short of 12 inches. Instead of requiring the waters of this State to run in the low beds of rivers to sink into the ground or flow uselessly into the sea, the Legislature will most surely enact

#### Some Law of Appropriation

By which the running waters may be taken out of their natural beds and so conducted over our great valleys and extended plains and foothills that those otherwise arid regions will be clothed with cultivated verdure and made to teem with an industrious and thriving population, such as cannot fail to build up on these Pacific shores an empire which shall lead in prosperity, health and intelligence all other empires of industry, wealth and mind. Irrigation is the very life of California. It is a matter in which every man, woman and child is either directly or indirectly interested, and it is of the utmost importance that no mistake should be made in establishing fundamental and statute laws for its regulation. The recent Supreme Court decision has rendered it imperative that we should now cut entirely adrift from the English common law of riparianism, and in doing so

Most Careful Legislation will be Required.

Laws of irrigation, or more properly of appropriation, may be made as oppressive a monopoly as the fullest exercise of English riparian rights. The Legislature now in session has before it one of the most important matters for consideration and action which has ever been presented to the Legislature of any State in the Union. It has the power to recommend such constitutional amendments and to pass such statutory enactments as will place in the hands of a few wealthy men the power to control the chief portion of the irrigation waters of the State, and thus establish in such hands a practical ownership over every acre of land whose fertility depends upon such waters for its development.

It may enact laws under which water rent may be collected to the utmost amount which the cultivation and traffic of the land will bear; rates which will give the lion's share of profit to the few water-owners who neither sow nor reap, and a bare living to the thousands, nay millions, which in the near future will have to bear the brunt and do the drudgery required to place the products of the land in market. Laws under which none but a community of serfs can grow up, a community with little wealth, possessing nothing but the actual necessities of life; without ambition, with but little education, and in nowise superior to the downtrodden, ignorant population of most of the country districts of Europe. On the other hand, irrigation laws may be so made as to secure to the cultivators of the soil such a just and equitable distribution of the appropriated water as to enable them to live as American citizens should live. To form prosperous and happy communities with thriving towns and villages, where the privileges of schools, churches and good society may be open and free to all who desire or may be worthy of such privileges.

#### The Legislation Called For.

In the Governor's call the first proposition is to submit to the people of the State an amendment to Article 14 of the Constitution, which provides that the Board of Supervisors shall have power to fix the rent rate of appropriated water. That this article might be amended to the advantage of the people is an acknowledged possibility; but at the same time the opportunity is opened to take from the people the advantages which they now possess, and place them more fully under the will of water appropriators.

The second proposition, which should have been the first, is to submit to the people such amendments to the Constitution of the State as may be necessary to secure the right of appropriating running water for irrigation, or other beneficial purposes—thus nullifying the late decision of the Supreme Court.

The necessity for such a law is imperative, for reasons already given; but the wording of this proposition is somewhat uncertain and misleading. The Governor's proposition is "to secure to the people the right of appropriation." The only way to secure to the people the right desired is to "secure to the State the right," etc. Without any intention of so doing, the suggestion of the Governor, if introduced into the Constitution, might place this privilege in the hands of a very few of the people, which "few" might be erected into a monopoly worse than riparianism.

In swinging away from riparianism, it should be enacted that

The Waters of the State Belong to the State Itself.

To be held, appropriated and dispensed for the benefit of all the people, and not for any few over-reaching appropriators. No law should be enacted which would give to appropriators any ownership in the water itself. That should remain forever in the State, and legislation devised by which companies and corporations might be allowed to construct ditches, reservoirs, etc., for the storing and distribution of such State property, subject to such rentals only as will pay a reasonable dividend upon the cost of ditches, reservoirs, etc., necessary for such storage, distribution, maintenance, etc. Any law founded on any other basis will most surely be converted into an oppression of the cultivators of the soil, and thus indirectly upon the entire people.

The third proposition is especially faulty and in fact inoperative. It proposes certain legislation which must depend upon the indorsement by the people of the second proposition. Under the late decision of the Supreme Court, and under the fact of the absence of any legislation declaring the waters of the State the property of the State, it will be impossible for this Legislature to pass any such laws as recommended by the Governor—the Supreme Court would be compelled to declare such laws unconstitutional—they can only be passed after the people have indorsed such an amendment as proposed in proposition two. Farther, in relation to the third proposed action by the Legislature, it proposes to "protect the people of the State in the full enjoyment of the right to appropriate, divert," etc. Now if the Legislature had the power to so legislate in the matter, the right should be adjudged to the State as its



rightful owner, and not to the people. With the fact of ownership in the State, the people are safe from monopolists, inasmuch as the State can at any time regulate and control its own property and prevent such ownership from being misused to the oppression of the people who control the State. In this connection we would call attention to the words of Mr. Kinney, of the Los Angeles delegation to the late Irrigation Convention in this city, as published in the Pasadena Union:

In so far as a change of law is necessary in water laws, that change should be most carefully undertaken. Its foundation should be solid in justice. The corner-stone should be the rights of the people. The people of California are just and liberal, and as the safety of the State is by our free government placed in their hands, so may the interests of capitalists engaged in water corporations be placed in their hands with equal safety. All the corporation has to do to be liberally treated is to deal fairly with the people.

On the other hand, the people's interests cannot be left with the corporations. A corporation is said to be without a soul; in our everyday practice we find them without a conscience.

Farther on Mr. Kinney says: "The people need guarantees; the corporations need only to act justly. \* \* \* The corporation has the guarantees; the people have nothing." Referring to the proposition then under discussion before the convention, he further remarked: "This is a fundamental error which must in the end withdraw the support of the people from these measures." Such withdrawal will be visited upon any measure which the present Legislature may enact or propose which may by any means be so used or perverted as to place the people in the hands of water or any other class of monopolists. To quote still farther from the speech of Mr. Kinney:

The whole question is one of great importance, requiring careful and delicate handling. Extreme measures hastily acted on are not to be thought of in such a vital matter. The present circumstances offer no justification for such action. \* \* \* Laws on the water rights of California must be carefully considered. No monopoly of the waters of this State can be allowed. New water laws must consider the interests of the entire State and be fair and just to all men. Due checks and safeguards must be placed in these laws to protect the people in their present and future enjoyment of the waters of the State. \* \* \* Just and reasonable laws will bear debate and examination; unjust laws alone need fear free speech. Eternal vigilance is the price of liberty. Eternal vigilance is the price of the people's control of the waters of this State. It is only by eternal vigilance that monopoly can be prevented from seizing on all the streams in California.

There are 52 counties in this State, of which over 30 use more or less water for irrigation. This fact should not be forgotten by our law-makers, nor the further fact that our present law-makers in Sacramento are being closely watched by the people of the State, and will be held strictly accountable for any act in contravention of the principles above set forth. They can also rest assured that whatever laws are passed or proposed, which, by any possible construction, may be construed and carried out to the oppression of the people in the matter of water rights, will most assuredly be repudiated, together with all who aided in their passage.

The people of this State need not be and are not in ignorance of what should constitute a proper system of irrigation for California. The subject has been carefully studied, mapped out and explained at great expense to the State in the very full and able report of the present State Engineer, William Hammond Hall, to which quite full reference was made in our last week's issue. A report on the subject has also been made to Congress by a Board of Commissioners, consisting of the Government engineers, Messrs. Mendell, Alexander and Davidson, who propose a general system for the whole valley.

VERMIN KILLING.—We sometimes think we are badly enough off with our coyotes, rabbits, squirrels, etc., but our Australian friends seem to have rather more trouble on hand. The following is given as the Government work in vermin extermination in one district: "Number of scalps paid for from March 7 to December 12, 1885: Dogs, 814; kangaroos, 27,035; wallabies, 37,993; rabbits, 2,872,043; eagle-hawks, 579; total, 2,938,449; cost, £24,998 7s. 11d." And yet the account says the Government rabbit-parties are doing little or no good in that district, and that "owing to the ravages of the rabbits, Mr. Davies has been forced to clear out from the Mattawarrangala Station, as he can keep no stock there without feeding them on hay or chaff—rather hard lines after over 20 years' occupancy." That is worse than anything we have in California, surely.

## THE IRRIGATION QUESTION.

### An Extra Session of the Legislature and Its Proposed Work.

Since our last issue went to press the Legislature of California has been summoned and has convened in extra session. There were but four days between the proclamation and the roll-call in the State Capitol. On another page we give the petition upon which Governor Stoneman based his action and the proclamation, which fixes the outline of the work to be done. Probably not 100 people, outside of the signers of the petition, knew that the session was to be called. It had been rumored, but the rumor found no credence. For this reason there was no consensus of opinion demanding it, nor was there any effort to learn the popular will. It is unnecessary to discuss the action of the Governor, for it is accomplished and the State will have to accept the fact for better or worse. If there had been opportunity for discussion it would have appeared that many people do not approve the too speedy "railroading" through which the water question seems bent on, nor would they be able to discover the necessity for drawing upon the treasury for an extra session when the regular session, with legislators chosen fresh from the people, would be held in five months' time—soon enough, one would think, for the purposes required. But as we have said, there is little use to make complaint; the Legislature is again in Sacramento and the people will have to make the best of it.

There is no doubt whatever that it will be a great public blessing to have the matters relating to water rights and irrigation definitely settled, and settled in a way that will foster and promote irrigation; and if this be done in the interest of the whole people, the cost of such legislation would not be murmured at. The danger is that in the haste and in the methods which seem to be employed, there is great hazard of the public interest being made a cover to conceal personal or corporate designs. All that can be done is to see that the pending questions are so settled that the public interest is really conserved. It is quite possible to do this, and it is possible also to create the most oppressive monopoly or aggregation of monopolies that this State has ever experienced. There should be no unseemly haste. The questions are momentous. The issue is far wider than when it was before this Legislature at its last session, for now constitutional amendments are proposed which practically amount to an impeachment of the Supreme Court of the State—an impeachment without a trial, a condemnation without a hearing. These are sharp tools, and should be handled very carefully.

However, the issue is upon us. The proceeding is according to the provisions of the Constitution of the State. While the gravest apprehensions will rest in many minds, let every honest voter do something to impress his representatives in the Legislature to act in the matter to the full limit of the public weal, but not surpass nor fall short of it.

SACRAMENTO, July 16, 1886.—The Governor has received the following memorial, signed in their proper hands by more than two-thirds of the members of both houses of the Legislature: June —, 1886.

To His Excellency, George Stoneman, Governor of California.—SIR: We, the undersigned Senators and Assemblymen, respectfully request you to convene the Legislature of the State in special session, for the purpose of passing certain bills and measures, which we herewith submit, relating to irrigation and water rights. While we disclaim all intention of controlling your Excellency's judgment, yet we beg to suggest that the present crisis in the question of water rights, which vitally affects the immediate welfare of the State, demands prompt action, and constitutes such an extraordinary occasion as to warrant the convening of the Legislature as we request.

The Supreme Court of the State has recently decided that the riparian owners along the innavigable streams are possessed of riparian rights, so called, as known under the common law of England; that they may obtain writs of injunction against persons who may have appropriated flowing waters for irrigation under the provisions of the Civil Code and under the authority of the several acts of Congress, permitting such appropriation from streams on the public land. The consequences which must inevitably follow the enforcement of this legal doctrine are painful to contemplate.

The existing appropriations of water for irrigation are almost without exception for the benefit of non-riparian owners and of ri-

parian owners whose right to irrigate depends upon their appropriations under the Civil Code and pre-existing customary law. Such diversions of water may, as we say, under the decision of the Supreme Court, be enjoined at the suit of lower riparian owners. Many such suits have heretofore been instituted; writs of injunction have been issued which have not been enforced pending the consideration of the question by the Supreme Court, and in a large number of cases have not been obeyed, although attempts have been made to enforce them. But the fact remains that the court has so declared the law that nearly every irrigating ditch and canal in the State may be closed by injunction.

The mere suspension of irrigation for a single season would result in wholesale destruction of many thousands of homes and of millions in value of improved and permanent property. The irrigators of the State now stand in fear of the immediate enforcement of the destructive policy asserted by the majority of the Supreme Court. An attempt to do so might, and most probably would, result in bloodshed in many sections of the State. Free-born American citizens will not look upon the destruction of their homes and see the results of years of toil swept away without resistance.

We believe that the rule of water rights in California, as laid down by the minority of the Court is, and ought to be, the law of the State. In common with the masses of the people, as shown by the action of several conventions and by the united voice of the public press, we have reached this conclusion, after deliberate consideration of the subject. In the month of May, 1884, a convention of those interested in the water question met at Riverside. The matter was there fully discussed. Again in December, 1884, a convention assembled at Fresno, when the measures which we now propose were discussed and formulated. The Legislature met. These measures among others were introduced. They passed the House by a vote of 51 out of 80. In the Senate they secured a large majority, and only failed for want of time. Thereupon the public agitation continued, and on the 20th of May of this year a large and representative body convened in San Francisco. Again these measures were considered and unanimously indorsed and proposed. The movement has received the earnest support of the whole press. Thousands of the best citizens have enrolled themselves in an organization to secure this reform in the laws, necessary to the peace and prosperity of the commonwealth. This organization is pledged to advocate the adoption of the particular amendments and laws which we herewith submit, and it is safe to say that a vast majority of the people of the State are in full sympathy with the irrigation movement. For these reasons we unhesitatingly commit ourselves to vote for the measures which we append to this memorial, without amendment.

The first of these is a constitutional amendment determining and fixing the nature of water rights; the second is also a proposed constitutional amendment regulating the use of water for irrigation; the third is an act governing the right to acquire the use of water by appropriation; the fourth is an act to repeal Section 1422 of the Civil Code.

These several measures can become laws with your Excellency's approval within 10 days after the assembling of the Legislature.

We believe that the executive and legislative departments of the State, without delay, should exercise their power to the fullest extent in ascertaining and confirming the right of appropriation and in repudiating the riparian doctrine of water rights announced by the Supreme Court. The State and the people cannot wait. Before the next regular session of the Legislature in January, thousands of citizens and their families may be ruined and millions of property may be destroyed. In our judgment, the exigency is so great that the constitutional amendment should be submitted to the people at a special election, to be held in the shortest time possible under the Constitution. We will vote for a bill providing for such special election.

We now, therefore, respectfully memorialize your Excellency to convene the Legislature in extraordinary session to pass these measures.

We further respectfully suggest that the Legislature be requested in the proclamation to consider suitable measures looking to the reorganization of the Supreme Court. It cannot be disputed that the best judgment of the bar of this State and the general opinion of the people is that the court should in some way be reconstituted. The salaries paid to the judges are too small, and yet they cannot be increased while the present incumbents hold office. We submit that your Excellency might well include in your proclamation the general subject of changing the organization and the personnel of the Supreme Court.

#### The Proclamation.

Upon satisfying himself of the good intent of the memorialists, the Governor has issued to day the following proclamation for an extra session of the Legislature:

STATE OF CALIFORNIA,  
EXECUTIVE DEPARTMENT,  
SACRAMENTO, July 16, 1886.

To the Senate and Assembly of the State of California: In my judgment, an extraordinary occasion has arisen which renders it expedient and necessary for the public welfare that the Legislature should be called together.

The Supreme Court of the State in a recent decision announced that the riparian owners

along the innavigable streams in California owned the flowing waters in such streams, and are entitled to the exclusive right to use the same. The widespread disaster which this decision threatens to the agricultural interests and the consequent general excitement and apprehension make it proper that the legislative and executive branches of the Government should take prompt and efficient action to prevent the injurious consequences which will otherwise inevitably flow from the establishment of such a rule of law by the highest court in the Commonwealth.

Under the sanction of the laws and customs which prevailed in California when it was acquired from Mexico, under the protective policy of the National and State Governments, and in harmony with the climatic and physical characteristics of the country, a splendid system of irrigation has grown up since the American occupation. The flowing waters were deemed public property, and were considered as dedicated to the use of the people. The right to appropriate water for irrigation was regulated by custom and by statute law. Most of the soil of California was public land of the United States. But Congress expressly sanctioned the custom of appropriation and diversion of water, and expressly authorized it upon the public domain. The practice of irrigation was thus allowed to become general, and marked the progress of the agricultural development of the State. The larger part of the great valley of California, and most of the southern portion of the State, were in a desert condition, owing to the aridity of climate and soil. Irrigation has transformed large areas of this splendid domain into luxuriant fields, vineyards and orchards; hundreds of millions of taxable property have been created; many thousands of happy homes have been planted; colonies, villages and towns have sprung up, and an intelligent and industrious population has been invited from abroad to develop the resources of the State. The agricultural prosperity already achieved and the future possibilities of Southern California and of the great valley, which comprises much the larger part of the arable land of the State, have depended and will depend upon the ability of the people to use the waters of the State for irrigation.

The majority of the judges of the Supreme Court have announced that any riparian proprietor may obtain an injunction against any person not a riparian proprietor, to prohibit him from appropriating, diverting or using water from the stream above his land. Under this ruling the ditches and canals, which are the arteries of the agricultural life of the State, may be closed by writs from the courts, and, too, upon *ex parte* application, without notice or warning or opportunity of being heard until after irretrievable damage has been done. Many such suits are now pending. Writs of injunction have been asked for and in some cases obtained, but have not been obeyed. Should an attempt be made to enforce them and others which are likely to issue, as is apprehended, serious trouble may ensue, because the people may resist to prevent the desolation of their homes, farms, vineyards and orchards. But if they should not; if they should peaceably submit, still the injury to the State would be immeasurable. To suspend irrigation for one season would destroy thousands of homes and millions of property.

Other Western and Pacific States, having an arid climate similar to our own, have conformed their organic and statute laws to the necessities and requirements of their condition in this regard. Manifestly that course is demanded in California.

In view of these considerations and particularly of the ruin and disaster which seem likely to flow from the enforcement of the doctrine recently announced by the Supreme Court as to water rights, it seems to me imperative that the Executive and the Legislature should take immediate action to confirm to the people the right to a free use of the flowing waters, which is essential to their prosperity and to the welfare of the State.

Another matter of great public concern is the reorganization of the Supreme Court. The existing system has not given satisfaction, and the evils are growing worse. It is cumbersome to a degree. The business is in arrears, notwithstanding the creation of a commission to assist the judges. The plan of dividing the court into departments has not worked well. It leads to the necessity of hearing cases twice over. A litigant defeated before a minority of the court appeals to the judges in banc, and the whole work must be gone over. The system is perplexing and unsatisfactory to everybody. And, furthermore, the salaries paid to the judges of the Supreme Court are too small. Lawyers eminent in their profession cannot accept the places without making a sacrifice which the State ought not to require. But the compensation now provided cannot be increased during the incumbency of the present judges. In my judgment, the court should be reorganized. The system of departments should be abolished. A court constituted of a compact body of judges will accomplish more. Their pay should be increased, so as to secure the best talent in the State.

Now, therefore, I, George Stoneman, Governor of the State of California, deeming that an extraordinary occasion has arisen, by virtue of the power in me vested by the Constitution of the State, do hereby convene the Legislature to meet and assemble at the State Capitol on the 20th day of July, 1886, at 12 o'clock M. of that day; and I do hereby specify the following sub-



jects upon which it is assembled to legislate:

First—To propose and submit to the people of the State an amendment or amendments to Article XIV of the Constitution of the State, relative to Water and Water Rights.

Second—To propose and submit to the people of the State such amendment or amendments to the Constitution of the State as may be necessary or proper to secure to the people the right of appropriation, diversion and use of flowing water for irrigation or other beneficial purposes, and as may be necessary or proper to protect all such rights in the courts of the State.

Third—To enact all laws necessary or proper to protect the people of the State in the full and free enjoyment of the right to appropriate, divert and use flowing water in the State for irrigation or other beneficial purposes, and so as to fully protect all such rights in the courts.

Fourth—To repeal section 1422 of the Civil Code.

Fifth—To propose and submit to the people of the State an amendment or amendments to Article VI of the Constitution of the State relative to the judicial department, so far as it relates to the Supreme Court.

Sixth—To enact a law to provide for submitting the constitutional amendments proposed to a vote of the people.

Seventh—To provide by appropriation for the expenses of holding an election for the ratification or rejection of such proposed amendments to the Constitution.

In witness whereof, I have hereunto set my hand and caused the Great Seal of the State to be affixed at my office in the city of Sacramento, this 16th day of July, 1886.

GEORGE STONEMAN, Governor.

Attest: THOS. L. THOMPSON, Sec'y of State.

### Farmer Before Corporation.

In the issues of our paper for June there were 21 pages wholly devoted to the full stenographic report of the Anti-Riparian Convention, which conveyed at length the views and claims of those who are now conducting the movement against existing laws and court decisions. We presumed that those who believed in fully posting themselves upon important questions had mastered the work of the convention and were ready for farther discussion of the problems involved in the present irrigation situation in this State, and so invited correspondence on the all-important subject. In this discussion, as is our custom with other questions, we do not propose to restrict admission to our columns to views only which coincide with our own.

The first communication presented, which we publish below, from our old and well known contributor, Abbot Kinney, of Los Angeles county, is therefore presented, not because we indorse all the views expressed, but because we regard thoughtful conclusions honestly arrived at worthy of the attention of those who are studying an important question:

EDITORS PRESS:—Laws to facilitate and encourage the use of the streams of California for irrigation would do good.

Such laws should have for their corner-stone "the rights of the people." The individual irrigator and farmer should have full and complete guarantees, first to the use of the water from the canal corporations, and second, to that use at reasonable rates.

The appropriation of the rivers of the State must be subject to State control. The wealth of individuals or corporations must not be the measure of the water they can seize. The development of the streams must be subject to franchise or other State regulation. Without this a few rich firms will hold the rivers and demand a grinding and excessive tax from the farmer.

No dependence can be more complete than that of an irrigating farmer on the distributor and controller of the water his farm requires. This dependence has in most irrigating countries made serfs and slaves of the farmers and practically confiscated their farms.

Mr. Wm. Ham Hall, our distinguished State Engineer, in his recent book, speaks of this fact in connection with some of the large Italian works.

There are 52 counties in this State, of which at least 40 are not to any important extent irrigated counties. These must be considered in new laws on this question. Such matters as debris, etc., cannot be forgotten. Laws on water must be just to all men and to all interests.

They should be short and plain so as to be easily understood and remembered. The rights of the people must be fully guaranteed in every respect. No monopoly of the waters of California can be tolerated. Monopoly of the water means the slavery and subservience of the great population so soon to occupy this State. The manhood of the farmer, even the security of our free institutions, rests on the safety of the farmer's rights to use the water on which his living will depend. We cannot allow great firms to dam up whole rivers and take them off without license or control. One such river at its height in Kern county, now claimed in more than its entirety, to the extent of 3000 cubic feet per second, represents more water than all the water developments of the imperial county of Los Angeles. It is not safe for a private corporation to have such power as this implies, to hold the water rights of a principality in its hands. There should be State control. The people must be considered. There is now in this State a wealthy and powerful combination

spending money freely. This organization is called "anti-riparian." Its main object seems to be the handing over of a certain river now, henceforth and forever to the enormous wealth of one firm.

These gentlemen have a stack of constitutional amendments and new laws on water, which they propose to pass without change or amendment.

They are pledged "to oppose through the ballot-box, and by every other legitimate means, the election of any person to office, executive, legislative or judicial, who is not known to be in full and active accord with every proposition contained in these articles of association."

They have prepared what they wish to be the future water code of the State. Their measures, they say, must be passed *without change*. "No change can be made except for the worse."

Thus they usurp the functions and powers of the representatives of the people.

The Legislature no longer makes the laws, nor even deliberates on them, but is merely the recorder of the edicts of these gentlemen. The executive is to record their wishes, and lest there should be any mistakes the courts are to be stuffed with pledged judges.

The State Government goes on nominally, but the powers of its officers will have been transferred to others not responsible to the people.

The people's government is to be only the machinery to carry out the edicts of a wealthy oligarchy.

What are these measures that are to be passed without examination or debate, without any change, that require the surrender by the people's representatives of their responsibility as law-makers to this oligarchy?

These amendments to the Constitution and revolution in the law provide in substance that the wealthiest men in California shall control the rivers and streams without any regulation whatever. The present laws are changed so as to guarantee to these rich men seven per cent per annum *net* on all the capital they can spend wisely or wastefully on irrigation works.

They are guaranteed against mistakes. Good year or bad, they get at least net seven per cent. The most barefaced thing in this measure is that the present maximum rate is done away with. There is at least seven per cent as a minimum to protect the corporation. There is no maximum, there is nothing to protect the people. The corporation gets the guarantees, the people get nothing.

Without competition the transportation rates were made so as to take all the traffic would bear. So it is likely to be in this, the tax for water will be all the farm can yield, and God have mercy on the farmer. The methods proposed are subversive of our system of free government. To pledge a judge and stuff a court, and that the highest, to decide a case for a particular party, is vicious in principle and pregnant with intolerable corruption. The Legislature should frame and examine all the laws it passes, and can never properly delegate that power to others.

The judge must be untrammelled and unpledged, a free agent to do what is right.

Error comes before us masked. If she came without disguise she would be mobbed at once.

These schemes may be well intended; they are certainly well disguised. When we tear down the mask we find the streams of California turned over to the few. These few guaranteed in the perpetual extortion of an exorbitant tax, guaranteed against wastefulness or bad judgment, and with power to freeze out any farmer in their toils. The freeze-out scheme is not even now unknown in Kern county.

The people have not a single guarantee. Not a single bit of security is given the irrigators and the farmers from the top of this stack of revolution to the bottom.

Our State has developed under the present system of law. It is doing so now. Irrigation counties are of all others the most prosperous. These laws, it seems, need complete sweeping away. Why? because the State is prosperous under them? Probably not. Let the large sums of money being spent by private parties to blind the people point to the reason of this agitation.

There is no rule of law in this State preventing the use of public streams for irrigation.

We have used the streams for irrigation, we are using them and we are going to continue that use.

The present false and unreal issue is a financial agitation to secure judges on the Supreme bench to decide a great private case in a particular and foreordained way. Such a prostitution of the first court in the State cannot be tolerated.

We will not again walk open-eyed into the mouth of greedy monopoly, as we once did in transportation matters.

The rights of the people of California must be fully guaranteed to the use of the public streams. Cunning monopoly masks its measures. It will speak of the public good and distract attention by the cry of "Stop thief!" while it rifles our pockets to the depths.

Farmers and Irrigators, be careful. Examine and weigh well these measures that must be passed without amendment. Look twice before you leap. Demand that any change in the water laws shall guarantee the farmer in the use, at reasonable rates, of the water he needs.

Look out for this first, last and all the time.

ABBOT KINNEY.

### The Legislature.

#### List of Members of the Last Senate and Assembly.

Below is given the names of the members of the last Legislature, and who were called to meet in extra session at the State Capitol at noon on Tuesday, July 20th:

##### Members of the Senate.

1. A. P. Johnson, San Bernardino, R.\*
2. R. F. Del Valle, Los Angeles, D.
3. Geo. Steele, San Luis Obispo, R.
4. P. Reddy, Mono, D.
5. J. D. Spencer, Stanislaus, D.
6. Ben. Knight, Santa Cruz, D.
7. James R. Lowe, Santa Clara, R.
8. A. W. Saxe, Santa Clara, R.
9. J. Lynch, San Francisco, D.
10. G. C. Parkinson, San Francisco, R.
11. Egisto Palmieri, San Francisco, R.
12. D. McClure, San Francisco, R.
13. G. H. Perry, San Francisco, R.
14. Daniel J. Creighton, San Francisco, D.
15. Edward F. Drum, San Francisco, D.
16. J. T. Dougherty, San Francisco, D.
17. M. Kelly, San Francisco, D.
18. John M. Days, San Francisco, R.
19. John L. Boone, San Francisco, R.
20. H. Vrooman, Alameda, R.
21. G. E. Whitney, Alameda, R.
22. F. C. DeLong, Marin, R.
23. F. T. Baldwin, San Joaquin, D.
24. B. F. Langford, San Joaquin, D.
25. A. B. Beauvais, deceased, Tuolumne, R.
26. Fred. Cox, Sacramento, D.
27. J. Routier, Sacramento, R.
28. W. B. Parker, Solano, R.
29. Martin J. Wright, Solano, R.
30. D. Spencer, Napa, D.
31. G. A. Johnson, Sonoma, D.
32. J. A. Filcher, Placer, D.
33. Henry Mahler, El Dorado, D.
34. C. W. Cross, Nevada, D.
35. H. W. Wallis, Sierra, R.
36. A. L. Chandler, Sutter, R.
37. W. W. Kellogg, Plumas, D.
38. E. G. Hurlburt, Humboldt, R.
39. C. W. Taylor, Shasta, D.
40. B. F. Foster, Tehama, D.

##### Members of the Assembly.

1. J. K. Johnson, Siskiyou, D.
2. J. H. G. Weaver, Humboldt, R.
3. Joseph Russ, Humboldt, R.
4. John Yule, Trinity, R.
5. Thomas A. Roseberry, Modoc, R.
6. George Wood, Sierra, R.
7. John Ellison, Tehama, R.
8. Allen Henry, Butte, D.
9. J. M. Ward, Butte, R.
10. Robert Barnett (resigned), Colusa, D.
11. Whit. Henley, Mendocino, D.
12. E. W. Britt, Lake, D.
13. W. H. Parks, Yuba, R.
14. Austin Walrath, Nevada, R.
15. C. F. McGlashan, Nevada, R.
16. Geo. H. Colby, Placer, R.
17. E. H. Watson, El Dorado, D.
18. W. J. Davis, Sacramento, R.
19. C. T. Jones, Sacramento, R.
20. Dwight Holister, Sacramento, R.
21. C. B. Culver, Yolo, R.
22. H. A. Pellet, Napa, R.
23. W. T. Mears, Sonoma, R.
24. S. I. Allen, Sonoma, R.
25. M. E. C. Munday, Sonoma, D.
26. D. G. Barnes, Solano, R.
27. R. C. Carter, Solano, R.
28. Joseph Almy, Marin, R.
29. James H. Daley, San Francisco, R.
30. E. C. Kalben, San Francisco, R.
31. Peter Deveny, San Francisco, R.
32. Jos. Franklin, San Francisco, R.
33. W. B. May, San Francisco, R.
34. F. W. Hussey, San Francisco, R.
35. N. T. Whitcomb, San Francisco, R.
36. John Lafferty, San Francisco, R.
37. M. J. Sullivan, San Francisco, R.
38. W. B. Hunt, San Francisco, R.
39. Charles H. Ward, San Francisco, R.
40. Julius Buhler, San Francisco, R.
41. H. C. Firebaugh, San Francisco, R.
42. V. C. Murray, San Francisco, R.
43. Eugene F. Loud, San Francisco, R.
44. Frederic Lovell, San Francisco, R.
45. Hugh K. McJunkin, San Francisco, R.
46. T. H. McDonald, San Francisco, D.
47. Charles D. Douglas, San Francisco, R.
48. Frank French, San Francisco, R.
49. James V. Coleman, San Mateo, D.
50. Lucien Heath, Santa Cruz, R.
51. Joseph F. Black, Alameda, D.
52. Thomas C. Morris, Alameda, D.
53. F. J. Moffitt, Alameda, D.
54. W. M. Heywood, Alameda, R.
55. W. H. Jordan, Alameda, R.
56. G. W. Watson, Alameda, R.
57. G. W. T. Carter, Contra Costa, R.
58. Hugh J. Corcoran, San Joaquin, D.
59. F. J. Woodward, San Joaquin, R.
60. U. S. Gregory, Amador, D.
61. Mark S. Torrey, Calaveras, R.
62. W. G. Long, Tuolumne, R.
63. W. F. Patterson, Santa Clara, R.
64. J. W. Cook, Santa Clara, R.
65. D. M. Pyle, Santa Clara, R.
66. E. B. Beard, Stanislaus, D.
67. G. G. Goucher, Mariposa, D.
68. Maurice T. Dooling, San Benito, D.
69. S. N. Laughlin, Monterey, R.
70. A. M. Clark, Fresno, D.
71. E. DeWitt, Tulare, D.
72. R. J. Van Voorhies, Mono, R.
73. Arza Porter, San Luis Obispo, R.
74. Alex. McLean, Santa Barbara, R.
75. R. I. Ashe, Kern, D.
76. J. Binbury, Los Angeles, R.
77. H. T. Hazard, Los Angeles, R.
78. E. E. Edwards, Los Angeles, R.
79. Truman Reeves, San Bernardino, R.
80. T. J. Swayne, San Diego, R.

\* R.—Republican. D.—Democrat.



He ate  
GREEN  
FRUIT  
and at night  
had

## Cholera Morbus



His Mother  
brought a bottle of  
PERRY DAVIS'  
PAINKILLER  
and by morning he was

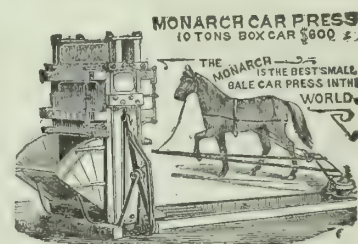
WELL.  
PAINKILLER  
is a sure and safe cure

for  
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Cholera Morbus,  
Diarrhoea,  
Dysentery,  
and Summer Complaint.

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every test.  
Sold by all druggists.  
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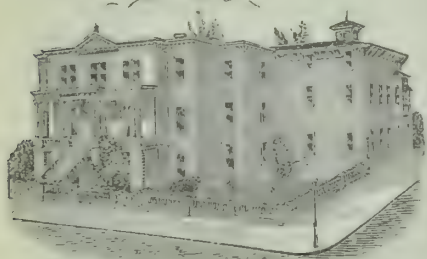
The next term of this well-known Institution will commence on

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Mills Seminary P. O., Alameda Co., Cal.

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San Francisco, Cal.

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REFERENCES.—Rt. Rev. W. I. Kip, Bishop of California; Rev. C. O. Tillotson, Santa Cruz; Hon. C. H. Hartson, Napa; John D. Yost, San Francisco; F. A. Hihn, Santa Cruz; E. J. Wilson, Vallejo; Capt. A. D. Wood, San Francisco; Eugene Sherwood, San Francisco.

## Field Seminary for Young Ladies,

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Oakland, California.

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THE FIFTEENTH YEAR WILL BEGIN

Wednesday.....July 28, 1886

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PRINCIPALS.

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WILL RE-OPEN

WEDNESDAY, JULY 28th, 1886.

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CHRISTMAS TERM OPENS

Monday.....August 2, 1886

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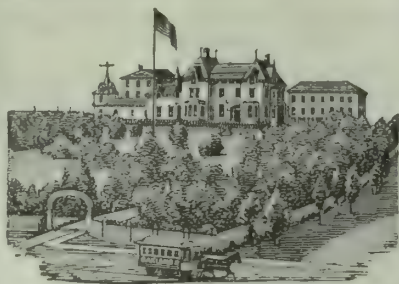
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## CALIFORNIA STATE FAIR—1886.

At Sacramento, Sept. 6th to 18th.

TWO WEEKS.

The Attention of the Farming Community of this State is particularly called to the Liberal Awards, and advantages offered for

COUNTY EXHIBITS.

The importance of an exhibit made by separate counties, showing the productive qualities of the various sections of our State, has become more apparent each year since the system was inaugurated by this Board. Recognizing the interest made manifest in the past by both the public and the exhibitors, through whose energy and enterprise valuable agricultural lands have been brought to the notice of the world, and counties with small populations have increased in a manifold degree, by reason of the producer having come forward with his products that were of such quality as to enable him to meet all competitors, the Board have deemed it proper to increase the premiums in this Department, and to that end have appropriated \$2000 to be distributed among the various counties making displays under the following provisions:

To those who may have charge of the exhibits, we would call their attention to the fact that these awards will be made for the most extensive, perfect, and varied exhibit of Farm Products (exclusive of live stock) exhibited as a County Production. Thus it will be seen that it is to be wholly devoted to the products of the farms located in the county where the exhibit is made from, and does not include manufactured goods of any kind or character except those grown and raised in the county from whence the display comes.

For the best display, as per explanation above, First premium of \$500, cash. The remaining exhibits shall receive premiums in proportion to their excellence, as compared with that receiving the First Premium. Competition to be between counties only. That is to say, that the entire exhibit made by one county must compete against the entire exhibit of another county. The premium awarded to each county exhibit will be paid to the committee in charge of said exhibit.

The State Board of Agriculture earnestly desires the hearty co-operation of the various subordinate Granges throughout the State, in making this exhibition of California's products a success, whereby the varied products of different localities may be fully shown. We would ask the appointment of a committee from the Grange in each county to call upon and urge the patrons to make a display representing their respective counties.

Address the Secretary at Sacramento for Premium Lists and other information.

JESSE D. CARR, President.

EDWIN F. SMITH, Sacramento.

## SEEDLINGS!

We will furnish all who desire first-class (Imported) French Seedling stocks of

PEAR, PLUM, CHERRY, Etc.,

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## TWENTY-FIRST

## Mechanics' Institute Fair,

SAN FRANCISCO, 1886,

Opens August 24th, Closes September 25th,

—IN THEIR—

IMMENSE PAVILION ON LARKIN ST.,  
WITH A GRAND DISPLAY OF

NATURAL AND MANUFACTURED PRODUCTS OF THE PACIFIC COAST, including a magnificent collection of Oil and Water Color Paintings, Art Work, and Photography; MACHINERY in operation; a SPECIAL FLORAL EXHIBIT each week; the finest display of FRUITS, GRAINS, and VEGETABLES ever before presented to the people, and a Grand Instrumental Concert day and evening.

The San Francisco and North Pacific Railroad Company, and the South Pacific Coast Railroad Company, and the steamers under the management of Messrs. Goodall, Perkins & Co. will transport perishable articles consigned to the Mechanics' Institute Exhibition free of charge, and other articles at half rates.

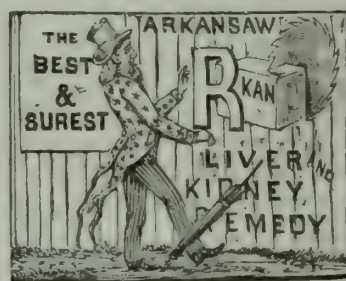
LIBERAL PREMIUMS of Gold, Silver and Bronze Medals, Diplomas and Cash, will be awarded. Members of the Institute entitled to Season Tickets at half rates.

PRICES OF ADMISSION—Double Season Ticket, \$5; Single Season Ticket, \$3; Adult's Single Admission, 50 Cents; Children's Single Admission, 25 Cents.

Full information given or sent on application to the Assistant Secretary, 31 Post St.

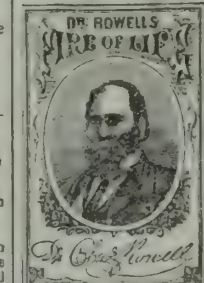
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## THE FIELD.

## California Wheat Crop.

[Written for RURAL PRESS by J. R. F.]

Last year's wheat crop of this State was disappointingly small, the average to the acre not going much above seven bushels. This small average was due to extreme dry weather, causing a failure in some sections, and cutting down that of the other agricultural sections of the State. The following table of yields by years shows the light output last year, when a larger area was seeded to wheat than was even in 1884:

Years.	Cents, Year.	Cents.
1870.....	8,404,400	25,194,000
1871.....	10,054,200	21,000,000
1872.....	15,300,000	20,336,500
1873.....	12,900,000	18,840,600
1874.....	18,688,000	21,637,900
1875.....	14,280,000	21,783,200
1876.....	18,000,000	26,592,000
1877.....	13,200,000	16,200,000

While the crop was very light, yet the price at which it was sold averaged better than the season of 1884-5. But while it had a higher average than the preceding season, yet it fell considerably below any former season for over a decade past, as the following comparison of season prices shows:

Season	Price per Cental	Price per Cental
1870-71.....	\$2.20 1/2	1.67 1/2
1871-72.....	2.34	1.82
1872-73.....	1.76 1/2	1.41 1/2
1873-74.....	2.05 1/2	1.60
1874-75.....	1.62	1.73 1/2
1875-76.....	1.93 1/2	1.64 1/2
1876-77.....	1.92 1/2	1.31 1/2
1877-78.....	2.18	1.37 1/2

So as to convey a better idea of last season's prices, I present the following monthly average of prices of No. 1 shipping wheat, together with the highest price reached at any time in the month and also the lowest:

1885.	Average.	Highest.	Lowest.
July.....	1.41 1/2	1.45	1.37 1/2
August.....	1.40 1/2	1.45	1.37 1/2
September.....	1.41	1.47 1/2	1.30
October.....	1.48	1.52 1/2	1.45
November.....	1.42	1.47 1/2	1.35
December.....	1.38 1/2	1.42 1/2	1.35
1886.			
January.....	1.36	1.40	1.30
February.....	1.28 1/2	1.33 1/2	1.25
March.....	1.30 1/2	1.35	1.27 1/2
April.....	1.34 1/2	1.37 1/2	1.31 1/2
May.....	1.31	1.36 1/2	1.25
June.....	1.21 1/2	1.27 1/2	1.17 1/2

The shipments from this port are to nearly all parts of the world, as the following table of exports by sea and land last season shows:

Destination.	Cents.
Antwerp.....	325,151
Avonmouth.....	60,803
Barrow in Furness.....	27,831
Belfast.....	33,602
British Columbia.....	250
Cape Town.....	68,329
Central America.....	12,294
Civita Vecchia.....	105,179
Cork.....	5,487,218
Dublin.....	376,275
Germany.....	5,702
Gibraltar.....	159,153
Hamburg.....	21,847
Havre.....	121,109
Hawaiian Islands.....	6,529
Hull.....	499,615
Japan.....	33
Limerick.....	104,616
Liverpool.....	3,486,412
London.....	13,318
Maryport.....	58,310
Mexico.....	5
New York.....	46,560
Overland.....	18,004
Plymouth.....	112,299
Russian Possessions.....	408
Sydney.....	174,923
South America.....	25
Tahiti.....	529
Total.....	11,340,329

Same time in 1884-5.....	15,732,435
" " " 1883-4.....	11,282,548
" " " 1882-3.....	14,536,675

The flour exports expressed in wheat were as follows: 1885-6, 3,279,085 cents; 1884-5, 3,913,923; 1883-4, 3,776,637; 1881-2, 3,119,991. Of the wheat cleared for Cork, fully one-half was ordered to continental ports.

The following table gives the stock of wheat and flour in the State on July 1st of each year named, as taken by the Produce Exchange of this city:

Year.	Wheat.	Flour.
1886.....	1,252,600	102,325
1885.....	5,282,900	70,800
1884.....	664,050	112,000
1883.....	979,500	77,000
1882.....	2,822,903	119,324
1881.....	12,444,278	135,592
1880.....	323,821	30,934

Although the carry-over of old wheat from the season of 1880-81 was very heavy (622,000 tons) and the crop of 1881 was only 75,000 tons short of that of 1880, yet the average price for the season of 1881-82 was \$1.60 per cbl., being a higher average by about 19 cents than that of 1880-81. This shows that it is not so much the heavy stock with us as the

European harvests and consequently demand. The short crop in Russia that year created a better market for our grain. By the following table of average wheat charters by seasons, it will be seen that freights ruled very high in 1881-82:

Seasons.	Average freight.	Wood.	Iron.
1885-86.....	29 3	32 6	
1884-85.....	34 2	38 -	
1883-84.....	25 8	34 6	
1882-83.....	43 6	46 9	
1881-82.....	65 7	67 3	
1880-81.....	66 9	73 -	

For the sake of comparison and also that the wheat situation last season can be better understood, I give the following highest and lowest monthly charters of iron vessels (wood vessels are always 2s 6d less than iron):

Month.	Average.	Highest.	Lowest.
July.....	33 3	36 9	30 6
August.....	35 -	37 6	30 -
September.....	33 -	35 -	30 -
October.....	32 3	32 6	31 3
November.....	29 8	32 6	28 9
December.....	29 4	32 6	29 9
January.....	30 -	32 6	28 9
February.....	31 -	35 -	28 9
March.....	33 4	34 6	36 6
April.....	34 4	35 6	33 9
May.....	34 8	36 3	33 9
June.....	35 -	36 5	33 9

So far the present season the average is higher than last season in July; but now the rates of charters are dropping, owing to an increasing number of vessels headed this way, and also to the more established fact that the California wheat crop is very considerably below estimates made in May and also in the fore part of June. Not only are spot vessels lower but vessels to arrive are offering to accept lower rates. In April and May and even well into June, vessels to arrive for September-October loading were taken at 35s and some even at higher rates. Now, shippers are not disposed to take any unless they get them at a decided falling off rate from 35s U. K. f. o.

San Francisco, July 16, 1886.

## The San Francisco Bar Condemns the Governor.

The Call of the 21st publishes the following report:

The members of the Bar Association of San Francisco held a meeting last night at the rooms of the association in the Supreme Court building on Post street. About 40 members were present, including two representatives of the interior bar, C. E. Tuttle and E. Sherwood. The meeting, which was executive, was called to order by Judge T. P. Stoney. T. V. O'Brien acted as secretary.

The following resolutions were unanimously adopted:

WHEREAS, The Governor has convened the Legislature in extra session by proclamation, declaring the objects to be accomplished, among which are the reorganization of the Supreme Court and the removal of the members thereof from office; and Whereas, The Governor has so convened the Legislature because of a decision of the court upon a purely legal question duly submitted to it; and Whereas, We, the members of the Bar Association of San Francisco and members of the bar practicing in this State, desire to protest against the action of the Governor and to express our views as to the attack thus made upon the Supreme Court; therefore be it

Resolved, That the freedom and independence of the judiciary are inestimable and should be maintained, and that the present assault on the Supreme Court must be met and repelled.

Resolved, That the attempt to expel the present members of the Supreme Court through the guise of a constitutional amendment because of a decision rendered by them is fraught with danger to the independence of the judiciary, the stability and perpetuity of our institutions, and merits the severest reprobation.

Resolved, That the attack upon the court is directly subversive of the express guarantees contained in the Constitution designed to protect the independence of the judiciary in the administration of justice, and as such meets with our unqualified condemnation.

The next resolution adopted was as follows:

Resolved, That a committee of three be appointed by the chair, to prepare and present to this association for adoption, on Thursday, the 22d day of July, 1886, at 1 P. M., a memorial to be presented to the Legislature, expressive of the sense of this association with regard to the proposed reorganization of the Supreme Court.

The meeting was addressed by Judge J. W. Winans, I. M. Taylor and M. M. Estee, the speeches being in keeping with the foregoing resolutions.

MR. F. S. BELCHER, of Charlotte, Michigan, is one of the visiting comrades of the G. A. R. Mr. Belcher is the inventor and manufacturer of the Acme Steam-Heat Evaporator (described and illustrated in the RURAL PRESS) of June 12th, and for which Batchelor & Wylie are general agents, and while he is on the Pacific Coast purposes instructing those who have these dryers in the method of operating them to the best advantage.

## Cheap Money for Farmers.

Farmers in this State will be glad to learn that they can borrow on mortgage any amount, from \$5000 to \$500,000, from S. D. Hovey, 330 Pine St., San Francisco, at 6 to 7 per cent and taxes.

## PACIFIC COAST WEATHER FOR THE WEEK.

[Furnished for publication in this paper by NELSON GOROM, Sergeant Signal Service Corps, U. S. A.]

DATE.	Portland.				Red Bluff.				Sacramento.				S. Francisco.				Los Angeles.				San Diego.			
	Rain.	Temp.	Wind.	Weather.	Rain.	Temp.	Wind.	Weather.	Rain.	Temp.	Wind.	Weather.	Rain.	Temp.	Wind.	Weather.	Rain.	Temp.	Wind.	Weather.	Rain.	Temp.	Wind.	Weather.
July 14-21.																								
Thursday.....	.00	87	NW	Cl.	.00	105	N	Cl.	.00	93	SW	Cl.	.00	74	W	Cl.	.00	95	SW	Cl.	.00	77	NW	Cl.
Friday.....	.00	81	NW	Cl.	.00	101	E	Fr.	.00	95	SW	Fr.	.23	71	W	Cl.	.00	87	W	Cl.	.00	73	W	Cy.
Saturday.....	.00	84	NW	Fr.	.00	103	S	Cl.	.00	93	S	Cl.	.00	64	W	Cl.	.00	81	W	Cy.	.00	69	W	Cy.
Sunday.....	.00	86	NW	Cl.	.00	92	S	Cl.	.00	85	SW	Cl.	.00	62	SW	Cl.	.00	85	W	Cl.	.00	73	SW	Cl.
Monday.....	.00	82	N	Hy.	.00	92	S	Cl.	.00	82	S	Cl.	.00	68	SW	Cl.	.00	82	W	Cl.	.00	70	W	Cl.
Tuesday.....	.00	74		Cy.	.00	89	S	Cl.	.00	79	S	Cl.	.00	64	SW	Cl.	.00	79	W	Cl.	.00	69	NW	Cl.
Wednesday.....	.00	76	N	Cl.	.00	94	CM	Cl.	.00	85	W	Cl.	.00	63	W	Cl.	.00	81	W	Cl.	.00	70	NW	Cl.
Totals.....	.0				.00				.00				.23				.00				.00			

EXPLANATION.—Cl. for clear; Cy. cloudy; Fr. fair; Fy., foggy; — indicates too small to measure. Temperature Wind and weather at 12:00 M. (Pacific Standard time), with amount of rainfall in the preceding 24 hours.

## List of U. S. Patents for Pacific Coast Inventors.

Reported by Dewey & Co., Pioneer Patent Solicitors for Pacific States.

From the official report of U. S. Patents in Dewey & Co.'s Patent Office Library, 262 Market St., S. F.

FOR WEEK ENDING JULY 13, 1886.

- 345,404.—CHECK REIN ATTACHMENT—C. L. Bard, San Buenaventura, Cal.  
 345,567.—PIPE WRENCH—S. J. Benson, Boulder Creek, Cal.  
 345,280.—HEAT REGULATOR FOR INCUBATORS—L. H. Cutting, Stockton, Cal.  
 345,371.—TWO-WHEELED VEHICLE—S. P. Davis, Napa, Cal.  
 345,373.—ANIMAL EXTERMINATOR—H. Esborn, Petaluma, Cal.  
 345,385.—EXPANDING DRILL-BIT—C. C. Lane, S. F.  
 345,388.—SAW GUMMER—S. R. Mathewson, Porterville, Cal.  
 345,391.—STEAM CORKER—D. D. Mounts, S. F.  
 345,395.—BARREL-TILTING DEVICE—Potter & Gomez, S. F.  
 345,396.—KEY-HOLE GUARD—Katy Rumetsch, S. F.  
 345,333.—STEAM GENERATOR—J. E. Taylor, Walla Walla, W. T.  
 345,461.—CANDLESTICK—Samuel Tyrell, Grass Valley, Cal.  
 345,345.—GOPHER TRAP—John Weichhart, S. F.

NOTE.—Copies of U. S. and Foreign Patents furnished by Dewey & Co. in the shortest time possible (by mail or telegraphic order). American and Foreign patents obtained, and general patent business for Pacific Coast inventors transacted with perfect security, at reasonable rates and in the shortest possible time.

## Business College Graduates.

Following is a list of graduates of Heald's Business College for the year ending June 30, 1886:

W. B. Fielding, H. A. Long, T. W. Chandler, Miss Lulu Drinkhouse, James Simon, F. Brown, J. N. Russell, Miss Mary Carlson, Henry Hartman, J. Kullman, J. M. Brewer, G. P. Neppert, Miss Jennie Rice, Leo C. Williams, H. S. Pelton, Walter R. Lovegrove, C. Westerfield, A. C. Pistolesi, John Hennings, R. C. Rosenberg, John G. Shannon, S. Walter, H. W. Apparius, David Thomas, Chas. K. Kirby, W. F. Pollak, Edward C. Doyle, Frank J. Waizman, F. R. Capp, C. H. Poulj, W. Cordoza, A. N. Aitken, A. Garat, C. L. Quast, San Francisco; Miss A. A. Heimbold, Wm. Martin, S. H. Wheeler, R. D. McKenzie, T. A. Kilgore, G. S. Wheaton, Geo. E. Perkins, Geo. Stetson, E. C. Hyde, Eva M. Wardwell, Oakland; Samuel Messick, Miss Winnie Morris, Alameda; Paul Brown, Wm. Swank, John Swank, Marysville; Geo. Mundorf, A. H. Booker, Sonora; Chas. A. Grissel, Geo. H. Kohler, Washington; R. S. Kirtick, A. B. Birmingham, Strawberry Valley; Jas. P. Fincher, Mdsoto; J. W. Flaherty, Boca; C. T. Lindsey, Visalia; F. W. Stickney, Little River; J. T. Howell, Merced; H. T. Wall, Healdsburg; F. E. Kimball, Seminary Park; A. B. Knowles, Ocean View; E. Worrell, St. Helena; J. W. Gibson, Woodland; B. T. Thomas, Amador City; W. L. Jones, Vallejo; Edwin Jones, Nortonville; W. C. DeNise, Cambria; J. F. Ward, Red Bluff; V. P. Pena, Vacaville; F. M. Strickland, Madison; E. McGaden, Dixon; John Murphy, Iowa Hill; Fred. A. Otto, Susanville; James R. Dailey, Folsom; Dennis Desmond, Blair; Miss Kate Schafer, Gilroy; H. J. Patterson, Colusa; H. L. Guerne, Santa Rosa; C. J. Swithenbank, Garberville; Alfred E. Thomas, Alcatraz Island; J. R. Jameson, Sumner; Chas. M. Wiggins, Ferndale; Thos. W. Lynch, Honcut; Jas. W. Hyatt, Emigrant Gap; Frank W. Kerrigan, San Andreas; I. L. Compton, Princeton; W. F. Eschbacher, Downville; E. B. Ball, Bonville; F. L. White, L. E. Lee, Reno, Nev.; John Barrett, W. F. Hartman, O. F. Werner, Empire City, Nev.; Geo. E. Melzner, Gold Hill, Nev.; W. F. Aplin, Little York, Nev.; Edward R. Daily, Hamilton, Nev.; Jas. E. Gale, Wells, Nev.; H. L. Stokes, Aug. Hildebrand, Astoria, Or.; E. Rackleff, Myrtle Point, Or.; N. K. Frazer, Pendleton, Or.; W. O. Van Schuyver, Portland, Or.; D. G. Beale, Empire City, Or.; E. Keating Strobbridge, Hayward, O.; Wm. J. Martz, Leito, Minn.; Max Peters, New York; B. J. McDonald, New Westminster, B. C.; M. F. Morales, Guatemala, C. A.; E. Ulloa, Paris, France.

## Haywards Hotel.

We take pleasure in calling attention to this well and favorably known resort. It has been long established and popular. The locality is elevated and healthy, the surroundings pleasant in the midst of the fruit region of Alameda county. The table will be found supplied with the best in the market, and the proprietor intends to spare no pains in making his house a pleasant and popular home for tourists and pleasure-seekers. Further particulars will be seen in the advertisement in this paper. San Franciscans and Oaklanders find it a very convenient and delightful place to tarry.

EXCHANGE AND MART.—We have received a copy of Mr. Henry Myrick's *Real Estate Exchange and Mart* for July. It has the usual marks of Mr. Myrick's work, enterprise, candor and neatness. It is especially devoted to Santa Cruz interests, and can be had by addressing the publisher at that place.

## News in Brief.

THE hay crop in Siskiyou is larger than ever before known.

A FARMER near Galt has over 100 acres devoted to melons.

SOLANO COUNTY has 50 school districts and 5000 school children.

THE Santa Rosa *Republican* complains of the scarcity of fruit in the stores of that city.

PARTIES in St. Louis, Mo., have formed a company to sink artesian wells near Phoenix, Arizona.

THE Big Bottom Mill Company have about 4,000,000 feet of lumber on hand at the mill at Guerneville.

THE total number of immigrants to Oregon for the first five months of the present year reaches 21,575.

AN excursion from San Bernardino to San Francisco during the Grand Army Encampment is being organized.

THE supervisors of Fresno county at their last meeting paid over \$1100 as bounties on the scalps of wild animals.

SHEEPMEN in White Pine county offer a reward of \$2 each for coyote scalps, in addition to the regular bounty.

A SAN BERNARDINO butcher announces that he is prepared to make contracts for a year to retail beef at five cents a pound.

IN one of the artesian wells in Sierra valley, gas has been obtained. Experiments will be made to test its illuminating power.

THE Winnemucca *Silver State* says: "It is suggested that the Legislature offer a bounty for rabbit scalps; otherwise the country will be laid waste by them."

IN Humboldt county, Nevada, Indians are making wages by destroying noxious animals. At the last meeting of the commissioners of that county some of the red men had as high as \$20 paid them.

THE number of tourists in Northern Shasta is greater than ever before. The magnificent scenery, health-giving climate and splendid hunting grounds attract nearly as many people as the seaside resorts.

THE Gilroy *Advocate* says: This is a good point for the establishment of an ice factory. The demand of the city, and of the adjoining towns and settlements, would insure business to any factory from the start.

THERE is talk once more about building a flour mill in Galt, says the *Gazette*. In connection with the planing mill, it would seem that an industry of this kind could be started at a small cost and run at a profit.

THE *News* says: Los Gatos is growing more and more into favor with all who know its favorable situation. The fine young orchards in the vicinity have made it beautiful, and now that fruit and grapes are advancing in price, we can feel the effect in the increased number of visitors in our town.

THE San Jose *Mercury* says: Wild honey hunting has become the pastime of several persons in this community. Each visit to the bee trees has been very productive of very animated fights between the besieged and besiegers. Though in each case the bees lost their stores of honey, they left their marks on the invaders.

A EUALYPTUS tree 106 feet high was cut down recently in Santa Rosa. The tree, instead of being chopped down in the usual manner, was commenced on at the top, and piece by piece was cut off and lowered to the ground. The growth of the tree had moved an adjacent house two inches off and one inch up from the foundation. It was one of the oldest trees in town.

## Complimentary Samples.

Persons receiving this paper marked are requested to examine its contents, terms of subscription, and give it their own patronage, and, as far as practicable, aid in circulating the journal, and making its value more widely known to others, and extending its influence in the cause it faithfully serves. Subscription rate, \$3 a year. Extra copies mailed for 10 cents, if ordered soon enough. If already a subscriber please show the paper to others.

## Cheap Money to Loan on Grain.

FARMERS, don't pay 10 per cent. S. D. Hovey, 330 Pine St., San Francisco, has \$500,000 to loan on grain in warehouse, at 6 per cent per annum. He loans \$18 a ton on wheat. Write him.

THE more misfit institutions, the better for Muller, the Optician, 135 Montgomery St.,



## Breeders' Directory.

Six lines or less in this Directory at 50c per line per month.

### POULTRY.

**GEO. B. BAYLEY**, 1317 Castro St., Oakland, Importer and Breeder of all the best known and most profitable Land and Water Fowls. Publisher of the Pacific Coast Poultryers' Hand Book and Guide. Price 40 cents. Send 2-cent stamp for Illustrated Circular.

**E. C. CLAPP**, South Pasadena, Cal. Light Brahmas, Plymouth Rocks and Silver Spangled Hamburgs, Fowls and Eggs. Ex. and P. O. Money-Order offices, Pasadena.

**JAS. T. BROWN**, 18 Georgia St., Los Angeles, Cal. Breeder of Thoroughbred Poultry of the leading varieties. Send for circular and price list.

**O. J. ALBEE**, Santa Clara, Cal., breeder of Langshans, Partridge Cochins, Pedigreed Scotch Collies, W. C. B. Polish, Wyandottes, B. Leghorns, B. B. R. G. Bantams.

**T. D. MORRIS**, Sonoma, Cal. Tuolouse and Embden Geese, Bronze and W. Holland Turkeys, and all leading varieties of Thoroughbred Poultry.

**CHOICE LAND AND WATER FOWLS** for sale at all times of all the most popular and profitable varieties. Please inclose stamp for new circular and price list to R. G. Head, Napa, Cal.

**D. H. EVERETT**, 1616 Larkin St., S. F., importer and breeder of Thoroughbred Langshans and Wyandottes.

**J. N. LUND**, Box 116, Oakland, Cal. Wyandottes, Langshans, L. Brahmas, P. Rocks, B. Leghorns, B. R. Game Bantams, T. Guineas, Hom'g Antwerp Pigeons.

**D. D. BRIGGS**, Los Gatos, Cal. Fancy Poultry breeder

**AXFORD INCUBATOR**—Best in the world; never beaten in competition; from \$37.50 to \$85.00. Pekin and Rouen Ducks; best in the State; \$7.50 per trio, or \$2.00 each per doz. Eggs, \$3.00 per doz. For particulars address I. P. Clark, Mayfield, Cal.

**CALIFORNIA POULTRY FARM**, Stockton, Cal. Send 2-cent stamp for Illustrated Catalogue.

**W. C. DAMON**, Napa, Wyandottes, W. and B. Leghorns, F. Rocks, L. Brahmas, Pekin Ducks.

**MRS. M. E. NEWHALL**, San Jose. White and Brown Leghorns, Langshans, Plymouth Rocks, Light Brahmas, Pekin Ducks and Bronze Turkeys.

### HORSES AND CATTLE.

**GEO. BEMENT, & SON**, Redwood City. Ayrshire Cattle, Southdown Sheep, Berkshire and Essex Swine.

**SETH COOK**, Danville, "Cook Farm," Contra Costa Co., breeder of Aberdeen Angus, Galloways and Devons (Registered). Young stock for sale.

**H. S. SARGENT**, Stockton. Thoroughbred Jersey Cattle, and Poland-China Hogs from imported stock.

**J. H. WHITE**, Lakeville, Sonoma Co., Cal., breeder of Registered Holstein Cattle.

**OLYDESDALE HORSE CO.**, Petaluma, Cal. Full bloods and grades on hand and for sale. Address G. B. McNear, Secretary.

**PETER SAXE & SON**, Lick House, San Francisco, Cal. Importers and Breeders, for past 14 years, of every variety of Cattle, Horses, Sheep and Hogs.

**WILLIAM NILES**, Los Angeles, Cal. Thoroughbred Poultry, Cattle and Hogs. Write for circular.

**COTATE RANCH BREEDING FARM**, Page's Station, S. F. & N. P. R. P. O., Penn's Grove, Sonoma Co., Cal. Willard Page, Manager. Breeders of Short Horn Cattle, English Draft Horses, Spanish Merino Sheep and Berkshire Swine.

**THE BEST HERD OF JERSEYS**, all A. J. C. C. registered, is owned by Henry Pierce, San Francisco.

**R. J. MERKELEY**, Sacramento, breeder of Norman, Percheron Horses and thoroughbred Shorthorn Cattle.

Estate of **M. E. BRADLEY**, San Jose, Cal., breeder of recorded thoroughbred Shorthorn Cattle and Berkshire Hogs. A choice lot of young stock for sale.

**J. R. KOSE**, Lakeville, Sonoma Co., Cal., breeder of Thoroughbred Devons, Roadsters and Draft Horses.

### SWINE.

**TYLER BEACH**, San Jose, Cal., breeder of thoroughbred Berkshires.

**I. L. DICKINSON**, Lone Oak Farm, Sonoma, Tuolumne Co., Cal., breeder of thoroughbred Essex Hogs. Pigs now ready for sale. Prices reasonable.

**WILLIAM NILES**, Los Angeles, Cal. Thoroughbred Poland-China and Berkshire Pigs. Circulars free.

**JOHN RIDER**, Sacramento, Cal. Breeder of Thoroughbred Berkshire Swine. My stock of Hogs are all recorded in the American Berkshire Record.

### SHEEP AND GOATS.

**JULIUS WEYAND**, breeder of pure-blooded Angora Goats, Little Stony, Colusa Co., Cal.

**KIRKPATRICK & WHITTAKER**, Knight's Ferry, Cal., breeders of Merino Sheep. Rams for sale.

**EASTON MILLS**, Lakeville, Sonoma Co., thoroughbred Spanish Merino Sheep. Choice rams for sale.

**J. B. HOYT**, Bird's Landing, Cal., importer and breeder of Shropshire Sheep; also breeds cross-bred Merino and Shropshire Sheep. Rams for sale.

**L. U. SHIPPEE**, Stockton, Cal. Importer and breeder of Spanish Merino Sheep, Durham Cattle, Red Duroc and Berkshire Swine. High graded Rams for sale.

### BEES.

**J. D. ENAS**, Napa Cal., breeds pure Italian Queens. The best honey and wax extractor; manufactures comb foundation, sections & hive material; send for circulars.

### HIRES' IMPROVED ROOT BEER.

Packages, 25 cents. Makes 5 gallons of a delicious, sparkling and wholesome beverage. Sold by all druggists, or sent by mail on receipt of 25 cents. C. E. HIKES, 48 N. Delaware avenue Philadelphia, Pa.

## IMPORTANT!

That the public should know that for the past **Fourteen Years** our **Sole Business** has been, and now is importing (**Over 100 Carloads**) and breeding improved Live Stock—Horses, Jacks, Short Horns, Ayrshires and Jerseys (or Alderneys) and their grades; also, all the varieties of breeding Sheep and Hogs. We can supply any and all good animals that may be wanted, and at very reasonable prices and on convenient terms. Write or call on us. **PETER SAXE and HOMER P. SAXE**. San Francisco, Cal., Oct. 22, 1884. **PETER SAXE & SON**, Lick House, S. F.

## GRANGERS' BUSINESS ASSOCIATION, SHIPPING AND COMMISSION HOUSE.

OFFICE, 108 DAVIS STREET, SAN FRANCISCO, CAL.

Warehouse and Wharf at Port Costa.

### CONSIGNMENTS OF GRAIN, WOOL, AND ALL KINDS OF PRODUCE SOLICITED.

Money advanced on Grain in Store at lowest possible rates of interest. Full Cargoes of Wheat furnished Shippers at short notice.

**ALSO ORDERS FOR GRAIN BAGS, Agricultural Implements, Wagons, Groceries and Merchandise of every description solicited.**

**E. VAN EVERY**, Manager.

**A. M. BELT**, Assistant Manager.

## STODDARD BARREL CHURN

With Improved Cover Fastening.

The Only Practical Churn for the Dairy.

Awarded First Premium California State Fair, 1885; also First Premium Mechanics' Fair, San Francisco, 1884 and 1885, over all opposition.

The Stoddard Churn is as great an improvement over the cumbersome, leaky, and often sour box churns as the Cream Separator is over setting in pans, and this fact is fast becoming realized, as is proven by the growing demand for them, and they are being adopted by our best dairies with the most gratifying results. Beware of imitations of the "Stoddard." All interested in dairying will regret if they fail to all or address us to investigate these matters.

#### PRICE LIST.

No. 1—10-gallon Churn, 1 to 4	\$ 8 00
No. 2—15-gallon Churn, 2 to 7	9 00
No. 3—20-gallon Churn, 3 to 9	10 00
No. 4—25-gallon Churn, 4 to 12	12 00
No. 5—35-gallon Churn, 5 to 16	14 00
No. 6—60-gallon Churn, 6 to 25	20 00

Extra heavy frames, pulleys, etc., extra. Send for price list of larger sizes, of which we carry up to 120 gallons.

**G. G. WICKSON & CO.**

**DAIRY AND FARM MACHINERY,**  
38 California St., San Francisco.



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## LIFE-SAVING RESPIRATOR

Entirely Prevents Lead Poisoning and Salivation

The most perfect appliance for people engaged in Smelting, Dry Crushing, Guano Works, Quicksilver Mines, Lead Corroding, Threshing and Stock-driving, and all other occupations where there is dust, poisonous vapor, or bad odor.

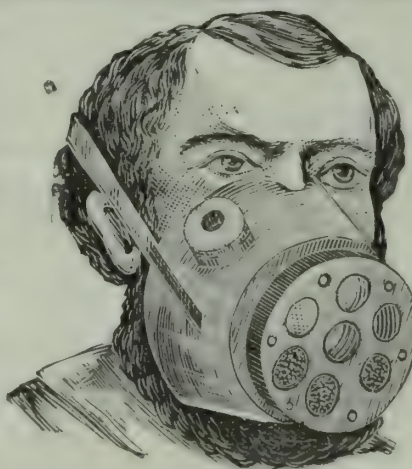
In Feeding Threshing Machines, and similar work, they are indispensable, as no foreign substances can be inhaled when they are worn.

The Respirators are sold subject to approval after trial, and if not satisfactory the price will be refunded. Price, \$3.00 each or \$30.00 per dozen. Sent post-paid to any address on receipt of price.

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Send for Descriptive Circulars containing Testimonials of well-known parties who are at present using them.



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THE GREAT REDUCTION IN PRICE, MAKES IT THE MOST ECONOMICAL IN THE WORLD. SAFE, SURE. IT DOES NOT STAIN THE WOOL. SAME. CABOT, SOLE MANFR. AND PATENTEE, 70 KILBY ST. BOSTON, MASS.



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Heifers in Calf to such grand bulls as Netherland Star, Clifden Prince (Holstein) and Ashantee's Sultan (Jersey) for sale at reasonable prices. Also **POLAND-CHINA** and **BERKSHIRE PIGS**.

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### HIGH-CLASS POULTRY.

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### THE PACIFIC INCUBATOR!



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Send Stamp for Illustrated Circular to **GEORGE B. BAYLEY**, Manufacturer, 1317 Castro St., Oakland, Cal.

N. B.—A large line of Poultry Appliances, such as Wire Netting, Bone Mills, Chopping Machines, etc., for sale at the lowest rates. The Pacific Coast Poultryers' Hand Book and Guide; price 40c.



The Haisted Incubator Co., 1011 Broadway, Oakland, - - Cal. Price from \$20 up. Model Brooder from \$5 up. Thoroughbred Poultry and Eggs. Send for new Circulars containing much valuable information.

## SHEEP AND SHEEPWASH.

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### 40 head SPANISH MERINO BUCKS



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TERMS REASONABLE.

ADDRESS

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KILLS GOPHERS, INSECTS, Etc. Makes a pure Soap at a cost of \$1 per 125 lbs. Send for directions to **T. W. JACKSON & CO.**, 304 California St., S. F.



### Calvert's Carbolic SHEEP WASH \$2 per Gallon.

After dipping the Sheep, is useful for preserving wet hides, destroying the vine pest, and for wheat dressings and disinfecting purposes, etc. **T. W. JACKSON**, S. F., Sole Agent for Pacific Coast.

## THOROUGHbred SPANISH MERINO SHEEP.



Have taken the First Premiums at the State Fair for the last three years.

CHOICE

**BUCKS and EWES**  
FOR SALE.

ORDERS PROMPTLY FILLED. Address **FRANK BULLARD**, Woodland, Cal.

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### 200 HEAD OF RAMS.

Bred from Imports from the leading registered flocks of Vermont, offered at prices reduced to suit the times. The finest lot of Rams on the Pacific Coast. Ewes in lots to suit. **E. W. WOOLSEY & SON**, Fulton, Sonoma Co., Cal.

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Price Reduced to **\$1.25 PER GALLON.**

Twenty gallons of fluid mixed with cold water will make 1,200 gallons of Dip.

It is superior to all Dips and Dressings for Scab in Sheep; is certain in effect; is easily mixed, and is applied in a cold state. Unlike sulphur or tobacco, or other poisonous Dips, it increases the growth of the wool, stimulates the fleece, and greatly adds to the yield. It destroys all vermin. It is efficacious for almost every disease (internal and external) sheep are subject to.

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FROM THE HERD OF

**HON. LELAND STANFORD,**

On his Ranch at Vina, Tehama County, Cal.

For prices and catalogue address

**MR. ARIEL LATHROP,**Room 69, C. P. R. R. Building,  
Cor. 4th and Townsend Sts.,  
San Francisco, Cal.**FRENCH DRAFT STALLIONS,****Kentucky Jacks and Jennets,  
Work Horses and Mules****FOR SALE.**

Some of the Stallions were imported from Europe, others from Illinois, and some young ones were bred in California from imported stock. The prices will be less than animals of equal value can be purchased elsewhere.

Call at or address Patterson's Ranch, Hueneme, Ventura County, or Patterson's Ranch, Grayson, Stanislaus County, or for further information call on or address **JAMES M. PATTERSON, No. 8 Davis St., San Francisco.**  
**JOHN D. PATTERSON.****FOR SALE.****Pure-Bred Southdowns,**

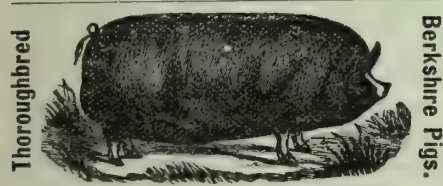
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For Sale at our Farm at Mountain View.

From our Thoroughbred Berkshire Boar and Sow, which we imported from England in 1880. Pigs from Imported Boar and Sow, \$25 each; from Imported Boar and Thoroughbred Sow, \$10 to \$20. Our Imported Pigs are as nice Pigs as there are in the State. Address

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My herd consists of the best strains that can be found. Stock all recorded in A. P. C. R. I have a fine lot of spring, summer and fall pigs, also a few choice yearling sows, for sale. Prices to suit the times.

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Traces and Doubletrees done away with.

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**EXTRA.****PRICE \$17.50**

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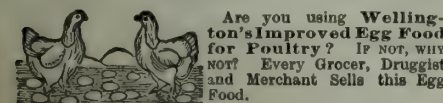
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Vine, and  
Alfalfa  
Land,**

Some of it being specially adapted to Gardening. It has

**SUPERIOR WATER PRIVILEGES,**

Having a main Canal 60 feet on the bottom, running through the land and all necessary main distributing ditches, making it a very desirable location for a Colony, as its

**WATER AND RAILROAD FACILITIES**

Cannot be surpassed in the County.

**TO BE SOLD CHEAP,****AND ON EXTREMELY EASY TERMS TO ACTUAL SETTLERS.****HOME SEEKERS!****DON'T MISS THIS OPPORTUNITY!**

Correspondence solicited and lands shown free of charge.

**L. SHARPE, Selma, Cal., or O. J. WOODWARD, Fresno, Cal.****San Diego County! El Cajon Rancho!**

16,500 acres, known as the Jarvis Tract, situated 13 miles from San Diego, surrounded by high hills, protected from winds and fogs—the most equable climate in the world—rich soil and lovely surroundings. Will be offered as a whole or in subdivisions, from 10 acres upward, at prices according to desirability, from \$10 to \$75 per acre, part cash, balance on time. The wonderful Raisins and Olives grown in this valley command the admiration of every one. Water from 6 to 12 feet. No irrigation, and Fruit and Raisins cured by solar heat. All the Semi-Tropical Fruits raised to perfection.

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Riverside, California.**R. J. PENNELL,**  
San Diego, California.**ATTENTION, OLD HUNTERS!****THE SLOTTERBEK SHOOTING SPECTACLES,**

THE SIMPLEST, MOST PRACTICAL, AND BEST SHOOTING SPECTACLES EVER INVENTED. Indorsed by Capt. A. H. Bygardus, Champion of the world, and the best shots on this Coast, and by old hunters generally. Makes open-sighted rifle shooting more rapid and accurate than any globe or peep-sight ever invented. Price, \$2.00 per pair. Discount to the trade. Descriptive Circular, with Testimonials, free.

**SLOTTERBEK & McCRAVEY, Lakeport, Cal.****\$50 WILL BUY**

THE EUREKA IMPROVED WINDMILL,

**12-foot Size. Strong, Simple, Durable,  
Self-Regulating, Beautiful in appearance,  
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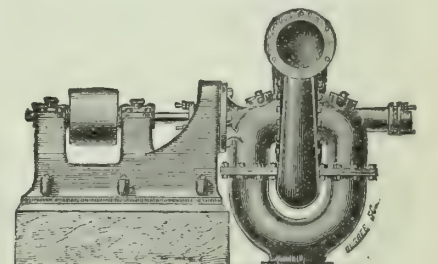
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## S. F. MARKET REPORT

NOTE.—Our quotations are for Wednesday, not Saturday, the date which the paper bears.

## Weekly Market Review.

## DOMESTIC PRODUCE, ETC.

SAN FRANCISCO, July 21, 1886.

We give below our usual variety of reports, domestic and foreign.

The latest by cable is as follows:

LIVERPOOL, July 21.—WHEAT—Steady. California spot lots, 6s 4d to 6s 7d; off coast, 32s 9d@33s; just shipped, 33s 6d; nearly due, 33s 6d; cargoes off coast, firm; on passage, quiet but steady; Mark Lane Wheat and Maize, steady; English country markets, turn dearer; French, quiet; Wheat and Flour in Paris, quiet; weather in England, hot forcing.

## Foreign Review.

LONDON, July 19.—The *Mark Lane Express*, in its weekly review of the British grain trade, says: The rainfall has benefited the crops, excepting the wheat, which required hot forcing weather. Wheat is firmer in many provincial markets, and prices are from 6d to 1s dearer. The sales of English wheat during the past week were 28,725 quarters, at 31s, against 38,826 quarters at 33s 11d, during the corresponding week of last year. Flour is dull, foreign wheats are steadier and American is occasionally 6d dearer. The attempt to raise values, however, stops business, as buyers are apathetic. Barley is dull. A limited business has been done in wheat cargoes. There were three arrivals and two departures, two cargoes were withdrawn and two remained, one of which was from California. The trade in forward is nominally against buyers, although American red and white wheats are offered more freely. To-day the market was quiet but steady, full prices were realized, and holders of wheat are asking more money. Flour is firm, especially English flour. Barley favored the sellers, and beans were 6d dearer.

## New York Hop Market.

NEW YORK, July 18.—The wide margin of difference between buyers' and sellers' views on prices has put a quietus upon the trade in hops for the time being. Telegrams from the interior state that Friday's storms washed the honey dew off the vines to a considerable extent, but that the vermin were not affected in the least, and that growers' prices are away out of sight. A local dealer telegraphed from Malone that 27 cents was paid there for choice goods, and from other quarters it was reported that Eastern dealers are anxious buyers at Waterville and Cooperstown. Choice '85s and prime '84s are held away above the highest prices thus far paid. In the local market 25 cents is the highest price yet bid or paid for choice States. That quality is not offered, however. There was a speculative contract for about 200 bales of 1886 Pacifics on sale, for which 30 cents per pound, it was intimated, would be accepted, but that price was said to have been refused for a much larger lot. The cable reports that the German crop is unlikely to be more than one-half an average. Pacific coast crop, 1885, common to choice, is quoted at from 18 to 25 cents. Speaking of the rapid advance in hops, a large dealer said: "I think the high prices are only temporary, and will not go up to above \$1 a pound. Brewers are buying only for immediate wants, and as soon as the new crop is gathered, prices will go back."

NEW YORK, July 21.—The *Commercial Bulletin* says: Advice at hand yesterday from the hop-growing sections of this State are the worst received. The probabilities in the estimation of local merchants are decidedly against more than one-third of last year's yield. Sales have not been made at above 25 cents in this market, but 30 to 31c was paid in the interior. During the past few days there were reasonable doubts that anything less than 28 cents would buy a choice article. Lillenthal Bros. report the State crop has not improved, but this long since has been discounted. Heavy arrivals from England and a large stock in the hands of brokers, particularly in this vicinity, are likely to prevent any further advance for the present. There are local dealers offering Pacific Coast contracts at 27 cents.

NEW YORK, July 21.—The first bale of the new State hops was received from Cooperstown yesterday. This is considered unusually early. Reports from the fields in the interior are still very discouraging, some authorities estimating there will not be more than a two-thirds crop; but these should be received with caution, while speculation is rampant. There have been few operations in the New York market of late above 25 cents per pound; but in the interior as high as 30 and 31 cents has been paid.

## Eastern Wool Markets.

NEW YORK, July 18.—Wool is dull and the demand from manufacturers is irregular, with most calls based on present wants. Rates, however, remain full and the market may be called firm. Among the sales were 20,000 pounds of Eastern Oregon at 23½ cents. The Philadelphia market is quite active and very strong for all descriptions. There is some inter-trading among dealers, but the bulk of the sales is for consumption. Among the sales were 500 pounds Territory, fine, at 23 cents; 6000 pounds Territory, heavy, at 21 cents; 12,000 pounds Territory, fine medium, at 23½ cents; 14,000 pounds Territory, medium and fine, at 20 cents; and 6000 pounds Territory, medium, at 23 cents. The Boston market shows increasing strength, with a tendency among holders to advance prices. At the same time an undercurrent of doubt prevails among manufacturers. Among the sales were 230,000 pounds California spring and Oregon on private terms.

BOSTON, July 20.—The wool market is firm, with a good demand. Ohio and Pennsylvania X fleeces are quotable at 33c; XX, 35c@36c; Michigan X, 32c; No. 1 combing, 34c@40c. California, 16a@29c. Unwashed wools, 27c@30c.

PHILADELPHIA, July 20.—The wool market is firm and stocks are light.

NEW YORK, July 20.—The wool market is firm with a fair inquiry. Domestic fleeces, 27c@36c; pulled wools, 14c@33c; Texas fleeces, 9c@22c.

## California Fruit at the East.

NEW YORK, July 19.—The *Commercial Bulletin* says: California canned and dried fruits are rapidly

coming into favor with consumers in the East, and the trade here naturally watch all advices from that section that have a bearing on that subject. From information received it appears that lower rates of freight will enable Eastern dealers to lay the same down here at a trifle below the cost of last season. Earlier in the year the expectations were that the prices of this season would rule low, but the large quantity of fruit which dropped from the trees, and the increased facilities offered by the railroads combined, served to advance values for canning purposes 50@100 per cent over the opening prices. The California raisin crop will probably be double that of last year, and of greatly improved quality. Packers there are rapidly improving their methods, and each year witnesses some progress toward a closer competition with the best quality of Mediterranean fruit. The prospects for a large yield of honey on the Pacific Coast are very favorable, which fact means a low price for the article in this locality.

## Chicago Fruit Market.

[By telegraph to the Fruit Union.]

CHICAGO, July 20.—We are having fine weather for fruit—quite cool for this time of year. Early Crawford peaches are selling at \$2.00 and \$2.25 per box. Plums in crates bring from \$2.00 to \$2.25; in boxes, from \$1.75 to \$2.25. Bartlett pears range from \$3.00 to \$3.50, according to condition and quality. Fontainebleau grapes are selling at from \$2.00 to \$2.50. PORTER BROS. CO.

## New York Wheat Market.

NEW YORK, July 18.—The close was fully steady, and 3/4c higher—August 87 1/4, September 88 1/4, October 89 1/4, November 90 1/4, December 91 1/4, January 92 cents.

## Local Markets.

BARLEY—New Brewing is strong and higher. To-day's call was as follows: Buyer 1886—100 tons, 93c. Seller 1886—100 tons, 86c; 100, 86 1/4c. No. 1 Brewing, buyer season, after September 1st—100 tons, \$1.15 1/2; 100, \$1.15 1/4 per cwt.

CORN—Both California and Nebraska are scarce and higher.

DAIRY PRODUCE—The market for butter, except for something fancy, is weak. Fuller particulars in another column.

FRUITS—Full notes given elsewhere.

HAY—About 300 tons come to market daily, being sufficient for all wants. We quote: Alfalfa, \$6@8; Oat, \$7@9; Barley, \$5.50@8; Wheat, \$9@12.50 per ton.

HOPS—Market not quite so active, but buyers are reported to be bidding well up.

OATS—Market not quite so strong as last week.

WHEAT—Market strong and more active. To-day's call was as follows: Buyer season—100 tons, \$1.32 1/2. Buyer 1886—100 tons, \$1.28 1/2. Seller 1886—200 tons, \$1.22; 100, \$1.22 1/2; 2000, \$1.22 1/2 per cwt. Buyer season—100 tons, \$1.32 1/2; 500, \$1.32 1/2. Seller 1886—2000 tons, \$1.22 1/2; 100, \$1.22 1/2 per cwt.

[COMMUNICATED.]

## Market Information.

## Live-stock.

Beef cattle in good condition continue to rule strong, with now and then something very choice sold at a slight advance. Calves are strong with the supply light. Sheep have a weaker tone under freer selling offers. Lambs are fairly steady. It is claimed that both dairy and grain-fed hogs are weak and lower; whatever weakness exhibits itself, it is thought, is temporary, for when packers start up the higher cost of hog products and the light stock on this coast will create a strong competitive buying that is apt to cause better prices. The demand now ruling is chiefly for the block, which is easily supplied. Work horses are in fair inquiry, but the supply is now claimed to exceed the demand. General utility carriage and also buggy horses are in good request and animals meeting buyers' requirements meet with quick sales at good figures. For the saddle the demand is fair, with some inquiry for single-footers.

The following are to-day's meat prices: Beef—Stall-fed 7 1/4c @ 7 1/2c per lb; grass fed, extra, 6 1/4c @ 7c; first quality, 6 1/2c @ 6 3/4c; second, 5 1/2c @ 6c; third, 4 1/2c @ 5 1/4c. Calves, small, 8c @ 9c; larger, 6 1/2c @ 7 1/4c per lb. Mutton—Ewes, 4 1/2c; wethers, 4 @ 5c. Lamb—Spring, 6 @ 6 1/2c per lb. Pork—Live hogs on foot, 3 1/4c @ 4 1/4c for grain and dairy fed; 2 1/2c @ 3 1/2c for salt; dressed, 6 @ 7c for hard, and 4 @ 5c for soft. Grass-fed stock sell on foot, gross weight, at one-half the price they fetch dressed; stall-fed, on foot, fetch one-third less than they sell at dressed.

The *Grocer and Country Merchant* of July 9 contains the following sales of live-stock for the week as follows: San Francisco Stock Yards.—712 cattle (large; prime condition), \$39 00; 685 cattle (medium; prime condition), \$34 00; 294 cattle (rough stock; rather thin), \$28 00; 698 calves, \$4 25, \$5 50, \$6 00, \$9 00, \$12 00, \$14 00; 6321 sheep, \$1 75, \$2 00, \$2 25, \$2 50, \$3 00, \$3 25; 2643 lambs, \$1 25, \$1 50, \$1 75, \$2 10, \$2 25, \$2 40; 2497 hogs, 3c, 3 1/2c, 3 3/4c, 3 1/2c, 4c. Oakland Stock Yards.—225 cattle (large; fine), \$4 50; 163 cattle (medium; fat), \$3 60; 196 calves, \$2 75, \$3 50, \$4 25, \$5 00, \$7 00, \$12 50; 1098 sheep, \$1 80, \$2 50, \$2 75, \$3 00, \$3 25; 640 lambs, \$1 40, \$1 90, \$2 25, \$2 40; 385 hogs, 3 1/2c, 4c, 4 1/4c.

## Cereals.

The close of the cereal year finds Europe, notably the United Kingdom, with smaller stocks of wheat and flour on hand than were held on July 1, 1885, with the wheat crop outlook pointing to an under average. Russia's lack of a full harvest, India's lessened acreage, smaller yields in both Germany and France, and Australia's failure to produce an export surplus, together with cold and wet weather in the United Kingdom, are largely responsible.

Bradstreet's of July 10 claims that the wheat crop of the United States will not go over 400,000,000 bushels, which is a reduction in its estimate of six weeks ago, of 65,000,000 bushels. With a crop of only 400,000,000 conservative writers claim that this country will be about depleted of supplies before nine months pass, provided the exports only equal last season.

The local wheat market has ruled strong through-

out the week under a strong buying by persons having loading ships that will soon be on demurrage. Sales have been made at from \$1.25 to \$1.27 1/2 for No. 1 shipping, while a straight parcel of choice shipping favorably situated fetched an advance on the higher figure. Holders are very firm in their pretensions, and as threshing is progressing slowly buyers are compelled to pay up.

Much complaint continues to be heard regarding foul grain, causing all such to be discriminated against.

European markets have ruled exceedingly strong, with higher prices said to be obtainable than quoted. On Monday the English country markets were from 6d to 1s per quarter (from 2 1/2 to 5 cents per cental) higher, owing to unsettled weather in that country.

Barley has ruled very active throughout the week, with full prices obtainable, except on Saturday, when sales were made slightly off, but on Monday afternoon the decline was recovered. The demand is speculative; consumptive and shipping choice feed sold up to 92 1/2 cts, but off grades sold down to 80 cts.

The coast counties are sending considerable barley to this city, much of which is off-color.

Oats have been unsettled, with marked fluctuations in prices, which appear to have been governed by the necessities of buyers in some instances, and by those of sellers in other sales made. Receipts of new are expected to increase in volume soon, but not grow to any dimensions this month.

Rye is exceedingly dull, with \$1.15 hard to get, except for very choice.

## Bags.

The market appears to have gone to pieces by a continued selling pressure from outside holders, and no strong buying demand. Sales have been made as low as 6 1/2 cts for new Calcuttas and 5 cts for A 1 second-hand bags. The pool are not selling, claiming that the supply here held by outsiders is not enough to meet farmers' wants, and when the demand sets in stronger, all outside holdings will soon be closed out, when they say prices will be advanced. Every day the past week a few thousands have been sold at auction, cash on delivery, which has aided no little in depressing the market. The market quotations range to-day from 6 1/2 to 7 1/2 cts for new Calcuttas, standard size.

## Dairy Product.

Owing to the extreme hot weather of last week, the bulk of the butter received is soft and not desirable for the best trade. Gilt-edged butter of good color and hard is wanted, and fetches from 20 to 21 cts a pound, and at times 22 cts. Fair to good is hard to sell at from 14 to 16, and choice at 17 to 18.

Cheese continues to be talked up, but does not sell up, as the Eastern is crowding on this market and also other points supplied from here. The market is strong, but no higher.

The hot weather spoiled large quantities of eggs, and consequently only strictly choice from well-known near-by shippers fetch over 25 cts a dozen. Fair to good sell at almost any price, "as is," but when candied they fetch from 18 to 21 cts, and choice 22 to 24. Heavy receipts of Eastern weaken the market, owing to the strong selling pressure.

Poultry held to strong prices, up to Tuesday; with large, well-conditioned fowls sold at an advance on the daily press highest quotations. On Tuesday under heavy receipts the market was weaker, but to-day is steadier. The consumption shows a decided increase, necessitating dealers carrying larger stocks.

## Fruits.

Receipts of blackberries on Monday, Tuesday and to-day were the largest for three days in succession ever before known; they averaged 600 chests a day. Notwithstanding the heavy receipts, prices were sustained by canners buying.

The thunderstorm of Friday last injured small fruits, causing berries received to be in poor condition.

Raspberries and strawberries have sold generally lower, with a weak closing to-day.

Currants have been gradually receding, under a light demand. The market closed barely steady to-day, at from \$3.50 to \$4.50 a chest.

Choice varieties of both apples and pears continue firm under light receipts and a good demand. They both sold on the wharf at \$1.75 top for the more choice. Fair to good have ruled steady.

Plums have not varied any during the week, but apricots have dropped all of 35 cts a box, owing to canners' indifference and the trade buying but few.

Figs have made another down move, closing weak to-day, owing to heavy receipts and a light demand. Heavy receipts of canteloupes and watermelons have sent prices down to quite low figures, with a weak closing to-day.

A few Muscat grapes came in the past week, but the quality being poor did not sell above \$1.75 a box. Sweetwater grapes are in good supply, with a fair trade call ruling.

## Hops.

Trading the past week has been more quiet, for dealers fear that the higher prices will restrict consumption by causing the use of the bitter wood indigenous to South America. Sales of this year's for future delivery are still reported at from 25 to 27 1/2 cts for choice, while some say that some 30 cts has been paid. Old hops are well concentrated and fetch from 10 to 17 1/2 cts and even 20 for something choice. The stock of old is placed at about 2000 bales.

## Vegetables.

Onions have ruled in buyers' favor, with reds lower, but silverskins fell off 10 to 15 cts per hundred pounds.

Rhubarb is virtually out of the market. Green corn continues to come forward in heavy supplies, with the bulk rather old. Young, tender sweet corn is wanted at from 10 to 15 cts a dozen, but the older corn moves slow at low prices.

Green Peppers are very hard to sell, with dealers well stocked.

Green Okra is slow under fair receipts, but egg plants are firm at a slight advance, under light supplies.

Tomatoes have come in very heavy, with sales for poor conditioned as low as 15 cts a box to canners. The more choice were hard to sell at 50 cts.

Summer squash has ruled steady at prices current for all of three weeks past.

Receipts of cucumbers are very heavy, yet all coming in find custom at the low ruling prices.

Potatoes under heavier receipts and a moderate demand have been on the decline throughout the

week, but at the close a steady feeling is noted. Poor grades have been almost unsalable, with sales as low as 50 cts a sack on the wharf. Only well-matured fetched top prices.

Root vegetables are in liberal supply, with prices slightly shaded by outside dealers; but cabbages are steady, with receipts well cleaned up each day.

## Wool.

The market continues active, but lessening receipts restrict business. Medium to fine grades of merino are still in request, and if strong, healthy, clean and lively, fetch good prices, according to how heavy the fleeces are. Greasy, heavy fleeces loose heavily in scouring, and consequently command less than if light but healthy. Sales of fancy clips continue to be reported at the high figures given last week. The whole line is strong at full prices.

## Miscellaneous.

Large sales of new-crop mustard seed are reported for future delivery at a cts per pound. The crop is the largest ever before known. In two districts—Lompoc and Salinas valley—over 70,000 sacks have been gathered.

Extra choice hay is very firm, with sales made at \$13 per ton. Fair to good hay is in heavy supply, with the market weak at low prices.

Honey is very dull, but then there is no strong selling pressure which causes a steady market to obtain. With strong selling, lower prices must be accepted, but then buyers do not look for any undue selling pressure.

Beeswax is dull and weak at 20 to 22 1/2 cts a pound.

The tonnage movement compares with last year at this date as follows:

	1886.	1885.
On the way.....	313,467	216,345
In port, disengaged.....	48,293	103,549
In port, engaged.....	47,307	17,862

Totals.....409,067 337,756

The above gives a carrying capacity as follows: 1886, 654,506 short tons; 1885, 540,309 short tons. Increase over last year, 114,197.

San Francisco, July 21, 1886.

J. R. F.

## Domestic Produce.

WEDNESDAY, July 21, 1886.	
BEANS AND PEAS	
Bayo, cbl.....	1 30 @ 1 40
Butter.....	1 35 @ 1 50
Cashew.....	1 35 @ 1 50
Pos.....	1 75 @ 1 90
Red.....	1 20 @ 1 30
Plum.....	1 10 @ 1 15
Large White.....	3 00 @
Small White.....	1 75 @ 1 90
Lima.....	1 50 @
Old Peas, black eye.....	1 50 @
do green.....	1 00 @ 1 12
do Niles.....	1 25 @
BROOM CORN.	
Southern.....	3 @ 3 1/2
Northern.....	4 @ 4 1/2
CHICORY.	
California.....	4 @
German.....	6 @
DAIRY PRODUCE, ETC.	
BUTTER.	
Cal. fresh roll, B.....	14 @ 19
do Fancy brands.....	20 @ 22 1/2
Pickle roll.....	20 @ 21
Firkin, new.....	15 @
Eastern.....	10 @ 12 1/2
CHEESE.	
Cheese, Cal., lb.....	6 @ 8 1/2
Eastern style.....	8 @ 12 1/2
do, store.....	25 @ 24
Ducks.....	— @ —
Oregon.....	— @ —
Eastern, by ex.....	15 @ 16
Pickled here.....	— @ —
Utah.....	20 @ 21
FEED.	
Bran, ton.....	14 00 @ 14 50
Cornmeal.....	24 00 @ 25 00
Hay.....	5 00 @ 5 10
Midlings.....	16 00 @ 17 00
Oil Cake Meal.....	20 00 @ 22 00
Straw, bale.....	25 @ 45
FLOUR.	
Extra, City Mills.....	3 75 @ 4 20
do Country Mills.....	3 60 @ 4 00
Superfine.....	2 75 @ 3 25
GRAIN, ETC.	
Barley, feed, cbl.....	80 @ 60
do Brewing.....	1 50 @ 1 65
do new.....	97 1/2 @ 1 00
Cheviater.....	1 30 @ 1 35
do Coast.....	— @ —
Buckwheat.....	1 00 @ 1 05
Corn, White.....	— @ 1 25
Yellow.....	— @ 1 25
Small Round.....	1 25 @ 1 30
Nebraska.....	— @ 1 30
Oats, new.....	1 30 @ 1 35
do No. 1.....	— @ —
do No. 2.....	— @ 1 30
do Oregon.....	1 50 @ 1 55
Eye.....	1 10 @ 1 12 1/2
Wheat, No. 1.....	1 25 @ 1 27 1/2
do No. 2.....	1 20 @ 1 22 1/2
Choloe milling 1.....	27 1/2 @
HIDES.	
Dry.....	15 @ 18
Wet salted.....	8 @ 9 1/2
HONEY, ETC.	
Beeswax, B.....	21 @ 23
Honey in comb.....	8 @ 10
Extracted, light.....	34 @
do dark.....	3 @
HOPS.	
Oregon.....	— @ —
California.....	10 @ 12 1/2
ONIONS.	
Red.....	20 @ 25
Silverskin.....	40 @ 65
NUTS—JOBBING.	
Walnuts, Cal., B.....	7 1/2 @
do Chile.....	7 1/2 @
Almonds, hshl.....	6 @
Soft shell.....	10 @ 12 1/2
Brasil.....	11 @ 12 1/2
Pecans.....	10 @ 12 1/2
WEDNESDAY, July 21, 1886.	
Apples, box.....	1 00 @ 1 50
do red.....	1 50 @ 1 75
Apricots, bx.....	1 00 @ 1 25
Ananas, bunch.....	1 75 @ 2 25
Blackberries, ch.....	3 00 @ 4 00
Canteloupes, cr.....	1 25 @ 2 50
Cherries blk.....	— @ —
do white.....	— @ —
do Royal Ann.....	— @ —
Cherry plums.....	40 @ 50
Crabapples.....	7 00 @ 10 00
Currants chest.....	4 00 @ 6 00
Figs, lx.....	40 @ 1 00
Grapes.....	75 @ 1 75
Limes, Mex.....	9 50 @ 10 00
do Cal box.....	— @ —
Lemons, Cal., bx.....	2 50 @ 4 00
Peanuts.....	3 @ 4 1/2
Elberta.....	13 @ 14
POTATOES.	
New cbl.....	— @ —
Burbank.....	— @ —
Early Rose.....	60 @ 1 00
Cutley Cove.....	— @ —
Jersey Blues.....	— @ —
Petaluma.....	— @ —
do Tomatoes.....	— @ —
do River.....	— @ —
Humboldt.....	— @ —
do Kidney.....	— @ —
Chile.....	70 @ 90
do Oregon.....	— @



		VEGETABLES.	
do Sicily, box.	8 50 @ 9 00	Artichokes, doz.	10 @ 15
do Australian.	— @ —	Asparagus box.	— @ —
Nectarines box.	1 75 @ 1 75	Beets, sk.	1 70 @ 75
Oranges, Cal. bx.	1 50 @ 1 75	Cabbage, 100 lbs.	60 @ 50
do Tahiti, M.	— @ —	Carrots, sk.	35 @ 50
do Mexican, M.	— @ —	Cauliflower, doz.	— @ 1 00
do Panama, M.	— @ —	Celery, doz.	60 @ —
Peaches, bx.	40 @ 75	Cucumbers box.	15 @ 40
do basket.	40 @ 75	Eggplant, ....bx	1 50 @ 1 75
Crawfords, bx	75 @ 1 00	Garlic, lb new.	25 @ 3
do basket.	85 @ 1 00	Green Corn, sk.	25 @ —
Pears bx.	1 00 @ 1 25	do bay, box.	75 @ 1 00
do basket.	30 @ 50	Green Peas, sk.	75 @ 1 50
do Bartlett, bx	1 25 @ 1 75	Lettuce, doz.	10 @ —
do do basket	40 @ 75	Mushrooms, bx.	— @ —
Perseimons.	— @ —	do cultivated.	— @ —
Jap, bx.	— @ —	Okra, dry, lb.	15 @ 17
Pineapples, doz.	4 00 @ 5 00	do green.	5 @ 13
Pomegranates, b	— @ —	Parsnips, chl.	1 50 @ —
Plums b.	2 @ 3	Peppers, dry lb.	10 @ —
Prunes bx.	— @ —	do green, bx.	50 @ 75
Quinces bx.	— @ —	Rhubarb box.	40 @ 60
Raspberries ch.	8 00 @ 10 00	Squash, Marrow	— @ —
Strawberries ch	4 00 @ 5 00	fat, son.	15 00 @ 20 00
Watermelons 100	6 00 @ 15 00	do Summer bx	12 @ 25
DRIED FRUIT.		Tomatoes box.	25 @ 1 00
Apples, sliced, lb	6 @ 8	String beans.	15 @ 25
do evaporated.	6 @ 8	Turnips chl.	75 @ 1 00
do quartered.	1 1/2 @ 2		

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OUR FRIENDS can do much in aid of our paper and the cause of practical knowledge and science, by assisting Agents in their labors of canvassing, by lending their influence and encouraging favors. We intend to send none but worthy men.

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JULIUS REIMER, the expert accountant, has been admitted to practice as an attorney and counselor at law. He has had much experience in adjusting accounts between San Francisco commission merchants and their consignors.

THE Wheeler Fruit Packing Co. have re-organized and resumed business at 116 California street, S. F. Thos. Richardson is the new president, and Joseph Perkins secretary.

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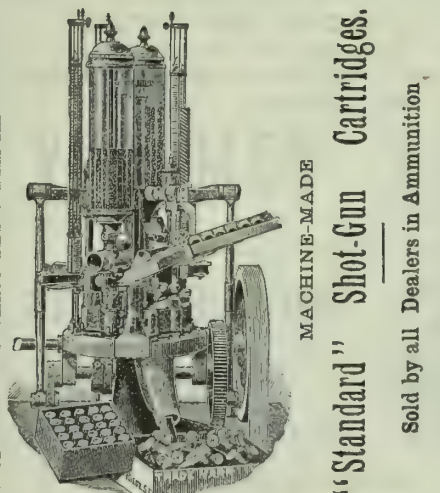
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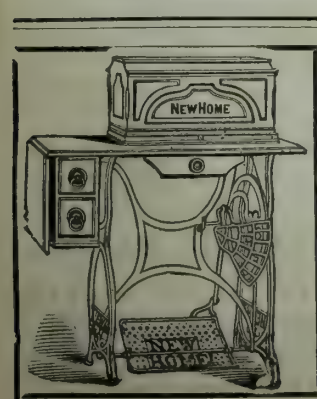
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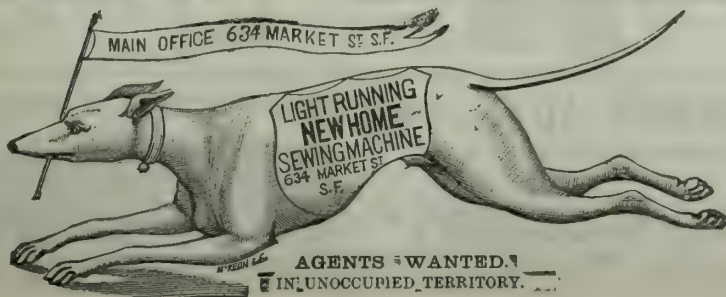


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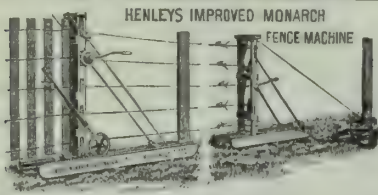
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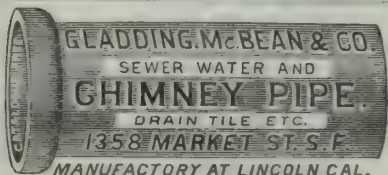
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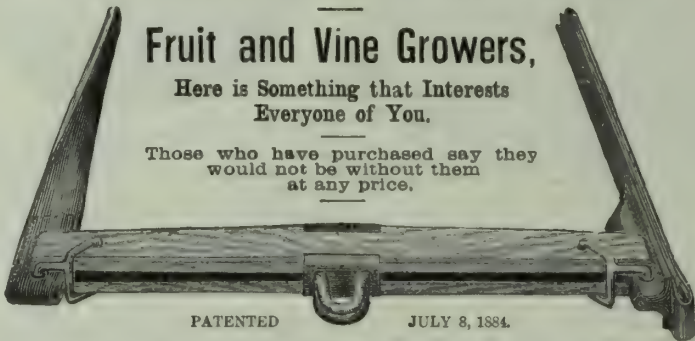
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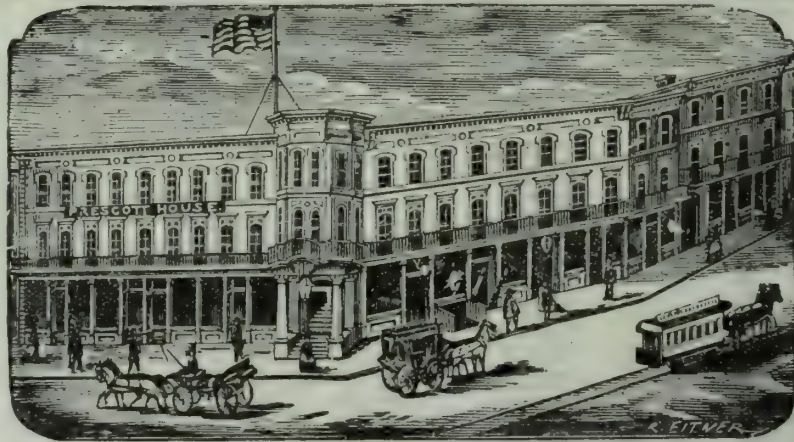
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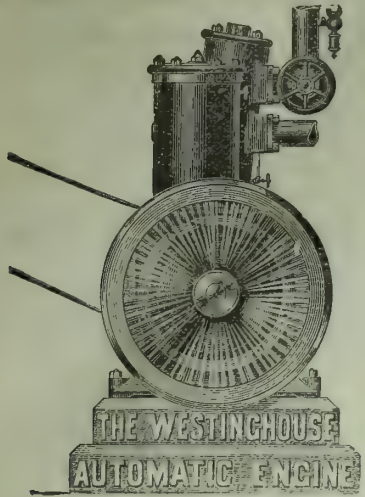
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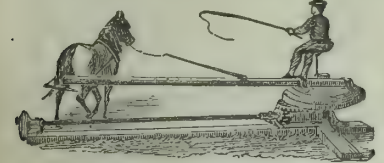


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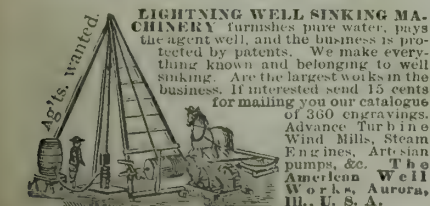
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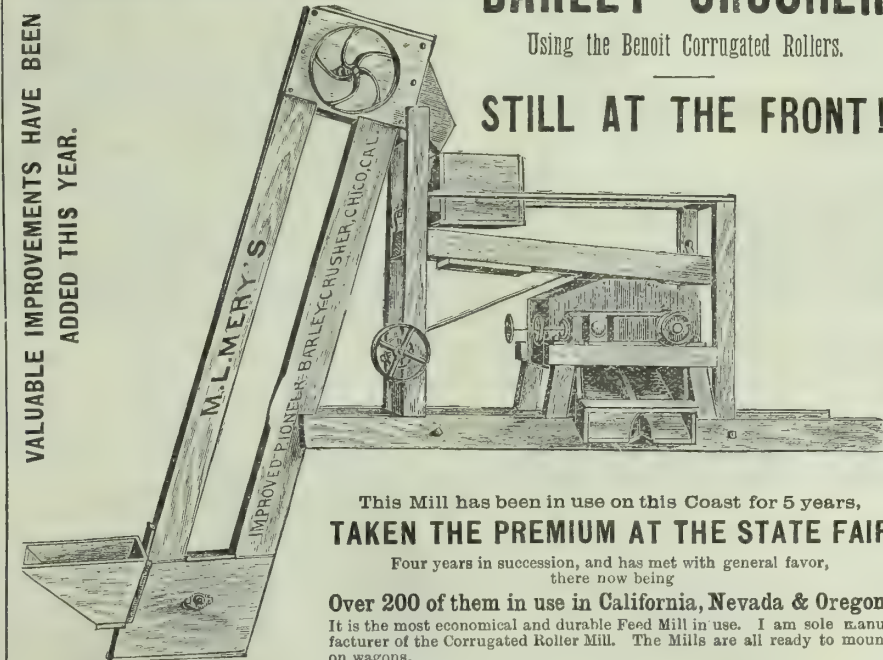
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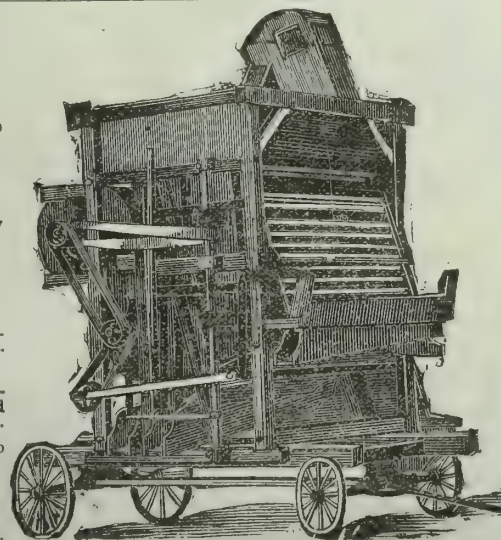
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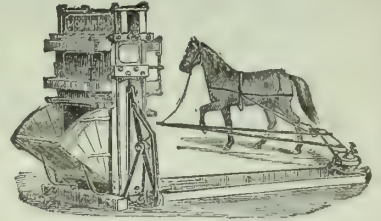
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SAN LEANDRO, CAL.

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PRICE, \$500.

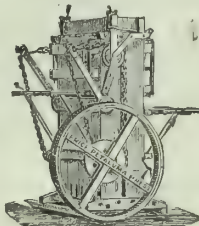
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RECORD:

31 Tons (259 Bales) in one day (13 hours)  
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(Petaluma) HAY PRESS

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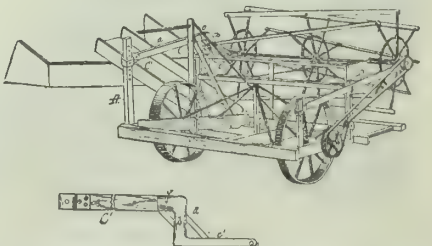


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them up in splendid shape  
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—FOR—  
**HARVESTERS.**



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Letters Patent awarded to me by the U. S. Government,  
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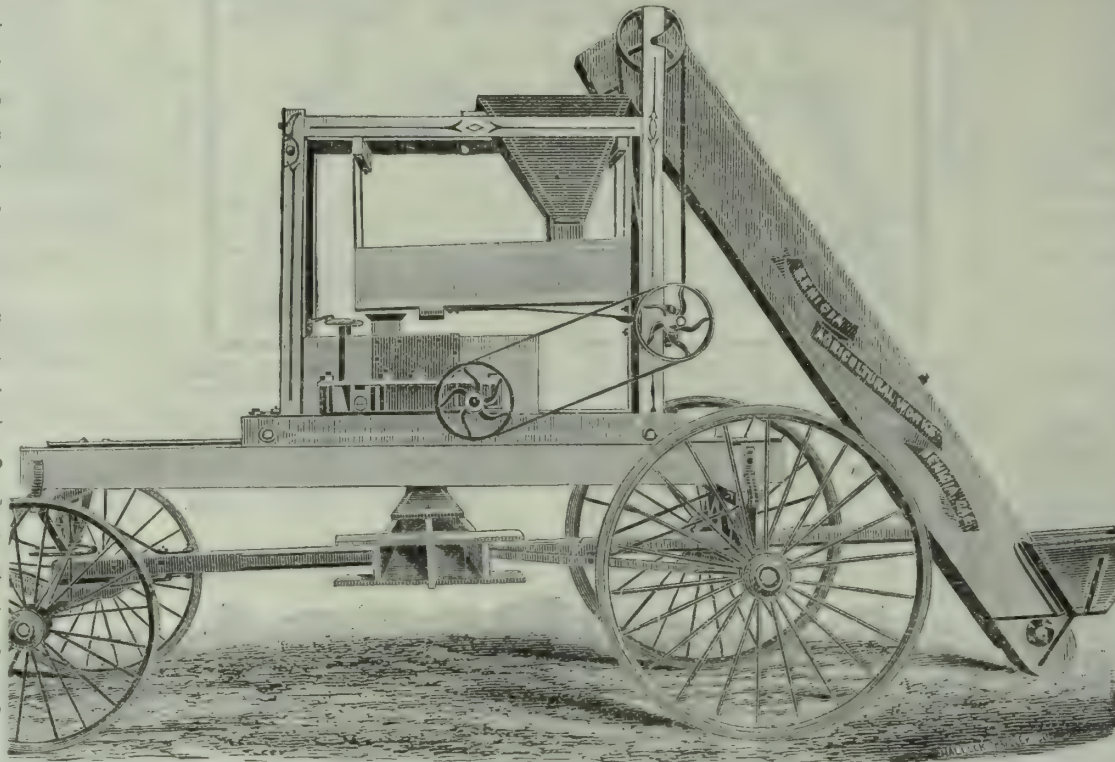
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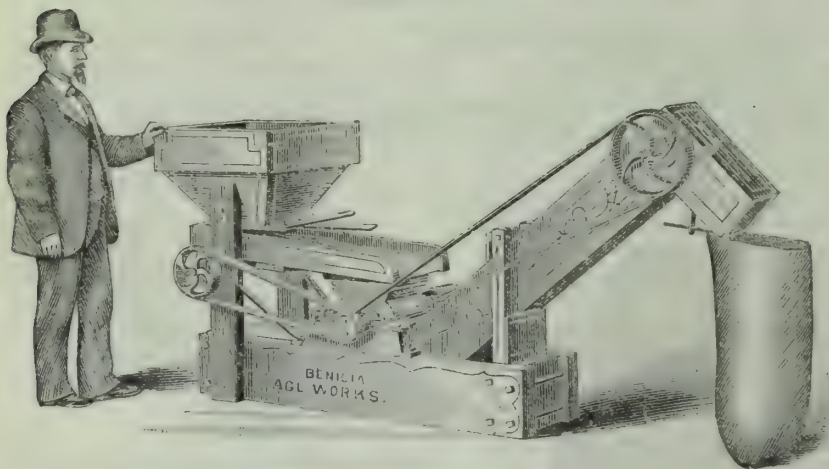


To those who wish to see the machines in operation we invite them to call at our works and examine for themselves. Numerous machines have been built and placed on the market for sale, as Feed and Barley Mills, etc., but when put to a practical test have proved to be comparatively useless. It is not alone our experience, but that of others, that stock fed on barley crushed by these machines thrive much better and require less feed than when fed on what is usually called ground barley. The feed is also free of all dirt, sand or grit of any kind.

No. 2, or Large Size; weight, 1620 pounds; capacity, 30 tons and upward per day. Price, without wagon, \$200.

Rollers are 12 inches long and 18 inches in diameter. Should be speeded not less than 600 nor over 800 revolutions per minute. Should be run with not less than 10-horse power.

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No. 1, or Small Size; weight, 675 pounds; capacity, 1 ton per hour; price, \$125.

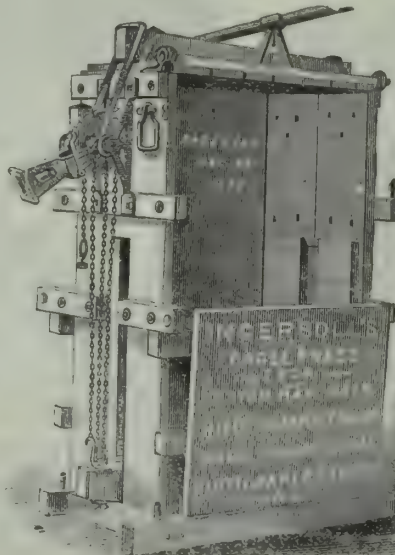
Has rollers 8 inches long and 6 inches in diameter. Should be speeded not less than 1000 nor over 1200 revolutions per minute. Should be run with not less than 6-horse power.

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No. 1. Size of Bale, 46x25x25; Weight of Bale, 200 pounds; Weight of Press, 850 pounds; Price, \$125.00.

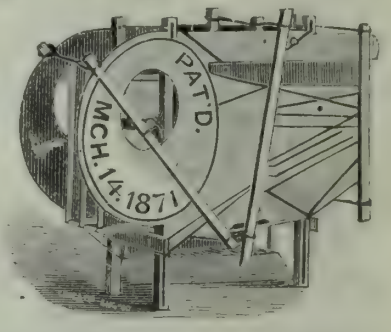
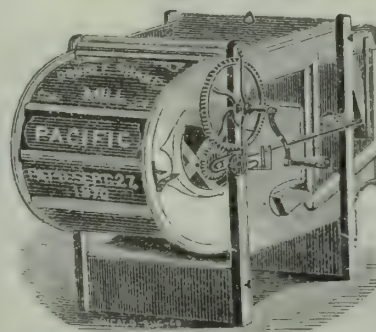
No. 2. Size of Bale, 49x27x28; Weight of Bale, 300 pounds; Weight of Press, 1500 pounds; Price, \$175.00.



During many years' experience in the sale of presses, we are fully convinced that the Ingersoll Presses will be found to have overcome the great objections heretofore existing against hand power presses. They combine a quick, convenient, and effectual working power, and everything liable to break has been done away with.

With a double ratchet wheel combined with a chain pulley and loose sheaves, a TWO, THREE OR FOUR-FOLD lifting chain power is obtained, which, when acted on by only ONE PERSON with a light lever of only 5 or 6 feet long, will exert a force on a bale reducing it to SMALLER dimensions than has heretofore been accomplished.

### PACIFIC DOUBLE-SHAKE FANNING MILL. AS IMPROVED WITH ZINC HURDLES.



No. 1, Capacity for 18 tons, or 600 bushels for 10 hours, weight 149 pounds.....\$30 00  
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No. 3, Capacity for 30 tons, or 1200 bushels for 10 hours, weight 225 pounds.....40 00  
No. 1 PACIFIC.—This is the farm size, and has sufficient capacity for all ordinary farm work, which it will do in the most thorough manner.  
No. 2 PACIFIC.—A small warehouse Mill, furnished with pulley, if desired. Any farmer having large quantities of grain or seed to clean, will find this Mill invaluable.  
No. 3 PACIFIC.—A large and substantial warehouse Mill, having great capacity and doing excellent work. Width of sieve 33 1/2 inches.  
We have sold this Mill extensively, and wherever it has been used it is universally acknowledged that IT HAS NO EQUAL.  
A comparison of the "Pacific" with any other style will convince any one that it is STRONGER, BETTER FINISHED AND MORE DURABLE THAN ANY OTHER MILL. It has no cross sections nailed to the sides, but all, including the head or drum, fit into grooves, and the Mill is held firmly together with rods, preventing it from getting "out of square," which will happen sooner or later to all of the other styles. By taking out these rods, the Mill can be easily taken apart and put into compact form for shipping, as shown in Fig. 2, thus making a GREAT SAVING IN COST OF FREIGHT.





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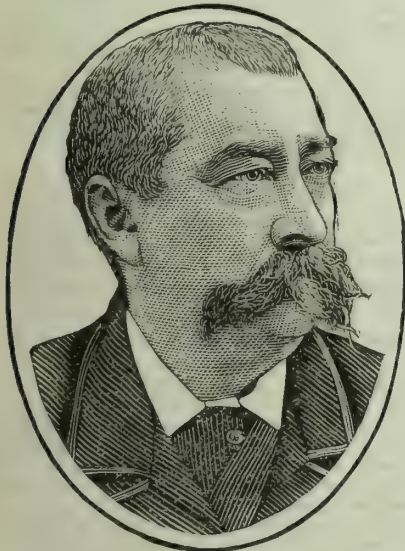
Vol. XXXII.—No. 5.]

SAN FRANCISCO, SATURDAY, JULY 31, 1886.

{ \$3 a Year, in Advance  
SINGLE COPIES, 10 CTS.

#### Our Guests.

The Twentieth National Encampment of the Grand Army of the Republic will convene August 3d, in San Francisco, and continue in session for a week. It will probably be the most interesting and brilliant affair of the kind ever witnessed on the continent. Already the advance guard is arriving and the hotels are lively. A train of 28 Pullman cars is on the road, crowded with Boston veterans and their wives. From the latest advices, in a few days more there will be not less than 30,000 Grand Army visitors among us. They are coming from all parts of the Union—Maine with its six months of winter, Minnesota and Kansas with their frosts and blizzards, and Kentucky and Tennessee, the land of big-boned men, lots of children, cornpone and hominy. They are coming with great brass bands, big drums and fifes,



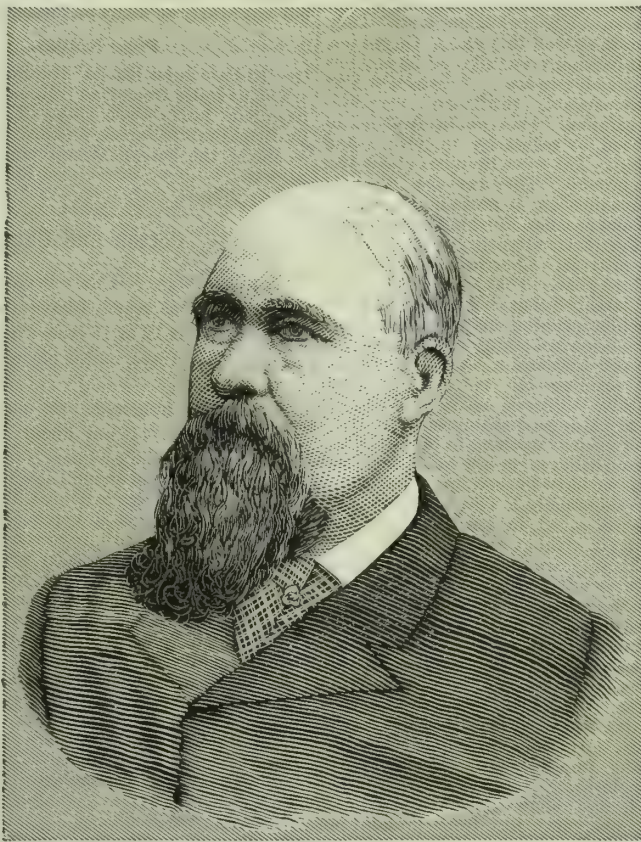
GENERAL PHIL. SHERIDAN.

and will make the air sonorous with the best of martial music. The female drum corps from Minnesota will be a novel feature. Those frisky old fellows, the Veteran Corps of Elizabeth, New Jersey, propose to parade in a different uniform on each of the six days of the Encampment. Many of the Sir Knights of De Molay Commandery, Louisville, who carried off the first trophy at the Templar Conclave of 1883, are coming back to see us as soldiers of the Grand Army.

They are welcome, thrice welcome, these valiant men who bore aloft the flag through that terrible war. They will find San Francisco gorgeous as a tropical forest, its streets one long emblazony of military symbols and devices. The bare and gloomy walls of Mechanics' Pavilion will blossom into banners, pendants, badges, battle-pieces and historic memories. Merchants, shop-keepers and householders will vie with each other in welcoming them by their magnificent display of decorative art and other ways. Even old Mammon will get a sniff of patriotism and put on his best clothes for a holiday.

We give upon another page the full official programme of the Encampment. From present appearances, the grand march and grand campfire will be the chief features. The march will be along streets profusely decorated with the national colors, and under an arch 80 feet high, surmounted by a monster eagle, 30 feet from

wing tip to tip, and ornamented with the figures of General Grant and Admiral Farragut, and of Presidents Washington and Lincoln. Our visitors will not make as showy a pageant as the Knights Templar; but they are no kid-glove soldiers. They are men who have smelt powder, worked in the damp trenches, toiled in the weary marches, and fed on hard-tack, beans and glory. San Francisco will put its best foot forward to make the days of our gallant visitors pass enjoyably, and Oakland, Sacramento, San Jose, Los Angeles and other places are making elaborate preparations to give them a reception. The fact is, there is a deep-laid plot, a deliber-



SAMUEL S. BURDETT, COMMANDER-IN-CHIEF, G. A. R.

ate conspiracy, to lure away these Grand Army folks into the country, feed them on climate, and capture as many of them as possible and hold them willing prisoners in the land of the orange and vine.

As pertinent to the occasion we give on this page portraits of three of the most distinguished guests of the State—Generals Sherman and Sheridan, survivors of the grand trio, headed by the late General Grant, whose names are indissolubly linked in the gratitude of a reunited people. The central figure of the present occasion, by virtue of his office, is General Burdett, Commander-in-Chief of the G. A. R., to whose portrait we award the place of honor on this page.

GRAND ARMY EXCURSIONS.—The many excursions planned by the G. A. R. Excursion Committee will enable the guests to obtain a flying view of a large part of the coast and interior regions of the central portion of the State, and added to the glimpses they will get from overland trains, should give them quite an idea of California's topography and her industrial growth.

#### Outside the City.

The Excursion Committee of the Encampment have made arrangements to show the visitors as much as possible of the country during the sessions. Of course, thousands will visit more leisurely and see for themselves after the Encampment is over. On Wednesday, August 4th, there will be an excursion to Sonoma valley, the train running through to Cloverdale, returning at once to Santa Rosa, where a reception will be given. On Friday, August 6th, there will be excursions to Monterey and to Ingrams in the redwoods of [Sonoma county.

#### The Grand Army of the Republic.

The occasion which brings to our city the hosts of veterans from all parts of the country is the 20th Encampment of the Grand Army of the Republic. In the midst of the deep gloom that overspread the land after the tragedy of April 15, 1865, the Order of the Loyal Legion was founded. Its membership was restricted to those holding commissions. The necessity of an organization into which all could come without regard to military rank, so long as they could show an honorable discharge, was met by the organization of Post No. 1, G. A. R., on the 6th day of April, 1866, at Decatur, in the State of Illinois. The happy thought is said to have occurred to Dr. B. F. Stephenson, who had served his country as a surgeon during the war. From that time the Grand Army has moved steadily on, until the light of its camp-



GENERAL WM. T. SHERMAN.

fire may be found wherever 10 Union soldiers of the Civil War are located.

The only persons eligible to become members of the G. A. R. are the honorably discharged soldiers and sailors of the army, navy and marine corps of the United States, who aided in maintaining the honor, integrity and supremacy of the National Government during the war of the rebellion. The objects sought to be accomplished by this organization are as follows:

**Fraternity**—To preserve and strengthen those kind and fraternal feelings which bind together the soldiers, sailors and marines who united to suppress the late rebellion, and to perpetuate the memory and history of the dead.

**Charity**—To assist such former comrades in arms as need help and protection, and to extend needful aid to the widows and orphans of those who have fallen.

**Loyalty**—To maintain true allegiance to the United States of America, based upon a paramount respect for, and fidelity to, its Constitution and laws; to discountenance whatever tends to weaken loyalty, incites to insurrection, treason or rebellion, or in any manner impairs the efficiency and permanency of our free institutions; and to encourage the spread of universal liberty, equal rights and justice to all men.

There are now departments of the Grand Army in nearly every State in the Union. The Posts are scattered throughout the land, from the pine forests of Maine to the golden shores of the Pacific, from the Gulf of Mexico to the chain of great lakes. The first Post organized in California was Feb. 20, 1868.

On Saturday, August 7th, there will be a grand excursion around the bay upon a fleet of five steamboats, visiting all the famous points. Monday, August 9th, will be Oakland day, and a reception has been prepared by the citizens. Ferryboats will run every 15 minutes during the day. San Jose day will be Tuesday, August 10th, and arrangements are complete for a rousing welcome in the Garden City. There will be triumphal arches, fruit in profusion, and carriage rides through the delightful scenes surrounding the city. The last and greatest excursion of the Encampment will be that to Napa and Sacramento. The whole route will be one continual ovation, as Napa, St. Helena and various minor towns have made generous preparations to welcome the veterans. The excursion will go by boat to Vallejo early Wednesday morning, August 11th, thence to St. Helena by rail, where a reception will be tendered; returning to Napa for another welcome, and thence to Sacramento, reaching the Capital City at 6 P. M. The citizens of Sacramento have prepared a great demonstration and reception which will occupy the evening of August 11th and the following day.



## CORRESPONDENCE.

Correspondents are alone responsible for their opinions.

## Camp Life and Sea Bathing.

EDITORS PRESS:—Perhaps it might interest some of your many readers to hear from the seashore resorts.

Well, I have just returned from Capitola, formerly Camp Capitola, after an absence of five weeks, and am free to add mine to the pleasure experienced by others who have been foot-loose and able to lay aside, for the time being, the active duties of life.

Santa Cruz, for a long time the resort for summer boarding and summer bathing, is holding her own this year. Crowds who come here for health and pleasure are constantly on the move.

Of course, Hotel Del Monte maintains her reputation for entertaining "the upper ten," who come with plethora purses. Near by, between the hotel and the old, quaint town of Monterey, are the warm baths in salt water, furnished in luxurious style, for 50 cents. Fifty cents more will take one by stage in a pleasant drive of five or six miles to

## Pacific Grove.

Here one finds himself in the shelter of tall pines and other trees in the midst of quiet comfort. The grove is very extensive, and the cottages much scattered or close, to suit those who like seclusion or sociability. This place has its bathing spot by the arm of Monterey bay, and is patronized especially by members of the Methodist denomination, who hold service and have literary entertainments during the summer school vacation.

The Chautauqua Society here have their annual reunions and literary exercises. Religious services and reunions are also held here by church members generally. The management aims to make this the resort of the devoted classes, and the camp rules are regarded too strict and stringent by many outsiders who attend these resorts for health and recreation.

## Capitola.

On the other hand, aims to draw the masses without religious or other restraint. Her gates are thrown wide open, and it is expected every one will be on his good behavior. The hotel furnishes good accommodations at reasonable prices. There is also a spacious hall free for general entertainments, managed in the main by the campers and guests; and much talent is always at hand among the members to entertain each other.

Social intercourse prevails; and chatting, singing, dancing, promenading, skating, bathing, etc., are woven in with literary entertainments to suit the inclinations of all; while the shore is lined, at intervals, with the masses who go to witness the frolic and fun of old and young during the bathing hour in the forenoon and afternoon. This pastime is supplemented by those who sit in the sand to witness the ocean breakers as they dash upon the shore, or to see the glimmer of the moonlight as it dances in the waves.

It will here be understood that this camp is noted for its life-giving activity, and usually innocent, harmless sports, health-inspiring as well as enjoyable. Boating and fishing are among the athletic habits; and rides by day and by moonlight to the lighthouse to Santa Cruz, and to the neighboring big trees, are enjoyed by many more. Bands of instrumental music now and then make their appearance from San Jose, Gilroy, Hollister and Santa Cruz, to mingle their music with that of the camp.

Time has not obliterated any of the primitive attractions of this old-time resort, and the camp tents are ranged alongside the neat-looking white cottages made for rent for those who desire them, with nothing but their rude tables and benches for furniture.

During the last two or three years many lots have been sold adjoining, and private cottages, of more or less style and magnitude, have been put up, and generally whitewashed or painted. Flower-gardens and evergreen hedges are to be seen, and many spend much of their time in the bathing season in these plain but cheap and comfortable homes; while a few spend the entire year, declaring that this is the best spot for a permanent home.

The beach is not excelled, if equaled, anywhere; and the railroad passes the grounds in a circular manner, upon a bridge 50 to 100 feet up from the flat portion, so as to be in fair view from the camp. The hill at the east is already bristling with cottages, built chiefly within the past year.

Mr. D. C. Feeley, of Santa Clara, has laid out 18 acres on the opposite hill, on the west, and will soon offer lots for sale.

While the old camp-ground, on the flat, has been all disposed of, and mostly improved and built upon, the rim of hills is attracting the attention of those who want an unobstructed view of the ocean and town below, as well as the background of mountain and mountain scenery.

Mr. Feeley calls his new camp "Camp Fair View," and it is expected that it will be connected by a foot-path on the bridge now being erected, as it is already by a suspension bridge across the Sequel creek.

Santa Clara.

I. A. WILCOX.

## In the Willows—San Jose.

EDITORS PRESS:—The Willows, near San Jose and south of that city, covering an area of several square miles in extent, affords some of the most attractive drives for strangers and sight-seers anywhere to be found in the country. The distant mountain scenery surrounding the Santa Clara valley is very fine, and in bright, clear weather the landscape view is enchanting. But most attractive are the beautifully designed residences, including dwellings, ornamental gardens and orchards. At many places we find everything so well kept, and under such a high state of cultivation, that during the growing and bearing season we are scarcely able to detect the presence of a single weed or blade of grass, however small, within the boundaries of cultivated grounds. To an observing stranger being driven along some of the avenues, the places on both sides seem to glide by like visions of beauty, each place vying with its neighbors, in its own peculiar forms of loveliness, its lights and shadows, its brilliant flowers, its leafy arbors, its various and highly developed fruit trees.

For a slightly orchard, the cherry, with its stately forms, and dark, heavy foliage, is one of the most effective. One of the best authorities on the cultivation of the cherry is W. C. Geiger, of the Willows, and at our earnest solicitation he has promised to give the RURAL PRESS some items on this subject, and especially with reference to pruning of the cherry.

One of the best-kept places in the Willows is that of J. C. Arthur. His trees are mostly seven years old. His fruit trees are cherry, mostly Black Tartarian, with a few of the white varieties. His cherries usually bear well, but this season produced only about one-fourth of a crop. Behind these are apricots, principally the Hemskirk and Moorpark. Among a very few places in the Santa Clara valley this season, we here find the Moorpark very full of fruit—so full that Mr. A. had to thin out at least half. His Hemskirks last year, at six years old, averaged 225 pounds per tree. They do not bear quite so well this year. Of prunes, he has 170, all bearing very full, and he reckons on some 300 pounds per tree. All trees of this orchard are remarkably thrifty and very uniform in appearance. This uniformity is, of course, produced by regularity in culture and careful pruning. The trees limb out about two feet from the ground. They are cut back annually, commencing on apricots in December, then cherries and peaches, finishing on prunes in February. Particular attention is paid to balancing heads of trees. Cherries are not pruned much after third year. They are headed back thus far and thinned out but little. Mr. A. thinks that while pruning may produce more fruit and thus bring temporary results, yet that we may expect best and most permanent results in not pruning too much. Mr. Jesse Stubbs and Mr. Williams, near neighbors of Mr. Arthur, are also good examples of neat orchardists, and keep everything in best of order.

Thos. Conant believes in low heads for fruit trees, even if we have to hoe around, in order to cultivate thoroughly. The extra expense thus incurred is saved, in being able to pick much of the fruit without use of a ladder. Especially in this way can much labor be saved in picking peaches and apricots.

W. L. Northern has, we believe, the largest apple orchard in the Willows. Of the Newtown pippin he has 18 acres in good bearing condition and two acres Bro. Jonathan newly set out. The Newtown pippin is reported to have borne every year for several years past, and Mr. N. pronounces this the best apple for winter market and profit. His trees are only 18 feet apart, and he thinks amply distant considering the soil, a heavy loam. The trees are kept well proportioned, and show great regularity in pruning. Limbs, two feet from ground; orchard doing well.

Among the many places where owners deserve special mention for their beautiful ornamentation of homes, we will mention one, because of taste exhibited in the selection of many trees, shrubs and flowering plants, all named specifically, and the habits of each individual kind studied during leisure moments throughout the season. It is that of Wm. Beauchamp, situated on Meridian avenue. Mr. B. has, among other very rare and handsome things, a great many roses of the finest types. He seems to spare neither pains nor expense in the selection and purchase of the most valuable varieties. Many of the older plants exhibit a gorgeous display of handiwork flowerers, rewarding our admiration with delicious fragrance. Many of the younger plants, however, determined from their names as among the fairest and sweetest, have not yet bloomed sufficiently to show their good qualities to advantage. Owing to this fact we made no attempt at taking names or peculiarities of varieties, but defer this for another season, hoping at some future time to be able to give the readers of the RURAL PRESS the results of some very interesting observations of the rose family at Mr. B.'s place.

Before closing we must allude to the very fine bed of pansies in front of the dwelling of Marcellus Ross and family. Mrs. Ross takes great pleasure in her flowers and has a magnificent array of choicest pansies of great variety in points of color, shades and markings.

Santa Clara Co., Cal.

McD.

## In San Luis Obispo County.

EDITORS PRESS:—May I beg space in your columns for a few remarks about our little town—San Miguel. I hope the time is not far off when it can claim the honor of a city. San Miguel is situated on the west side of the Salinas river, 40 miles from San Luis Obispo, and 49 miles from Port Harford—our nearest outlet to commerce. A few years ago our section was known as a sheep and cattle country, where herds roamed over rolling hills and valleys, grazing on the vegetation which abounds here and for which this country is noted. San Miguel has now all the appurtenances of a growing town. The country around is fast settling up, mostly by emigrants who have come from the East with moderate means, seeking homes, and who, although poor, are industrious, improving and cultivating their claims of either railroad or government land. Surveyors have been busy for several days surveying off a town north of the old Catholic Mission. It will not be long before the foot of the iron horse will sound and re-echo through hills and valleys and arouse the drowsy inhabitants from their peaceful slumbers. We expect the railway will be a valuable outlet for the products of this country, as it will save the farmers a long and tedious journey over the mountains to San Luis Obispo through the summer to get their crops to a shipping point and market.

## The Estrella Plains.

On the east side of the Salinas river, with the waving fields of yellow grain, are pleasing to the eye of the traveler who passes through that section. Nearly every quarter section of the plains has a house of some description on it. It is an extensive grain region.

## Cholame Valley

Is fast being converted into a farming country. A few years ago it was principally devoted to raising sheep, and there are still many flocks, but not nearly so many as formerly.

## Paso Robles.

Or "El Paso de las Robles" Hot Sulphur Springs, are eight miles from San Miguel, and 32 miles from San Luis Obispo City. They are owned by Blackburn & James, and are widely known as one of the best health-giving and pleasure resorts.

R. B. WALTER.

San Miguel, Cal.

## Cotton and Oats.

EDITORS PRESS:—I have been experimenting with cotton this year. I have about six acres planted. It is 12 or 15 inches high at date of writing (July 18th), and is blooming with many squares on it.

I have not irrigated. On clay points it is not doing well. I am under the impression that nights are too cool here for cotton to do first rate. It is old enough now to grow rapidly. One of my neighbors is doing a little better with a few stalks. I was in hopes cotton would do well here, for we sadly need some kind of crop that will bear transportation without taking so near all of the value to pay freight, as grain does. With a good cotton crop it would be possible for a man of small means to go ahead improving his place and wait for his vines and fruit trees to come into bearing. As it now is, all men without means here must work for others to the neglect of their own farms.

I have three and one-half acres of red rust-proof oats from Texas that are as good as I ever saw anywhere. I think oats will be a success in San Diego, particularly the rust-proof kind.

JOHN W. MOORE.

Valley Center, Cal.

## SERICULTURE.

## Government Aid to Silk Culture.

In last week's RURAL we mentioned the increased appropriation for the silk culture work under direction of Prof. C. V. Riley, U. S. Entomologist. We have just received by mail interesting documents relating to this work. An illustrated pamphlet which is designated as "Bulletin 9, Division of Entomology," is entitled "The Mulberry Silkworm, being a Manual of Instructions in Silk Culture, by C. V. Riley, M. A. Ph. D." It is an excellent document and will be of much interest to the silk-grower, who can, no doubt, obtain it by application to the Department of Agriculture or to the Member of Congress representing his district.

## Government Purchase of Cocoons.

It was stated last week also that the Government was to purchase cocoons for reeling. Concerning the details of the purchase, we have just received the following circular:

By a recently-enacted law I am instructed to conduct, "at some point in the District of Columbia, experiments with automatic machinery for reeling silk from the cocoon." To enable me to prosecute these experiments I shall pur-

chase a few thousand pounds of dry cocoons upon the following conditions:

No samples should be sent in before September 1, 1886, and no cocoons will be purchased before October 1st.

The highest price that will be paid will not exceed \$1.15 per pound, and this will be given for such cocoons only as will produce one pound of silk from four pounds of raw material. For inferior cocoons such prices will be paid as their quality will justify, and it must be remembered that very poor cocoons cannot be reeled and are only salable as waste, and as such bring excessively low prices. In the present state of the industry in this country but few raisers produce cocoons of such quality as will command the maximum price quoted.

Persons having cocoons to sell should notify this office before shipment, so that they may be informed whether or not the full quantity required has been purchased. This may be done upon the inclosed official postal card.\* No cocoons will be purchased except by such previous agreement, and lots shipped without regard to these instructions will not be returned to the shipper at the expense of this department. It would be wise to send with the notification a small sample of cocoons, which may be mailed without payment of postage if the inclosed franking label is used.\* Upon receipt of such a sample the shipper will be informed, approximately, of the price which will be paid for the cocoons. But as it is extremely difficult to judge of the value of the whole lot by the inspection of a small sample, I cannot undertake to bind myself by the estimate thus given. Lots of cocoons weighing not more than four pounds may be sent by mail with one of the inclosed slips attached.\*

In shipping samples or lots of cocoons it is very important that the name and the address of the shipper should be placed both inside and on the outside of each parcel or box. All freight and express charges must be prepaid by the shipper.

In order to save transportation expenses it is suggested that neighbors combine their small lots in one case and ship them by freight. The lots should, however, be separately packed in the case and each labeled with the name and address of its owner.

No special instructions are needed as to the packing of cocoons for shipment beyond calling attention to the fact that crushing must be guarded against. No soft or foul cocoons should be placed in the case.—NORMAN J. COLMAN, Commissioner of Agriculture. Washington, D. C., July 9, 1886.

The allusions which we have marked with a star (\*) in the circular were to sample labels and postal card sent us with it. They can no doubt be had by writing to Col. Colman. All who think of selling cocoons to the Government should write to the Commissioner at once for these instructions.

## State Board of Silk Culture.

The last regular meeting of the State Board of Silk Culture failed of a quorum owing to the absence of several of the members in distant parts of the State. Meantime matters at the State Filature (No. 22 Montgomery avenue, S. F.) are progressing well in charge of the secretary, Mrs. Louise Rienzi. It is expected that the new machinery ordered by the board will arrive in a few days, as it was shipped from Genoa on June 20th. It embraces a new double reel, with automatic battens. The board also expects a consignment of Cattaneo mulberry trees to arrive here in October, from Milan, Italy, and hopes to replace with this variety some of the less desirable varieties which are now being grown.

It now looks as though the board would have an abundant supply of cocoons for this year's reeling in their school. They estimate this year's crop as ten times as great as any yet produced in this State. More than 200 pounds of first-grade cocoons have been received from Napa county, principally from Mrs. P. Robeson, Mrs. Scheggia, Mrs. Inmann and Miss L. Gesford. Sixty pounds of cocoons have been received from Miss Turner, of Amador county. From Los Angeles and Santa Clara counties there have been received specimens of cocoons. Those from the first place are remarkable for their large size and surpass the others in their fine appearance.

Mrs. Rienzi recently returned from a tour of inspection and reports that in the vicinity of St. Helena, Napa county, the rearing of the silkworm and the culture of the mulberry is becoming quite an industry, and results are expected soon that will be surprising. Many people who raise the trees, but not the worms, permit others to use the leaves. Mrs. Rienzi is quite sanguine on the outlook of the silk industry in this State.

SILK CULTURE.—Mr. G. A. Garbarini left at our office a few days ago a bunch of fine-looking cocoons, raised on his ranch near Slabtown this year. Mr. Garbarini has gone into the business on quite an extensive scale, and his experiments for the last few years prove that this locality is as well adapted to the raising of the silkworm as any other part of the world. He has constructed a home-made reel with which he has produced a number of skeins of the finest quality of silk thread. The only thing required to make the business a success here is a reasonable amount of capital and experience.—Amador Dispatch.



## HORTICULTURE.

## Prune and Apricot Drying.

EDITORS PRESS:—Not finding an answer to the querist of San Jose in regard to apricot and prune drying, by which I might have learned something, I will answer myself as far as my experience goes. While I raise most kinds of fruit adapted to this locality, apricots and prunes are my specialty. But I am getting rid of my apricot trees as fast as I can graft them into prunes, for reasons herein mentioned.

Last season was the first my crop amounted to enough to make it an object of drying it. Let me first speak of my experience with apricots. During their season I had, besides my two boys and myself, from four to six boys and women hired to pick and cut them. The picking of them is a very annoying job, on account of their having to be picked at their proper stage of ripeness, which is just before they get soft. Before that they will be insipid, and two days after that they will turn dark in drying. So you have to pick about four different times from each tree, and move your step-ladder from three to five times at each tree.

When they were brought to the house the woman would cut and lay them out on trays (size 2x3 feet, of which I used 250), and put in the sun until we had 14 of them, which number would fill my smokehouse. Then a sulphur-ship about a foot long, such as winemakers use, was fired and laid on the ground under the trays, the door shut and left till another batch was ready to go in, and then laid in the sun. The trays were stacked about sundown and spread out again the next morning, until the fruit was dry enough to rattle, when I put them into sugar barrels upstairs. This was a great blunder. On account of the bulk, in going through the sweat, two-thirds of them turned dark; but the worst of all was, that notwithstanding I had my barrels covered with cloths and sacks, the little millers got in and in two weeks they were badly infested with worms. So we had quite a job overhauling them, grading, cleaning and throwing away about 10 per cent of them. Besides all this, while they were drying the bees would suck the juice out of many of them, and only leave a skeleton.

After going through all this, I pressed them into 25 and 50-pound boxes, in which they kept very well. But I still have about half of them on hand, and am selling them at 8, 10 and 12 cents per pound, according to grade.

## Prunes.

Now, with the prunes the story is of a different character. You may let them hang on the tree till they begin to drop fast, then shake the tree and pick them up; put them into a basket which goes easily into your wash-boiler, which you have on your stove boiling with water, in which you have put enough concentrated lye to make it a little slippery. Dip in your basket up and down for about two minutes; then let them drip half a minute, and rinse them thoroughly in a tub of clean, fresh water. Spread them on your trays and let them dry a little, and they are ready to go into the smokehouse. Then treat them the same as you would apricots, but be sure and not let them get too dry. When they are still soft they will do to pack, as there is no rot in them, and no insects have disturbed mine.

The sulphuring of them is not essential, but it gives them a little pleasanter color.

My smokehouse is a very cheap affair. It is simply a box with a tight fitting door in front, seven feet high, three feet wide inside and two feet four inches deep, with cleats nailed to the sides to let in 14 trays, which are alternately shoved in, one to go to the back and the next to the door.

I can do better to sell prunes at five cents per pound than apricots at 15 cents, and if I had to buy them I would sooner pay 15 cents for first-class prunes than five cents for apricots. This, however, is a matter of taste.

Santa Ana, Los Angeles Co.

H. G.

## Prunus Simoni.

EDITORS PRESS:—In this week's RURAL Prof. C. H. Dwinelle mentions *Prunus Simoni*, lately introduced from Northern China, and the Black apricot, which has been cultivated here for some years, as being perhaps synonymous. Both are now bearing fruit in one of my nurseries. The Purple or Black apricot has every appearance of being closely related to or a sub-species of the Myrobalan plum, and will root as readily from cuttings.

*Prunus Simoni* has a habit of growth so distinct from any plum or apricot before introduced that no one could confound the two after seeing them once. The light-green branches of *Simoni* grow as vigorous and upright as the Bartlett pear, and are heavily clothed with unusually long, narrow, light-green leaves. The fruit is quite large and has the form of the Peen-to peach; have had no success in growing it from cuttings. Among the Myrobalans introduced for stocks from France, we sometimes get a few trees of a much more vigorous, almost evergreen, variety, having a weeping habit. It has been suggested that this might make a good stock for peaches and apricots for clayey soils. It is of the utmost importance to fruit-growers and nurserymen to have the various

fruit trees grown on the best stocks, and no pains should be spared to learn which are the best for certain soils and locations, as the future value of an orchard depends as much on this point as on any other that can be mentioned.

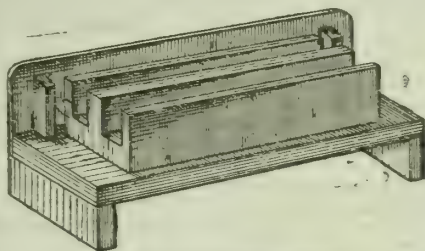
Santa Rosa.

LUTHER BURBANK.

## THE HPIARY.

## Device for Removing Sections from Wide Frames.

EDITORS PRESS:—One of the difficulties in the production of comb-honey is to get the sections out of the wide frames without injury and with as little loss of time as possible, to prevent the bees from uncapping the cells, which they will do if they are given time enough. If the separators and the wide frames could be made so exact that the former could clasp the latter and keep their place without falling off, the separators might be removed and the bees brushed off before they had time to do any harm. But such accuracy seems to be out of the question; besides, separators are now made of such thin, flimsy material that the turned-over ends have no strength in them, and it therefore becomes necessary to nail them permanently to the frames. This increases the difficulty of removing the sections, and to obviate this difficulty I have devised and all through the present season used the following implement, as shown in the engraving:



Muth-Rasmussen's Device.

Two boards, 12½ inches long, 3½ inches wide and one-fourth inch thick, and one board of the same length and width, but five-eighths of an inch thick, form the uprights with the thick board in the middle, and spaced so that they will slip easily through the frame, between and outside of the separators. They are joined together and held in place at each end by a strip one-fourth inch thick, 1½ inches wide and 8½ inches long, let into the uprights, flush with the bottom.

## A One-inch Dressed Board.

Sixteen and one-fourth inches long and nine inches wide, is provided with two strong cleats underneath, and to one edge is nailed a thin board, which forms the guide-back and projects three-eighths of an inch above the uprights. To this back, and coming even with its top edge, are fastened two upright guide-posts, five-eighths by seven-eighths of an inch thick, the narrow side nailed to the board. To the two outside uprights, even with their bottom edge, and projecting inward, are nailed two strips of ordinary frame-material (not shown in the engraving). By these strips the uprights are fastened, with nails or screws, to the one-inch board in such a position that when a wide frame is laid on top of the uprights the bottom-bar of the frame will slip easily down between the guide-back and the nearest upright.

## To Use the Implement.

First brush off all the bees you can, trim off any comb or honey sticking under the bottom of the frame, again brush off the bees that have come out from under the separators, then lay the frame down on the uprights, separators downward, bottom of frame between the two guide-posts and snug against the guide-back. Now press on the corners of the frame, alternating from the bottom corners to the top corners, and the frame will sink down and out of the way until the separators strike the two connecting-strips at the ends of the uprights, and leave the sections lying free on top of the uprights, when they may be quickly picked up with the fingers and any bees remaining on the under side brushed off. And here let me say, in parenthesis, that for brushing bees nothing is better than a single large feather from the wing of an eagle or a vulture, the shaft of the feather inserted in a short piece of broom handle, which makes it convenient to manipulate and prevents the feather from being blown away and lost.

## To Remove the Wide Frames.

Place the thumbs on top of the guide-posts and, with the other fingers grasping the side pieces of the frame, lift it out of its place.

To facilitate cleaning the implement the uprights might be hinged at the front and fastened with two iron pins at the back, but would then require a substantial bottom (instead of the two pieces of frame-material above mentioned) to prevent them from getting out of shape.

The device with the above dimensions is for wide frames holding six "simplicity" sections, as used in the "Three-quarter Langstroth" hive. By making the implement one-fourth longer it will answer for the standard Langstroth frame.

WM. MUTH-RASMUSSEN.

Independence, Cal.

## THE DAIRY.

## Fine Jerseys for Oregon.

Mr. Henry Pierce has recently sold to Mr. J. T. Apperson, of Oregon City, Oregon, President Oregon State Agricultural Society, a small herd of Jerseys from his Yerba Buena ranch, consisting of the following animals: Iolanthe of Y. B., Hattie of Y. B., Belle of Y. B., Nina of Y. B., females, and the bull Thistle Pogis.

The heifers are of the blood of Coomassie, Farmers' Glory and Scituate families, and are in calf to bulls imported from the Eastern States. The bull Thistle Pogis is probably the best blooded Jersey bull ever sent out of California. His sire is Romeo de Bonair—the \$10,000 bull—sired by the famous Stoke Pogis III; his dam by a son of the equally famous cow Jersey Belle of Scituate. In Eastern sales the get of Romeo de Bonair bring large prices, it being considered that his promise to get large milking daughters is a trifle the better of any one of the other seven sons of Stoke Pogis III, as, in addition to strong blood on the sire's side, he has like strength on the dam's side. Of the extraordinary large butter yields in the Stoke Pogis III, Victor Hugo family, a greater number appear in the pedigree of Romeo de Bonair than in those of the others.

This lot of animals are all registered in the American Jersey Cattle Club of New York, and, added to a previous purchase by the same gentleman, should make his herd equal to, if not finer, than any other in Oregon, as the draft of animals from Mr. Pierce's herd is from his best, and his herd is acknowledged to be the foremost on this coast, having taken the lead wherever shown. It will be remembered that it was his bull Jack Low and three of his get that took the first prize at the State Fair in Sacramento last fall over all breeds and ages.

SANTA CLARA CHEESE FACTORY.—The annual meeting of the stockholders of the Santa Clara Cheese Manufacturing Co. was held at the factory, July 10th. The San Jose Mercury gives this report of the proceedings: The following persons were elected directors to serve for the ensuing year: Robt. McCubbin, S. I. Jamison, James Southerland, W. H. French and L. P. Alexander. The members subsequently met and organized by the election of S. I. Jamison as president, W. H. French as treasurer and L. P. Alexander as secretary and salesman. The balance sheet shows the corporation to be in a healthy condition, financially, a dividend of eight per cent per annum being paid on the capital stock. From the annual statement, we take the following figures: Pounds of milk received during the year ending March 1, 1886, 1,625,344; pounds of cheese made, 150,564; sales of cheese during the year, \$15,887.12; paid dividends on milk, \$12,683.48. This shows an increase of 200,000 pounds of milk over the previous year, yet owing to the extremely low prices, cash receipts have been less. Since the 1st of March last the receipts of milk have been greater than for the corresponding period of last year. Under the superintendence of Mr. J. M. Bigger, the factory is turning out a very superior quality of cheese, the product selling at present in San Francisco at 8½ cents per pound, which is above the highest market quotations. The managers intend to spare no pains or expense in the endeavor to keep the quality of the cheese up to the highest grade of excellence.

## POULTRY YARD.

## Wild Oats for Fowls.

EDITORS PRESS:—In reply to an old subscriber, in your July 17th issue, in relation to wild oats for fowls, I will say that I would not want to feed them to young fowls or to chickens, as the sharp husk is liable to prick through the crop and make trouble. But for older fowls they (oats) are a very fine feed, making biddy pan out eggs and not lay on much fat. They are very good feed, on this account, for the large breeds of fowls. I should not want to make the entire feed of the flock on oats, but give now and then a feed of wheat and corn for change. Barley in itself is a good feed, if only well threshed and cleaned of the sharp points.

There is a point just here for us all to remember—that seeds of some kind make up the living, to a great extent, of fowls in their wild state; then why not follow nature as far as possible?

South Pasadena, Cal.

E. C. CLAPP.

## Remedies for Fleas.

EDITORS PRESS:—Will you or one of your readers give the simplest and best method of driving fleas out of hens' nests, and also out of houses, etc.? There are so many in my hen house, and they are such a nuisance, that I shall either get rid of the fleas or sell the hens.

—A SUBSCRIBER, San Francisco.

A CANINE ROOST-RAIDER.—San Jose Mercury: For the past two weeks a number of the

citizens of Santa Clara have been agitated over the sudden disappearance of their poultry on various occasions. The depredations became so general, a watch was put on at several of the residences where fowls had mysteriously disappeared, and the consequence was the capture of the thief by Ike Thompson last evening, which turned out to be a large bloodhound. The animal at the time had killed ten large turkeys belonging to Mr. Thompson, and his capture was a matter of great rejoicing by the residents of the town.

## THE FIELD.

## Killing Evergreen Millet.

EDITORS PRESS:—Harvest is very nearly over in this valley. Most of the wheat has fallen short of all expectations, still we have a fair crop all over, and some fields in this neighborhood have yielded from 25 to 30 cents. The greater part, however, has fallen below 20 cents. The continuous hot weather in May and June cut short our crops considerable. We have had some very hot weather. Last week the thermometer showed 118° in the shade three days, only falling to 70° and 80° at night. It is now cool, and has been pleasant all this week.

## Alfalfa.

I have just finished hauling in the third crop of alfalfa hay this week. It makes about five tons per acre, so far. I shall get another clip yet that will go a ton or over and then give good fall pasture.

## Evergreen Millet.

There has been considerable said for and against millet in the columns of the PRESS. My opinion differs widely from the majority of those who have written about it. I have been experimenting on a small scale with it for two years and find it a splendid forage plant. It will keep double the amount of cattle per acre, through the summer and fall, than anything I have found; and then it will keep in good growing condition all winter, and keep from 15 to 20 head of stock-hogs per acre from the first rains until the first of March. The hogs will root and live on the roots, and then there will be plenty left in the ground for the summer and fall crop, by plowing and harrowing, which keeps foul weeds out.

It has been claimed by some of our farmers that when you get it in your land you can never get it out. Unless you irrigate, or have very moist bottom land, you can kill it by repeated deep plowing in hot summer time. To prove that fact, I am killing, this season, my experimental patch. It is only one-eighth of an acre. The first of March I plowed it up 10 inches deep, picked all the roots I could get, which was about two tons. I sold one ton for a cent a pound, the balance I fed to my hogs. I have plowed it three times since, and there is still a little coming up now; but the soil is getting dry now—one or two plowings in August will not leave a spear, I am satisfied. If I fail I will let you know later.

K. N. MCENTIER.

Brentwood, Contra Costa Co.

## Millet and Morning Glory.

EDITORS PRESS:—Your report of Dr. Foote's experience with Johnson grass touches my sympathies slightly. A few years ago I planted some on wet and some on dry land, with ground in good condition. The former grew; the latter did not attempt it. The second year after I heard its roots were excellent hog feed and unkillable. Of the first I was hopeful; of the last fearful. I dug a few roots and threw to my hogs. They tasted, dropped and left it. The remaining roots I dug up carefully and burned—peace to their ashes.

When the native grasses were dried up and the millet still green, I have seen cattle walk through a bunch of it, nip sparingly of the leaves and seeds and leave it for the dry feed, which showed four times the amount on equal space.

## Morning Glory.

You refer to morning glory as a standing problem. I think it can be solved. About 10 years ago I found it in my orchard on land that was always moist. Not knowing what it was at first, I gave it no attention; but after learning its character went after it with hoe, salt and other useless appliances, till, as a last protection, I corralled it with plank set 18 inches in the ground and gave a quit claim on the inclosure. It held peaceable and prosperous possession about five years. Then the grasshoppers raided the orchard, which I saved by turning my hogs in and shaking down the hoppers. When the hoppers were gone there was not a sign of morning glory above the ground, nor did it show itself any more till the next spring, and then only a few straggling vines, which I dispatched with a hoe. The present season shows still less and I think will close it out. Why the hoppers' work proved so effectual I cannot say. The glory stood two feet high and as thick as it could grow when they struck it—about the last of May. I incline to the opinion that the sudden and complete check given to its growth at that stage caused its death.

Paskenta.

M. WILCOX.



## PATRONS OF HUSBANDRY.

Correspondence on Grange principles and work and reports of transactions of subordinate Granges are respectfully solicited for this department.

## San Joaquin Grange Notes.

[Written for the RURAL PRESS by Mrs. W. D. A.]

San Joaquin Pomona Grange No. 3 held a special meeting at Lodi, the 21st, when Brother Hoffman, chairman, resigned to take a position in San Francisco, and W. P. M. Elliott, of Lodi, was appointed to fill his place.

W. M. Fiske and the committees are determined to spare no effort to make a fine exhibit, but the season is against them. The staple, wheat, has long, slim straw and shorter heads than usual, and much of the fine apples and pears are being cast by codlin moth. Fine wool sheep have been low so long that the county is nearly decimated of Spanish merino flocks. Sister Beecher of Stockton has the experience of the other exhibit and a visit to the New Orleans Exposition to aid her as chairman of the difficult undertaking.

Stockton Grange, on the 24th, adopted the resolutions of Plymouth Grange on the water question, and will hold discussion next meeting to send delegates to Sacramento, Aug. 5th, to sustain our representatives in their efforts to have the State control her innavigable waters and justly distribute them.

## Sacramento Grange.

EDITORS PRESS:—At the last meeting of Sacramento Grange, Bro. John Reith, chairman of the Grangers' Picnic held at Beach's Grove, May 6th, submitted the following report:

Balance cash on hand May 1, 1886. . . . . \$123 05  
Total sundry receipts. . . . . 594 00

Total. . . . . \$717 05  
Expenses. . . . . 649 80

Balance on hand. . . . . \$67 25

These annual gatherings are great features of the year among the farming community and visiting city cousins. The day is taken up with games, races, dancing and general chit-chat of old and young, as well as gathering useful information on farm matters and topics of the day.

Bro. L. H. Fassett also submitted a detailed report of the Sacramento county exhibit at the State Fair last year, showing the distribution of moneys awarded, with names and amounts. The report states that in order to induce future exhibitors to take an interest, we would distribute the money among those who did not receive anything from the society; therefore, after paying out for lumber, carpenter's work, materials for trimmings and decorating to the amount of \$139, there remained a balance of \$161, which was distributed to the various parties named in the report—leaving a small balance, \$3 50, in the hands of the secretary. G. T. R.

Sacramento, Cal.

## Elk Grove Grange.

Elk Grove Grange, Sacramento county, has adopted a series of resolutions on irrigation, from which we take the following:

*Resolved*, That the appropriation of water by individuals or corporations under cover of legislative enactments is in violation of law and justice—is confiscation—and as a public policy would entail upon our State the most oppressive, grinding and odious monopoly that ever cursed a free people.

*Resolved*, That the attempt to transfer a purely judicial question (riparian) from the courts to the rostrum and the ballot is lawless, revolutionary and communistic. Striking as it does at the stability of government and property, this last device of plunder and monopoly must meet the execrations of a people loyal to justice, order and law.

*Resolved*, That in the State's right of eminent domain we have an easy and just solution of the irrigation problem, without injustice or resort to lawless methods; let the irrigation district proceed to the condemnation of any and all necessary private rights for this admittedly greater use.

## The Special Session.

At a regular meeting of Sonoma County Pomona Grange held at Santa Rosa, July 21st, the following resolutions were adopted:

*Resolved*, That the anti-riparian organization and movement is the most dangerous menace to the prosperity of the State of California that has ever confronted the people.

*Resolved*, That we await with much anxiety and apprehension the action of the special session of the Legislature, now convened, on the subject of irrigation.

*Resolved*, That we urge the Legislature to adjourn at once and without any action on any of the subjects proposed in the proclamation of the Governor in convening this special session, or upon any other subjects.

*Resolved*, That these resolutions be forwarded at once to our representatives in the Senate and Assembly, and properly attested by the Worthy Master and Secretary.

DANVILLE GRANGE, at a meeting held July 17th, discussed the irrigation question and fully indorsed the resolutions of Eden Grange, which we published in the Press of June 26th.

## Dr. S. R. Chandler.

Dr. S. R. Chandler, a well-known and highly-respected citizen of Sutter county, and member of the Grange, died suddenly of heart disease on the evening of the 17th, at his home near Yuba City. As he had been seen upon the streets two hours before his death, the news caused a shock to the community. His funeral, which took place on Tuesday, July 20th, at the M. E. church in Yuba City, was perhaps the largest that ever occurred in Sutter county, and much feeling was manifested among those gathered to testify their esteem and regret. Many of the Marysville Pioneers attended and took part in the ceremonies. The pall-bearers were A. J. Cumberson, G. P. Hunt, H. S. Graves, James Littlejohn, B. F. Walton and Wm. P. Smith, the former three being members of the Pioneers' organization, and the others neighbors of the deceased. The services were conducted by Rev. T. H. B. Anderson, of Colusa, whose sermon was impressive and memorable.

Dr. Chandler was a native of Ohio, but came to California in 1849, and had resided in the county continuously since 1853. He was 72 years old. Though afflicted by bodily infirmity, he was full of enterprise and vigor, and was actively engaged in the development of his agricultural interests. He was one of our earliest raisin-producers. His orchard enterprise was also notable, and his participation in the discussions of the State Horticultural Society, of which he was a member, was always creditable to his powers of observation and deduction. His loss will be widely regretted.

## Irrigation Resolutions.

EDITORS PRESS:—At the regular meeting of Stockton Grange, No. 70, P. of H., held on the 24th inst., the following resolutions, passed by Plymouth Grange on July 10th, were discussed and unanimously indorsed:

*Resolved*, That we are in favor of the State taking control of all the innavigable waters of the State, and passing laws for the equitable distribution of the same for agricultural purposes.

*Resolved*, That we oppose the monopoly of water in any form, and that an equitable distribution of the waters of the State is indispensable to the progress and development of the resources of the same.

H. T. Root,

Secretary Stockton Grange.

Stockton, July 26th.

WATSONVILLE GRANGE.—The Pomona Feast given by Watsonville Grange, July 17th, was attended by such a number of members and invited friends that the capacity of the hall was fully tested. Quite a display of fruit was made by members, and the exhibit was well arranged. Master J. D. Bagnall opened the exercises and welcomed the visitors in a fitting speech. The program comprised vocal solos by Mesdames Spence and Roadhouse, recitations, and the production of the amusing play, "Champion of Her Sex." After these exercises a lunch was served.

HORTICULTURAL FAIR.—We acknowledge with thanks an invitation to the Second Annual Exhibit of the fruit and vine products of Santa Clara county which will be held in the new Horticultural hall, in San Jose, from August 9th to 14th inclusive. This will be one of the most notable horticultural displays ever held in the State. The visit of the Grand Army, on the second day of the Fair, will no doubt, cause everything to be in readiness early, and will tend to bring out the very best the county can display. The *exalt* attending the first exhibit in a fine new pavilion will also tend to make the exhibition very fine. We shall not be surprised to see the best horticultural fair ever had in the State. Many things seem to promise it. All interested in our fruit industry would do well to visit San Jose during the Fair week.

THE GRAPE CROP.—There have been estimates floated upon the public press placing the probable yield of wine in this State this year at 25,000,000 gallons. Such figures are in the interest of the wine-buyers, and are like the grand figures which buyers of other crops are wont to put out just before the crops are gathered. The Viticultural Commission estimates the yield at 16,000,000 gallons, which will give about 10,000,000 for export. Of course, to double these figures is to depress prices, and publications should be careful about putting out such estimates.

ARCADIAN HIGHTS.—A recent visit to the home of our excellent correspondent, Mallie Stafford, afforded us much pleasure. Mr. Stafford has some 30 well-cultivated vines of desirable varieties of grapes. They are beautifully located on sunny slopes overlooking Atna Springs and the upper portions of Pope valley, Napa county. His cosy home is in a nearly frostless belt, where the highest heat of the warm valley by day and the lowest temperature by night are avoided. The elevated outlook affords a charming panoramic view. It would seem just the place for the emanation of clear and cheerful thoughts.

CAYENNE PEPPER blown into the cracks where ants congregate will drive them away. The same remedy is also good for mice.

## Stockton Notes.

[Written for the RURAL PRESS by Mrs. W. D. A.]

From the 8th to the 17th the longest remembered term of heat prevailed, raising the mercury in Stockton to 96° in coolest places, 108° at Lodi; at Linden, 106. A man driving a grain wagon from Farmington to Stockton was found lying on the sacks insensible from sunstroke, but with proper applications soon recovered. Four deaths have since resulted from the intense heat near here. Cool days and heavy dews, not good for the grape crop or quick grain cutting, had made farmers wish for warmer weather, and they had it, with fleecy heat clouds swimming in the hot air above the great oaks that relieve the glare of the dazzling yellow fields and unusually hot nights.

Stockton's ice companies and lemon venders profited by it, but farmers found the cold water of this valley pumped from bored wells cool enough and refreshing enough with the good fare which every farmer has.

Harvest is in full force, though a few are done and don't know whether to sell at \$1 25 or store. A fine young man lost his life driving a team that ran away with a harvester, and David Young, maker of the "Young Combined Harvester," stepping down from one of his machines, caught in the wheel just as the team was starting, but the driver saw him and instantly stopped. He was badly bruised, not seriously. Few accidents happen considering the immense work done, and the necessity of using all kinds of horses. Mules are much better.

The wheat crop has fallen short one-third—considerably from the breaking off of heads and shelling by the wind of June 12th; then heads are short—rarely more than two meshes to the head, but the quality is good. Clover pulled down the grain, and much is hard to cut clean. The highest yield I have heard of is 30 bushels of wheat and 40 of barley to the acre; 18 is near the average for wheat. Twenty-five acres yielded 170 sacks. A man near Farmington bought 1000 sacks. After sacking his crop he took back 600. Another, counting on 15 bushels, had 7 to the acre. Some fields turned out more than expected, but usually the result is short, and many farmers will have a hard time to get through the year.

Curled leaf shortened the peach crop. Boxes of two layers sell for \$1 25. Apriots were plentiful, but the Early and the Moorpark were blotted. Peach-apriots do better than any other variety here. Moorparks are delicious dried.

No field fires have occurred—no fires but the burning of 50 tons of hay of Mr. Barge (supposed by matches ignited from the sun), and wheat is being hauled and shipped to Stockton and stored for the hoped for rise. Small profits rule the hour. Everything is plentiful and low. Our children must learn to work. Our children must learn to save. Flush days have vanished.

The melon crop of Lodi distributes \$50,000 in that town, the raisers buying most articles there. Twelve carloads were shipped on the 19th, 10 on the 20th, and so on, till the famous Lodi watermelons are shipped away. The crop is large and good as usual, though the fierce heat injured some.

The old courthouse was sold for \$1000, to be torn down and give place to the fine one, which is to be of granite. A tower is to be built on the Eureka Protection engine-house to receive the bell and \$1000 clock from the old building.

Great anxiety is felt at the filling up of Stockton channel with debris from Mormon slough, now the legal channel for most of the water of Calaveras river. It is feared that navigation will become difficult in low water.

Horse-racing will not be the chief feature of the San Joaquin valley agricultural fair in September. A large temporary pavilion is to be built for exhibits of everything excellent. Liberal premiums offered for rivalry between nine counties of the district—San Joaquin, Calaveras, Tuolumne, Stanislaus, Mariposa, Merced, Fresno, Tulare and Kern—for county exhibits will stimulate effort. For several years people have been indifferent to Stockton fairs. The shows seemed a tiresome repetition, not paying the trouble of attendance. They were given to racing and gambling; but new interest has awakened and the fair promises to be one that will reward all visitors to our friendly city.

Stockton, July 24, 1886.

THE FRATERNAL PUBLISHING Co. have brought out an extra *Fraternal Record*, containing 44 pages. It is what it purports to be—a "Grand Army Issue," containing a list of all the Posts of the Department of the Pacific Coast, battle scenes of Gettysburg, portraits of leading generals, patriotic poems, stories and fine illustrations, program of the 20th National Encampment, location of the headquarters of different departments, commanders, etc., and valuable information. It is sold at 15 cents per copy.

CO-OPERATION AMONG HONEY PRODUCERS.—A dispatch from San Buenaventura states that the beemen met there on Saturday last and called a mass meeting throughout the county for August 6th. It is proposed to form an association and build a warehouse and ship honey directly East, through the association. Reports from all parts of the county show a honey yield of about one-third.

## AGRICULTURAL NOTES.

## CALIFORNIA.

## Alameda.

LAMBS KILLED BY FOX-TAIL.—Livermore Herald, July 22: Our sheep-raisers have been considerably puzzled this year for a remedy for the work of the common fox-tail grass upon their lambs. The seed-stems from the fox-tail catch in the wool, and gradually work in, till the pointed end enters the flesh. The feathery tail constantly pushes the point forward, and every movement of the animal assists in the torture. As a result, the lambs in districts where this grass abounds are all poor, and many have died. We are informed by Mr. John Callahan that on opening a lamb killed on his range, recently, a section of a head of fox-tail was found imbedded in the fat of one of the kidneys. It had entered the skin and passed between the ribs. The old sheep are not affected, they having been sheared this spring. Some of the owners are combing the lambs, and others are shearing them, as a remedy. The latter is the most effectual, as in that way the fox-tail is cut in two, and the head, without the tail to urge it on, soon drops out.

NIGHT-BLOOMING CERESUS.—Oakland Enquirer, July 23: Mrs. E. M. Sanborn, of 475 Twenty-sixth street, is the possessor of a fine specimen of the grandiflora, or night-blooming cereus, which has attained a growth of 12 years, and came to maturity and bloomed for the first time last evening. The plant has grown out of doors, and showed rare perfection and size of blossom. The flower opened its petals at about 7 o'clock, and when fully expanded measured a foot across, and exhaled a delightful perfume. This class of cactus are of slow growth, and only bloom once a year, the blossom opening about 7 o'clock in the evening and closing before morning.

## Butte.

CANNERY.—Chico Chronicle, July 24: About 100 hands are now employed at the Rancho Chico cannery, putting up peaches, plums and other fruits. They intend to increase the force of hands, so as to be able to put up 4000 cans per day.

DEATH FROM GLANDERS.—On Thursday, a dark roan horse, affected with the glanders, crossed the bridge at Bidwell's mill, being so weak he could hardly walk. After going up the road a short distance he turned to come back to town, when he staggered and fell. Several men raised him up, but he was too far gone and could not stand up, and soon died. Mr. King, of Rancho Chico, had him hauled off and buried, in order that the disease might not spread. It is strictly against the law to allow such animals to run at large, and the owner should be held responsible.

IRRIGATION.—Butte Record, July 24: We learned last evening that a party had engaged the services of Surveyor McGann, to be in readiness as soon as the bills on the irrigation question, to go before the session of the Legislature, shall become laws, to appropriate the waters of Chico creek for irrigation, and to survey and plot the necessary canals and ditches. In view of the character of the work to be performed, Mr. McGann calculated that it would take at least 30 days in field and office work, and required the sum of \$300 to be placed on deposit in one of our banks, subject to his order upon completion of the work, together with \$200 to pay Chinamen and laborers employed in making the surveys. The water will be carried into an important neighborhood and distributed at a reasonable figure to those who desire to engage in the fruit and vegetable business. The scheme is a splendid one, and will add thousands of acres to that already devoted to gardens, vineyards and orchards in this vicinity. The money required will, we understand, be deposited some time during the present week, and the surveyors will camp near the creek in order to be first on the ground.

## Contra Costa.

CHERRIES ALLEGRETTIZED.—Gazette, July 24: Dr. J. Strenzel left in our office this week a number of cherries, which look as fresh as if they had just been picked from the tree. One-half of them are of the Black Tartarian variety, and were picked May 22d, over two months ago. The remainder are Royal Anne, which were picked on the second day of June. These cherries were preserved by the new Allegretti process, and their natural color and flavor remain intact, just as taken from the tree. The time required for treatment is from two to six days, according to the quantity, and the cost is comparatively small.

## Los Angeles.

WATER WITH THE LAND.—Pomona Times-Courier, July 24: The Pomona Land and Water Company is making preparations to transfer the water to private individuals holding water rights under them in accordance with the terms of many of the deeds from the company. A water company composed of S. T. Alexander, Wm. O. Smith, H. A. Palmer, F. L. Palmer and W. D. Gillette, with a nominal capital of \$242,000, has been incorporated for the purpose of making the transfer and vesting full title and control of the water in the individuals owning water rights. A committee, composed of Jas. Loney, J. E. McComas, H. Eno, C. E. White, J. A. Drille and others, are acting in behalf of citizens who hold water rights and will learn and explain the plan of transfer for water



owners. We are informed by several of the committeemen that no definite action has been taken by them yet.

**MOVING THE OSTRICHES.**—*Anaheim Gazette*, July 24: It is understood that the visit of Mr. Moses Hopkins to Anaheim was to investigate the advisability of removing the ostriches from the farm at present in use to a tract of the company's land in North Anaheim. The main reason for the contemplated change is that it is surmised that the soil of the present farm, being strongly impregnated with alkali, has something to do with the non-fertility of the eggs and the mortality among the chicks. It is very probable that the change will be made.

**VITICULTURAL.**—Pursuant to the call published in the *Gazette* last week, a number of grape-growers met at Kroeger's hall on Monday evening to organize a branch of the State Viticultural Society. Mr. J. P. Zeyn was elected temporary chairman, and Richard Melrose temporary secretary. After a full discussion of the benefits which would accrue from the organization of a live and aggressive local society, in which all present expressed themselves in favor of such an organization, the following committee was appointed to procure signatures to the society's roll of membership: F. Hartung, F. R. Krebs and F. A. Korn. Following a discussion of grape-vine diseases, A. Langenberger and F. Hartung were appointed to correspond with Prof. Hilgard regarding the disease which has of late shown itself in many vineyards. The secretary was instructed to correspond with L. J. Rose concerning the assessments recently made upon distillers by the Revenue Department, after which the meeting adjourned until Tuesday, July 27th.

**CANNING.**—The superintendent of the Los Angeles cannery reports that they have finished on apricots, having only succeeded in getting 100 tons. They expected to can 150 tons; but the ravages of a small bug resembling the fire-fly reduced the crop. Forty dollars a ton was the price paid at the cannery. The blackberry crop is large; but raspberries are only about half a crop. The Bartlett pear crop is a failure, and none are to be had in this county. Peaches will be about half a full crop, and the apple crop will be insufficient to supply the home demand.

#### Sacramento.

**HORSE SALE.**—*Bee*, July 26: The attendance at Shears' stables, opposite the entrance to Agricultural Park, at the sale of the Rancho del Rio thoroughbreds on Saturday, was large, but the attendance of buyers was small. The youngsters offered were by the stallions Norfolk, Joe Hooker and Three Cheers, and included full brothers and sisters to such noted performers as Alta, Duchess, Duke and Prince of Norfolk, Ed. Corrigan, Connor, Ballot Box, Fred, Collier, etc. Several of the colts were passed. Those sold are as follows: By Norfolk—Oro, bay colt, 1884, dam Golden Gate, by imp. Leamington; W. M. Murray, \$350. Bay colt, 1885, dam Marion, by Malcolm; Kelly & Lynch, \$1650. By Joe Hooker—Dynamite, chestnut colt, 1884, dam Chestnut Belle, by Norfolk; Albert Cooper, \$200. Chestnut colt, 1885, dam Puss, by Norfolk; W. M. Murray, \$300. Chestnut colt, 1885, dam Countess Zeika, by Norfolk; Kelly & Lynch, \$725. Bay colt, 1885, dam Ada C., by Revenue; Monroe Johnson, \$300. Chestnut filly, 1885, dam Laura Winston, by Norfolk; W. B. Todhunter, \$700. Bay filly, 1885, dam Abbie W., by Norfolk; W. B. Todhunter, \$300. Chestnut filly, 1883, dam Laura Winston, by Norfolk; John Mackey, \$375. Flora, bay mare, 1882, dam Illusion, by Alarm, Colonel James McNasser, \$575. By Three Cheers—Chestnut colt, 1885, dam Atlanta, by Norfolk; Case Winchell, \$180. Chestnut filly, 1885, dam Alice N., by Norfolk; John Mackey, \$250. By Jumbo or Joe Hooker—Chestnut colt, 1885, dam Irene Harding, by Jack Malone; W. M. Murry, \$110. Brood mares—Ada C., bay, 1863, by Revenue, dam Sally Morgan, by imp. Emancipation; Col. James McNasser, \$90. Big Gun, by Old George; Wm. McCormick, \$50. The total amount of the sale was \$5955, an average of about \$400 each.

**FRUIT SHIPMENTS.**—*Telegram*, July 22: The California Fruit Union shipped East its first full train-load of fruit, consisting of 16 cars, this forenoon. The fruit is mostly destined for Chicago as a distributive point. The union will also send two cars to-day by express, and other carloads will go this week. W. R. Strong & Co., E. T. Earl, Lyon & Curtis, and C. W. Reed, members of the Fruit Growers' Association, also send a 15-car train of fruit East from here to-day. This is the second full fruit train from the members of the association shipped to the East this week, and they will send another day after to-morrow. Sacramento has assumed the activities in the fruit trade natural to her commanding central position as a local point for gathering and shipping to the East, California's wealth of fruit. These shipments are made upon a very limited fruit crop. With a full crop next season, the present facilities in shipping and the increasing demand at the East for our fruit will insure two or more Eastern fruit trains daily from Sacramento.

#### San Joaquin.

**THE MELON PESTS.**—*Lodi Sentinel*, July 24: Mr. Rhodes, of the firm of Rhodes & Reedy, of Stockton, is our authority for saying that paris green is a sure remedy for the pests that have attacked the watermelon vines in this part of the country. He says a little of this poison sprinkled on the young vines will exterminate this evil. The sulphur remedy, we are told,

has worked well, and since the cooler weather has set in the vines are looking healthy and the melons are growing rapidly. On the whole, this promises to be an unusually profitable year for our melon-raisers. On Monday, nine cars were loaded with melons, and on Tuesday seven. The shipment for the week will not fall short of 45 cars, making 60 cars for the season up to date.

**COTTON.**—Last spring the *Sentinel* office received from the Oakland Cotton Mills a quantity of cotton seed for free distribution. Whenever the seed was given out the parties were requested to report the results to this office. Accordingly W. O. Green showed us a sample that he raised in his yard. The plants are two feet in height, just coming out in bloom, and are looking thrifty and well. The week or 10 days of hot weather just passed, of course, tickled the cotton plants. Mr. Green has watered them occasionally, and says he can see no reason why cotton cannot be raised here in the Live Oaks as successfully as it is in the cotton States. So far as we have learned, all the seed that we gave out has been planted and shows promise of maturing a good crop.

**PUMPING FOR IRRIGATION.**—E. Lawrence and John Hutchins of Lodi went to San Francisco last week and entered into a contract with the firm of H. P. Gregory & Co. to place in position, on the banks of the Mokelumne river, a 75-horse power steam engine and a 15-inch centrifugal pump. The engine weighs 7500 pounds and the boiler 15,000 pounds. The pump will throw from 10,000 to 15,000 gallons per minute, according to the height of water in the river. They calculate to be able to furnish water to thoroughly irrigate two square miles of land. They will adopt a schedule of water rates and sell water to the public at about the cost to pump it, and they are confident they can furnish water as cheap as many of the irrigation ditches in the southern country. Their investment in this enterprise will reach about \$6000.

#### Solano.

**FRUIT SHIPMENTS.**—The fruit shipments from Vacaville during the week ending July 23d comprised 457,190 pounds.

#### Sutter.

**NEW THRESHER.**—*Farmer*, July 23: Last Tuesday afternoon we were persuaded by Dave Harney, of the Empire Foundry, and an *Appeal* reporter, to accompany them on a "short" trip to the country. We finally pulled into the field of the Blevin Bros., about five miles northwest of town, and had the pleasure of viewing a very unique and novel thresher in operation. It is entirely new in the way of a thresher, and from the view we obtained it would be difficult to give a satisfactory or accurate description. The machine was invented and constructed at the Empire Foundry, in Marysville, and Mr. George Gates, manager of that institution, will explain its merits to those interested if they will call on him at the foundry. The thresher is drawn by 14 animals alongside a header, which cuts the grain and conveys it to the machine as it would to the header wagon. Mr. Blevin informed us that the machine did good work. It did not crack the grain, and threshed as clean as the stationary separator. The services of four men are all that is required to run both header and thresher.

### The Irrigation Question.

**EDITORS PRESS:**—I have been farming in the State of California since the fall of 1851. Since 1853 I have irrigated my land more or less each year, according to the necessities of the season. I have read nearly everything that has been published on the subject by the leading papers of the State—reports, court decisions, common and statute law. I am a riparian proprietor and have recorded my claim under the code as an appropriator. I have, therefore, a safe thing, whatever becomes of riparian rights. I do not write for pleasure, nor to tickle my vanity in parading my private affairs before the public; but at a time like this, when an avalanche of misrepresentation to hide public plunder comes from all directions, it becomes every free man to speak out and stem the foul tide or bag his head and be a tool of oligarchy.

Your correspondent, Mr. Kinney, has spoken. I thank and honor him for those truthful words. The only fault I can find with him is that he throws down his pen too soon, and some of his statements are not broad enough. For example, he says: "There is no rule of law in this State preventing the use of public streams for irrigation." True; neither the common law of England nor the statute law prevents it, and further, it should be added, neither does the decision of the Supreme Court in the *Miller vs. Lux* case prevent it, nor does any other Supreme Court decision. The whole excitement has been gotten up by hiring typesetters and stump orators to distort the truth for a purpose. Governor Stoneman and the memorialists talk like Rip Van Winkles awakened from a sound sleep during an earthquake and impressed by a Second Adventist that the world was coming to an end. Hear the Governor:

"The Supreme Court of the State in a recent decision announced that the riparian owners along the innavigable streams in California owned the flowing waters in such streams, and are entitled to the exclusive right to use the same."

### PACIFIC COAST WEATHER FOR THE WEEK.

(Furnished for publication in this paper by NELSON GORON, Sergeant Signal Service Corps, U. S. A.)

DATE.	Portland.				Red Bluff.				Sacramento.				S. Francisco.				Los Angeles.				San Diego.			
	Rain.	Temp.	Wind.	Weather.	Rain.	Temp.	Wind.	Weather.	Rain.	Temp.	Wind.	Weather.	Rain.	Temp.	Wind.	Weather.	Rain.	Temp.	Wind.	Weather.	Rain.	Temp.	Wind.	Weather.
July 21-28.																								
Thursday.....	.00	75	NW	Cl.	.00	93	S	Cl.	.00	80	SW	Cl.	.00	58	W	Cl.	.00	81	SW	Cl.	.00	70	NW	Cl.
Friday.....	.00	74	NW	Cl.	.00	88	S	Hy.	.00	77	SW	Cl.	.00	59	SW	Cy.	.00	81	SW	Fr.	.00	71	SW	Cl.
Saturday.....	.00	77	NW	Cl.	.00	86	S	Cl.	.00	73	S	Cl.	.00	57	W	Cy.	.00	73	SW	Fr.	.00	71	SW	Cl.
Sunday.....	.00	63	SW	Cy.	.00	81	S	Cl.	.00	74	SW	Cl.	.00	62	NW	Cl.	.00	76	W	Cl.	.00	70	NW	Cl.
Monday.....	.00	68	S	Cy.	.00	90	N	Cl.	.00	75	NW	Cl.	.00	65	W	Cl.	.00	80	SW	Cl.	.00	70	SW	Cl.
Tuesday.....	.00	71	NW	Cl.	.00	85	S	Cl.	.00	75	SW	Cl.	.00	57	SW	Cy.	.00	77	SW	Cl.	.00	69	W	Cl.
Wednesday.....	.00	68	NW	Fr.	.00	83	S	Cl.	.00	74	SW	Cl.	.00	65	W	Cl.	.00	78	W	Cl.	.00	70	W	Cl.
Totals.....	.00				.00				.00				.00				.00				.00			

EXPLANATION.—Cl. for clear; Cy., cloudy; Fr., fair; Fy., foggy; — indicates too small to measure. Temperature Wind and weather at 12:00 m. (Pacific Standard time), with amount of rainfall in the preceding 24 hours.

I believe the Governor is mistaken as to his source of information. It must have been Angell or some other old author, and when the doctrine is fairly stated and understood it will scare nobody.

I will state the doctrine fairly, for it is the corner-stone of riparian rights, as follows: "The owners of lands on a natural stream are the owners of the waters thereof in common, for a beneficial use." Why did the common law make owners to land and water? Because without private ownership of these elements they would not be utilized in the creation of wealth, and men would sink to the condition of the Indian tribes. The word "owner" I understand to mean the people's tenant—one who has possession as against any individual, but not as against the people's agent, the Government. It is the whole people's land and water all the time—the sovereignty is in the State or organized people. Reason tells me that riparian rights can be abolished under the natural law of eminent domain, unwritten in the statutes. In that I differ with the Supreme Court.

"Ownership of water in common." That implies equality. That requires an equal use of water by all owners on the stream, whether large or small owners. In that respect the common law differs from our statute law of appropriation, and also differs from any bill proposed at the last or present session of the Legislature. Had our appropriation laws required an equal division of water among all prepared to utilize it by irrigation, somebody beside Haggins and Carr could have taken up desert land in Kern county outside the artesian belt. Possession of Kern river has enabled them to acquire possession of more than a hundred thousand acres of land, and this in the face of the Constitution, which pronounces such ownership "against the public interest," and makes it the duty of the Legislature to abate the evil! Will the legislators who have had this matter under consideration for two years obey the Constitution, or will they, by the passage of the bills under discussion, deliver the San Joaquin valley, where the ownership of water includes the ownership of land, into the possession of a syndicate of Haggins and Carrs?

I now return to my quotation from the common law. You observe the riparian owner owns the water for "a beneficial use"—that is, he does not own a drop more than he puts to such use. All surplus water can be taken out under our present law of appropriation. But, says the Governor, injunctions may be issued. True, but to obtain an injunction a preparation and intent to use the water must be shown. The same must be proved in all actions for damages; hence riparian proprietors cannot compel the water to run to waste, and have no license of law to waste it or cause it to be wasted. Riparian owners have just the same priority over the first appropriator that he has over the second. Why should he not have? Is not his land cut up, overflowed and damaged by the stream? Can he not irrigate his land, produce wealth and use it for the public good as well as appropriators do?

I have shown the superiority of riparian law, yet I am in favor of its repeal after enacting its best features. Its great defects are the divided counsel, loose responsibility, and uncertainty of practical application in dividing water. The confusion of language employed in rendering decisions makes the subject difficult. There can be no successful irrigation except in unity of control. The controlling person should be a sworn officer of the Government. The law should compel him to serve every man alike, but in case corporations are to continue control, rigid laws should be passed to compel the division of water among all land-owners; and, in case of scarcity, that every owner have an equal share except riparian proprietors, who, to compensate for the damages of the stream, should have a double share.

Irrigators should pay a tax to the State, to pay for this extra session and all State expenses on their account, and to enable the State to purchase dams and ditches existing. This tax should be graduated so as to enforce the Constitution in "discouraging the holding of large tracts of land." Every man should consider that he has an important duty to perform in this matter. If the people cannot control the water in the interests of the people within a year, the tide of monopoly cannot be stayed till the clash of arms between the millionaires and tramps comes, and either monarchy or socialism alone survives.

D. A. LEARNED.

Stockton, Cal.

### List of U. S. Patents for Pacific Coast Inventors.

Reported by Dewey & Co., Pioneer Patent Solicitors for Pacific States.

From the official report of U. S. Patents in DEWEY & Co.'s Patent Office Library, 252 Market St., S. F.

FOR WEEK ENDING JULY 20, 1886.

345,944.—PORTABLE HOUSE—W. J. Anderfuren, S. F.  
345,686.—EXTENSION FIRE LADDER—D. D. Hayes, S. F.  
345,701.—FRUIT-DRYER—C. W. Kitts, Grass Valley, Cal.  
345,852.—CANE-STOOL—E. O. Leermo, Gold Hill, Nevada.  
345,797.—REVERSIBLE PLOW—Neil McLean, Watsonville, Cal.  
345,804.—SEWER-CLEANING APPARATUS—Geo. W. Pringle, Benicia, Cal.

NOTE.—Copies of U. S. and Foreign Patents furnished by DEWEY & Co., in the shortest time possible (by mail or telegraphic order). American and Foreign patents obtained, and general patent business for Pacific Coast inventors transacted with perfect security, at reasonable rates and in the shortest possible time.

### Heald's Business College.

This well known commercial-education institution is continuing its work with unabated vigor. In the last issue of *Heald's College Journal* we find the following:

It is due to a California public, who have so liberally patronized this college for the past 22 years, that a statement of what we are doing, and our purposes for the future, should be made known, in order that those interested in education may know whether we are deserving of the high encomiums that the press of the Pacific Coast has so generally lavished upon us. We publish on another page a few extracts of some of the leading journals.

Our purpose in the future shall be, as in the past, to make our school replete with all the modern and useful appliances for thorough business instruction in trade and commerce, as well as in the more intricate arts and sciences. In order to better improve the worth, and advance the great interests of business colleges in the United States, the leading institutions devoted to commercial instruction meet together in convention each year to discuss the best methods of teaching. The senior member of our firm, Professor E. P. Heald, will attend the Business Educators' Association of America, which meets at Jacksonville, Illinois, on the ninth day of this month.

It is expected that this year's convention will be the largest and most enthusiastic ever held, and will be productive of the greatest good to the chain of business colleges. Our institution is the only college west of the Rocky mountains having any connection with the great chain of business colleges or holding a membership in the Business Educators' Association of America, and consequently Prof. Heald will be the only representative of the Pacific Coast at this convention.

It has been urged against us, by some of the smaller schools, that we have too many scholars to do justice to each student. We are willing to admit, and the facts of the case compel us to say, that our number of students exceeds two or three times that of any other institution of the kind on the Pacific Coast. If this be true, the question arises, Why is it so? There must be some good reason for students to come here for instruction. We must refer the reader to the public to make answer.

As to the charge of any neglect of students, we must say that while our number of pupils is so much larger than other schools, our corps of teachers is also proportionately larger. We number in teachers and assistants 26, who busy themselves in giving individual instruction in all our various departments, our object being to urge all students forward to the earliest possible completion of their course, having ever in view thoroughness of instruction.

We cannot refrain from thanking the business community and farmers of this Coast for the very liberal manner in which they have given us their support, and we assure them that we shall spare no pains in our endeavors to make Heald's Business College worthy of their patronage.

**A CURIOUS CLOCK.**—The town of New Verbaz, in Hungary, has a curiosity in the way of a steeple clock, constructed about 100 years ago. Part of the clock is in the steeple of the Lutheran church and the remainder is in the steeple of another church across the street. Both steeples have dials, but one strikes the hours and the other the quarters, and the hour is never struck until the quarters have finished striking. Morgosy, who writes from Nusatz to describe the clock, does not mention by what means the two parts of the clock are kept in communication, nor whether it keeps good time





### Women of the War.

We hear of men and heroes  
Whose flashing swords are keen,  
Who on the field of battle  
"Drink from the same canteen;  
Who at the post of danger  
With front unbroken stand,  
And in her hour of peril  
Will guard our native land.  
But who will tell the story  
Of Love's sublimest law,  
Of choicest treasures given  
By "Women of the War?"

On the altar of her country  
The mother lays her son;  
The maiden bids her lover  
"Fight till the field is won."  
And how the news comes flashing  
Of victory or defeat,  
How dead and dying mingle  
We will not here repeat.

The dim light of the hospital  
Shone on the beds of pain,  
And the long night seemed endless,  
When in walked "Betsy Jane."  
'My God! is this a woman?'  
Said one poor soldier boy;  
And tears rained down the manly cheeks  
But they were tears of joy.

And chaos turned to order  
As "Betsy Jane" stepped in,  
And cleanliness, which we are told,  
To goodness is kin.  
Hard tack and salted bacon  
To chicken broth gave way;  
And Sanitary stores came in,  
And beef tea won the day.

'Oh, see my soft, white pillow,  
My bed, so clean—not straw!'—  
And "some one's darling" smiled upon  
This "Woman of the War."

We know not if our "Betsy Jane"  
Was fair to other eyes,  
But to her "boys in blue" she seemed  
An angel from the skies.  
Her apron and her gown of serge  
Each soldier loved to see,  
And blessed her footsteps as she brought  
Such "heavenly" toast and tea.  
All the sweet charities of home  
Soon clustered in her ward;  
And each day's work now brought its own  
"Exceeding great reward."

It was not in the earthquake  
Or in the fiery flame,  
But in the soothing, gentle voice  
God's Spirit truly came.  
When He shall come whose right it is  
Within our hearts to reign,  
And read from out the Book of Life  
The name of "Betsy Jane,"  
And in the last great muster-roll  
Before the Judge of All,  
While faithful servants of the Lord  
Will answer to His call,  
Perhaps He'll say to one of them,  
'For inasmuch as ye  
Have done it to the least of these,  
Ye've done it unto me.'  
And then with palms of victory,  
By Love's sublimest law,  
The pearly gates will open wide  
To "Women of the War."

### The Drummer of the Rappahannock.

Written for the RURAL PRESS by CLARA S. BROWN.]

It was my good fortune to be in Portland, Maine, at the time of the 19th National Encampment of the Grand Army of the Republic, which took place in that beautiful city by the sea last June.

Never have I seen so grand a sight as the brave army of 25,000 men which, on the opening day of the encampment, marched through the streets in all the pomp of handsome uniforms, glittering accoutrements, and waving banners, some fresh and bright, of elegant texture and gay trimmings, others tattered and drooping, even as they were brought sorrowfully forth from some disastrous battle, or triumphantly borne through the fierce strife to a hard-won victory. A glance at those time-worn shreds thrilled the heart with a sense of the patriotism and bravery manifested by our young soldier boys and their comrades of maturer years, and most devoutly we gave thanks that the dread war-cloud no longer shed its gloom over our land.

Did you ever think how much nerve it must require to stand boldly in the face of an enemy's fire, or charge unflinchingly upon a powerful battery that is raking down, to the right and left, before, behind your companions in the fight? To dream about it, and, through a love of excitement, to desire to engage in it, is one thing; to do it, another.

And so we cannot feel too proud of our bat-

tle-scarred war veterans. They have rendered to this broad and incomparable country a service beyond the power of man to estimate.

It is pleasant to note that there is an increasing interest in the annual reunions of the Grand Army, when tents are pitched and camp-fires built as of old, and around the cheerful blaze long-separated comrades meet again and rehearse the scenes of the past, undisturbed by thoughts of battle on the morrow. The encampment at Portland was the largest ever held since the war, and the present reunion in San Francisco bids fair to be a memorable one.

Returning to the parade, you will realize its interest when I tell you that it occupied three hours in passing a given point, and was attended by 40 bands of music and as many drum and fife corps of the Revolutionary period. The air was filled with martial strains, and file after file of erect, blue-coated, precisely-stepping veterans passed under the arches and banners of red, white and blue that adorned the Portland streets in profusion.

All won universal admiration, but some members of the pageant attracted unusual attention. Among the latter was a trim-built, rather small-sized man who scarcely seemed old enough to have taken a part in the great Rebellion. He was among the drummers, and with a right good will he stirred his hearers into patriotic fervor. This was

Major Robert Henry Hendershot, the Drummer Boy of the Rappahannock.

Widely known under the above title, and the subject of this sketch. He has a history that any man might be proud of, which has elicited the warmest approval from the most famous personages in the country, and is recorded in the annals of the Rebellion as a matter of history.

He was only 12 years of age when he enlisted as a drummer in the Ninth Michigan Infantry, August 12, 1861. From the outset he showed great bravery and faithfulness to all his duties, and was taken prisoner at Murfreesboro, Tenn., July 13, 1862, paroled and discharged.

He at once re-enlisted in the Eighth Michigan Infantry, and soon afterward distinguished himself for life by his patriotic conduct at the battle of Fredericksburg, Va., being at the time scarcely 13 years old.

General Burnside's army was in the mud, and it became necessary to lay pontoon bridges over the Rappahannock river; but, as the enemy occupied the opposite shore, it was extremely hazardous to attempt the feat, under a merciless fire. The General called for volunteers, and who do you think was the first to step out from the ranks, with no sign of fear? This young drummer-boy, little more than a child, who, with might and main urged on his comrades to their duty by his beating of the drum.

Soon a sufficient force was organized and a boat placed in readiness, but the captain, seeing the extreme youth of the drummer, had not the heart to permit him to face such great danger, and ordered him peremptorily out of the boat and back to camp. Finding entreaties of no avail, Hendershot left his drum on the seat, and obeyed sufficiently to slip over the stern of the boat, shove it off, and hang to it all the way across the river.

Not long after a landing was made on the other shore, a bursting bomb shattered his drum. Nothing daunted, he picked up a musket near by—it belonged to a fallen comrade—and set forth in search of an opportunity to prove his ability, small as he was, to serve in the capacity of a fighter. He entered a house near by, and finding it empty, set fire to it. Out in the back yard he discovered a rebel soldier peeping through a crack in a board fence, watching for a chance to shoot.

The drummer boy unexpectedly proved a match for the "reb," for he leveled the musket at him so squarely that the soldier saw there was no escape and surrendered unconditionally. There was some sensation at the landing when this youthful captor marched his prisoner to the commander at that point, and two soldiers were detailed to accompany the pair to Burnside's headquarters, where the story of the boy's daring was told, and he received the compliments of the general.

After recrossing the river, Hendershot served most efficiently in the charge on Fredericksburg, and received two wounds—one in the face and one in the leg.

When Horace Greeley, who was then editing the New York Tribune, heard about the boy and his shattered drum, he forwarded a splendid silver drum, thus inscribed:

"Presented by the Tribune Association to Robert Henry Hendershot, of the Eighth Michigan Infantry, for his gallantry at the attack on Fredericksburg, on the 11th of December, 1862."

The sticks that he now uses are gold-mounted and bear the following inscription: "Presented to R. H. Hendershot by the Republicans of Kinnmundy, Salem and Altamont, Ill., for his services rendered in the Garfield and Arthur campaign of 1880."

He was sent home to recover from his wounds after the memorable battle, but as soon as possible again entered the field, and was wounded a third time before the close of the war. His residence is now at Chamberlain, Brule county, Dakota, but he is away from home much of the time, answering the call of Grand Army Posts to give exhibitions of his skill upon the drum.

Everywhere his wonderful playing excites unbounded enthusiasm, and he has been the means of adding very materially to the pecuniary prosperity of the Grand Army.

He gave two entertainments at Portland in

June, to the second of which I was fortunate enough to gain admittance. The first was chiefly designed for the Sunday-school children in the city, and more than 2000 of them filled the spacious City Hall, until even standing room was taken. It is estimated that 1800 people were turned away, and their disappointment was so great that the performance was repeated on the following night, no admittance fee being charged either time.

The boys and girls, and "the children of larger growth," as well, were delighted. I cannot describe his playing, but I wish you might all some time hear it. I never realized before how much could be done with a drum.

At first he played "U. S. Grant's March," and then "Phil. Sheridan's Favorite." He represented a locomotive drawing a train from Bar Harbor to Portland—there was the starting, the steady, swift passage, the slowing up, and letting off steam, and crossing of bridges, until you could almost see the advancing engine, as well as hear it.

Then he plunged into a desperate conflict—the dullest among us could not mistake the sounds. We recognized the long, heavy roll of the countless musketry, the crash of shot and shell from the batteries, the swift progress of the battle to its culminating point, and the gradual cessation of hostilities—even the sharpshooters were heard picking off the men from their retreats.

I heard a lady behind me say, "Well, both he and his drum must be very strongly put together, or they would burst." He used the identical silver drum presented him by Greeley.

During the performance he sang some verses devoted to "The Army Bean," familiar to all soldiers, and occasioned shouts of laughter, the veterans joining heartily in the chorus. Brimming over with merriment and full of vim, he captured the good-wishes of his audience.

He remained some months in the New England States, seeking a better state of health, and was requested by many towns to give an exhibition of his powers.

This summer he expects to be in California, and the Pacific Coast people will hear some marvelous drumming.

The fearless and loyal spirit of this "Drummer Boy" is, no doubt, the type of many "Brave Boys in Blue" who will soon be seen in the veterans' ranks in San Francisco.

### Camp U. S. Grant.

The camp at Portland last year was named in honor of that renowned soldier who has answered the roll-call from Heaven—General U. S. Grant. It was beautifully situated on the brow of a hill overlooking Portland harbor with its islands, Casco bay, and the broad ocean—one of the fairest scenes in all America.

This time the tents will be set on the shore of the smiling Pacific, where a widely different, but still a most charming, view will be presented; and let us hope that among the throng will surely be "The Drummer Boy of the Rappahannock."

### The Other Fellow.

In the *Farmers' Advocate* of St. Paul, Minn., we find the following humorous speech, delivered at the Grand Army reception, by Hon. E. D. Meyers, which we think will be thoroughly enjoyed by the comrades having had like experience, as well as many others:

Things are exactly reversed from what they were in the war. In the army of the rebellion there were a great many privates and very few officers. Now there are a great many officers and very few privates. In fact, I am the only private that could be found, and they brought me here because they thought I would be a greater curiosity than the Ice Palace. I am simply applying my theory to the truth of history. I found one of those special providences in the shape of a big stump before I got very close to the fort. I lay down behind it so sudden that several of the boys thought I was shot and lay down alongside of me to see how badly I was hurt. I have heard a good many tell their experiences and feelings while in battle. They nearly all expressed themselves as being free from fear after they once got fairly in the fight. Now, that was not my case. I wanted to get into that fight awful bad. I was in it and had a good

### Strategic Position.

But I was scared. It appeared to me that that stump was about the only thing that separated me from the sweet by and by. I felt what a sinner I was to leave my mother unprotected and go into the war, even if that girl did want me to. In fact, I think all the love I ever had for her turned to hate. We took the fort and I was not killed, as I was afraid I would be at the time; but I wish to say right here that I never loved that girl since, and I wish to say further, in conclusion, that if ever there is another war I hope her husband will be drafted.

While listening to the speakers this evening, I could not help thinking what a queer thing this sentiment of patriotism is. I thought of how it affected people in the beginning of the war. Everybody had it, and they had it bad, and the strange thing about it is, it seemed to affect every one differently. Some did one thing and some another. Some of the young fellows rushed off and got married. You see, they felt as if they must be doing something. I think the young women had it worse

than the men. They could not, it is true, enlist as soldiers, but they could and did sacrifice their hearts' best idols on the altars of their country. I know what I am talking about. One of them sacrificed me. I was a very bold and

### Desperate Young Man.

And when the first gun was fired at Sumter my first impulse was to enlist, but on second thought I recollected my mother was a widow, and I was her only means of support, and I felt it my duty to stay with her. I told my girl about it. I thought she would think more of me if she found I was good to my mother, but she didn't. She said what I wanted to do was so brace up, and have some style about me and enlist. She said the man she married must be a soldier. That, of course, it would be the greatest sorrow of her life to part with me, but she would try to bear up under it. In two weeks from that day I was marching away to the wild, grand music of war—that is, folks said it was wild and grand, and I suppose it was, but it didn't sound grand to me under the circumstances. I want to remark right here, I never knew any one to bear up under a great sorrow like that girl. She even smiled when we parted for the last time. In six months she was married to the other fellow. I don't know how it is that girls always have another fellow, but they do. There may be five girls to one boy in a neighborhood, but if you fall in love with one of those girls, you are sure to find another fellow loafing around. The girls always explain it by saying they regard the other fellow

### As a Brother.

But, confound him, he never is their brother, and if you are in love, as I was, the other fellow is always a subject of suspicion. You are never satisfied. I wasn't when I enlisted. Married men are never troubled that way—that is, hardly ever. So I argue that while it was a terrible thing for husbands to tear themselves away from their wives and children to go into the army, yet in such cases there might be mitigating circumstances. A husband might have his personal liberty circumscribed, or the children might be bad little brats. In such cases their sorrow was not so great as it appeared. The real heart-rending cases were when the boys were torn away from their sweethearts. There was nothing to mitigate their sorrow, but, as I said before, the other fellow was always around to aggravate it. I well recollect the day when I heard my girl was married. It was the morning before we stormed the rebel works at Arkansas Post, a fort on the Arkansas river. I was feeling pretty bad about the prospective fight we all knew was coming off that day. The orderly came and distributed the mail which had just arrived. He handed me a letter. I saw it was from my girl. I tore it open, hoping to get some consolation. I got it.

The first thing I read was that she was married, and that she had only regarded me as a brother. So you see, after all, I was the other fellow. I tell you I was mad. I felt that I was a victim of misplaced confidence. I told the boys I was glad the fight was coming off. In fact, I

### Thirsted for Gore.

I felt that while I could not get revenge out of the fellow that had married my girl, yet I could and would wreak horrible vengeance on the rebels in the fort. I resolved to rush to glory or the grave. I felt that if I won promotion and became a great commander, some folks would be sorry for the way they had treated me. I had never been in a fight, but I wanted to be. The charge was ordered about 2 o'clock that afternoon, and in justice to myself I must say that I rushed at that fort with the greatest animosity. But those rebels were armed and waiting for us, and don't you forget it. I hadn't gone far before I was satisfied I had made a mistake. It became clear to my mind that those rebels could have had nothing to do with my girl marrying the other fellow, and I ought not to want to hurt them on that account. In fact I was sorry that there was any misunderstanding in the matter. There are two classes of theologians. One class believes in special providence, the other in instrumentalities. I believe in both. When the rebels were shooting at me, I always regarded a stump as a special providence, and myself as an instrument foreordained from the beginning of the world to get behind it. The point I make is this: If stumps were not made for the protection of life, what were they made for? I have no doubt there are persons present who will differ with me from a religious point of view, but I will not argue the question.

### Loss From Liquor.

EDITORS PRESS:—Looking over my PRESS of July 10th I notice an article, "Personal Liberty," copied from *People's Cause*. Will you allow me space for correction of an error which appears in the original, and of course copied correctly by you. The estimated loss to the nation through the liquor traffic, instead of reading \$130,000,000, should have read \$1,300,000,000. One cipher had been omitted in the notation, making a very erroneous reading and a very apparent discrepancy between items and footing, though the items of the estimate were not fully given. I am glad to see that you thought my article worth copying.

Paskenta, Cal.

THOUGHTOGRAPH.



**LIFE'S DECAY.**—Charles Kingsley once said: "One of the kind wishes expressed for me is long life. Let anything be asked for me except that. Let us live hard, work hard, go a good pace, and get to our journey's end as soon as possible. Then let the post-horse get his shoulder out of the collar. I have lived long enough to feel, like the old post-horse, very thankful that his end draws near. Long life is the last thing I desire. It may be that as one grows older one acquires more and more the consciousness of the difference between what ought to be done and what can be done, and sits down more quietly when one gets the wrong side of 50, to let others start up and do for us things we cannot do for ourselves. But it is the highest pleasure a man can have who has (to his own exceeding comfort) turned down the hill at last, to believe that younger spirits will rise up after him and catch the lamp of truth, as in the old, lamp-bearing race of Greece, out of his hand before it expires, and carry it on to the goal with swifter and more even steps."

**THE WASTE OF LIFE.**—An English naturalist remarks it is a sad reflection that while the turbot lays 14,000,000 eggs, not more than one, on the average, ever lives to reach maturity. In fish generally it takes yearly at least a hundred thousand eggs for each individual to keep up the average of the species. In frogs and amphibians a few hundred are amply sufficient. Reptiles often lay only a much smaller number. In birds which hatch their own eggs and feed their young, from two to ten eggs per annum are quite sufficient to replenish the earth. Among mammals, three or four at a birth is a rare number, and many of the larger sorts produce one calf or foal at a time only. In the human race at large, a total of five or six children for each married couple during a whole lifetime makes up sufficiently for infant mortality and all other sources of loss, though among savages a far higher rate is usually necessary. In England an average of four and a half children per family suffices to keep the population stationary.

**A TEN-TON CLOCK.**—The works of the immense clock which has been put up in the Board of Trade building in Chicago are pronounced a most perfect reproduction of those of the great Westminster palace clock in London, but with some additions and improvements adapted to its commercial purpose. It is constructed of iron, bronze and steel, and weighs 10 tons without the bell, the latter adding some 4500 pounds more. The pendulum alone weighs 750 pounds. In its arrangements the works are divided into a time train, a hand train and a striking train, these several trains comprising separate machines, resting, side by side, on separate frames. Each of the trains is operated by a separate weight, and the three weights together reach some 3500 pounds. The hammer that strikes the bell weighs 80 pounds, the clockwork is below the dials, which are 10 feet 10 inches in diameter, and the bell is above them, or 250 feet above the ground. The pendulum swings one way in two seconds.

**THE FIRST WATCH.**—The first description of a watch extant is found in the "Cosmographia Pomponii Melæ," under the heading "Nuremberg." After a description of the place comes a sentence in Latin which, freely translated, reads: Peter Hele, quite a young man, is making articles here which excite the admiration of even the most learned scientists; out of a small quantity of iron he makes a clock with numerous wheels which will register and strike 40 hours in whatever position it may be laid, and even when carried in the bosom or in the purse. This Hele was born about 1480, and is claimed as the inventor of the pocket-clock, as it is called in Germany. No specimen known to be his work beyond a doubt has come down to us, but some of the Nuremberg eggs were probably contemporaneous with the works of his later years.

**PIANOS IN WINTER.**—Winter is the heavy season for piano tuners. The heat of a fire soon puts a piano out of tune. This is not due to the expanding and contracting of the strings, as generally supposed, but to the variations produced in the sounding-boards under the influence of the increased dryness of the air, especially in furnace-heated houses. Sounding-boards are made of spruce because of the superior resonance of that timber, but spruce, of all woods, is most affected by changes in moisture.

**THE NOMENCLATURE OF CARRIAGES.**—Fifty years ago the names of the different kinds of carriages, wagons, etc., in use were few and easily remembered; but at the present day we are overwhelmed with a multitude of fancy names used to designate the particular productions of various ingenious houses engaged in this class of industry. As to the wisdom of this system of multifarious nomenclature, there may be differences of opinion.

**AN ANCIENT STONE PLOW.** weighing about 300 pounds, has been unearthed in New Jersey, at the old Smith-Clark quarry. The *Milford Leader* says: "It had the appearance of having been cut into the shape of a plow by an ancient people. It was complete in nearly all its parts, and bore a strong resemblance to that sort of agricultural implement used by the Assyrians and Egyptians centuries ago."

## YOUNG HOLKS' COLUMN.

### Farmer Boys.

[Written for RURAL PRESS by ADA E. TAYLOR.]

Oh, if I had the joys of the farmer boys,  
How happy I would be;  
Their life is as gay as a summer's day  
When the sky from clouds is free.  
They shout and sing till the woodlands ring  
With their music loud and clear,  
While no thoughts of care their young hearts share,  
No dark days ever appear.

They plow and sow as they merrily go  
Whistling a careless tune;  
They romp for hours 'mid fragrant flowers  
That in wild profusion bloom.  
They roam thro' dells where the tinkling bells  
Are heard thro' the summer's day,  
And where the stream, like a fairy's dream,  
Is lulled by the birds' soft lay.

When the evening shades in the quiet glades  
Are deep'ning into night,  
Oh, then for a stray and noisy play  
That's filled with wild delight.  
They romp and tear with never a care  
Of what the future may bring;  
Their hearts are as light as moonbeams bright,  
Or birds that joyously sing.

They toss all day the new-mown hay  
In the gentle, fragrant breeze,  
And they rest at will by the rippling rill,  
'Neath the cool and shady trees.  
They ramble over sweet fields of clover  
In the morning clear and bright,  
When the sparkling dew, with its brilliant hue,  
Is trembling in the light.

No traces there, on their brows so fair,  
Of sorrow or of pain;  
They think not the days, with gay, boyish plays,  
Will never return again.  
Oh, if ever I roam in search of a home,  
A farmer I will be;  
I'll sing with delight from morn till night,  
And feel I'm perfectly free.

I'll scatter and reap the dimpling wheat,  
With its graceful heads of gold;  
I'll breathe the fresh air in the morning fair,  
And brave the heat and cold.  
Three cheers for the boys the farm employs,  
With brave hearts strong and true,  
Who are willing to toil and till the soil,  
Beneath a canopy blue.

There is many a lad who is poorly clad,  
With feet all brown and bare,  
Who yet may stand above all in the land,  
And a proud name nobly wear.  
Toil bravely along with your careless song,  
In meadows fresh and sweet;  
In some future day that's not far away,  
The harvest you will reap.

Mount Pleasant.

### A Story About Another Jack.

[Written for RURAL PRESS by MRS. A. E. DAVIS.]

EDITORS PRESS:—Here is another story about Jack, only this time it is not a cat, but a rooster—of what class or species I do not know. I only know he is of a bluish-gray color, and has five toes on one foot and four on the other; so he is often called "Jack-o'-nine-toes" by us, and he lives in the back yard of No. — M— street, San Francisco, and is a great favorite of all there. He came from Napa county about two years ago, and was brought to my house among a large number of his kind and designed for table use.

I gave him and another one to a lady living near by. She had his mate killed at once, but reserved Jack for future use by tying him fast to one corner of her yard by a string. But, like the "kite," he became impatient of restraint, and tugged and pulled until he broke it, and was then free to return to his mates in my yard, which he did plus about two feet of string. And now that string became the badge by which we knew he belonged to the lady, and three times, by her request, in the following two weeks I ordered him killed, and each time they would miss the one with the string and some other poor unfortunate be beheaded in his place.

At last all were gone and only he remained, and now he would eat nothing. No matter what we gave him, not a bite would he pick for himself—only stand and "cut, cut, cut-i-cut" all day for the companions fate had delivered to the cook for pot-pie. And so it went on until we expected every morning to find he had been translated to the happy shadow-land of chickens, where good little bugs stand up in rows and just beg to be eaten. But a good fairy, in the form of a young turkey, came to his rescue, and he began to eat, and his suicidal mania of starvation passed by. It was then we discovered that no lapdog in all the land loved to be petted and caressed better than he. I taught him then to crow and to sit down when told, and to be carried around in a shawl-strap.

One day as I was cleaning a bed-room, where a door opens on a back porch, in came Master Jack, walking very stately, to view the proceedings. Thinking to surprise him, I picked him up suddenly and placed him on a bureau, saying: "There, Jack, see yourself as others see you."

I thought he would cackle or express some emotion at seeing his reflection in the mirror. But no! he only stood and stretched out his

neck, and "nothing more." So, being in a hurry, I turned to my work again and forgot all about him.

It was quite a time after when I was recalled to thoughts of him by hearing a fluttering, and looking on the bureau beheld him pitching into that shadow rooster in a way that would have made the feathers fly had it been a real bird; and ever after we had to keep close watch on that door, yet in spite of our vigilance he would get in, and then we would find combs, brushes, bottles, in fact every movable thing on the bureau, scattered over the room, silent witnesses of the battle fought there.

If any one thing delights him more than another, it is to have some one make believe fight with him by working the fingers and jumping the hand at him, when he will fly at it with every appearance of being beside himself with passion. But just stop and say "Why, Jack, old boy, what's the matter?" and he will spread his wing and spur around, seeming to enjoy the laugh he has created as well as any of us.

Not long since he met with a mishap which, for a time, we thought had finished his career. The children were playing with some lumber in the yard, when a piece fell on his head and laid him out as one dead; but pretty soon he struggled to his feet, and with his usual good fortune he came through safely enough, and was as prompt as he is every morning,

When first the light reveals the east,  
With clarion throat and tongue,  
He chronicles to all around,  
Another day begun.  
And if they fail at first to heed  
His warning voice so plain,  
He loudly flaps his wings and crows,  
And crows and crows again—

Much to the annoyance of the sleepy-heads in the vicinity of his yard.

Most of the neighbors say, "Jack is as good as an alarm clock;" but sometimes I fear some of the aforementioned sleepy-heads will give this "early bird," as a reward, a bug full of poison.

One more laughable notion of his, out of many, and I have done. About a year and a half ago a young lady student was visiting me, and chose for her place of study a seat at the back parlor window, outside of which a long railing ran, one end approaching the window, the other extending away from it. When she was sitting there Jack used to perch himself on the railing as near as he could get, and with a look of rapt devotion on his countenance sit and gaze at her by the hour. As it was an attention he conferred on no other member of the family, we laughed merrily at her about her new admirer; but as I have seen, on more than one occasion, that same look of rapt devotion in the eyes of "sighing swains," I assert it as my belief that Jack is a bird of fine discrimination and taste.

And now, Mr. Editor, if any one of your readers doubts this true story of Jack, I give you leave to fill out that blank number and give it to such a one, so that he or she may have ocular demonstration of the truth of all I have asserted; even the lady student being again a member of our household, which might be an inducement to some "doubting Thomas" to make the pilgrimage.

NOTE.—Since writing the above, Jack has (as he is a bird of fashion) gone across the bay to sojourn for a time in the rural town of San L—, about 30 miles distant.

San Francisco.

## GOOD HEALTH.

### Pasteur's Method of Vaccination.

If a section of the spinal cord of a rabid dog be inserted into the brain of a rabbit by trephining, the latter animal becomes mad in about 15 days; and when the virus from this rabbit is transmitted to a second, and from the second to a third, and so on, by the same method of inoculation, the rabies soon become more and more pronounced, and the developing or incubation period becomes shorter and shorter, until, at the end of 50 inoculations, a most severe form of madness results in about seven days. The virus from the last rabbit is of great purity and of invariable strength, so that similar sections of spinal cord may, therefore, be relied upon to produce exactly similar effects. It has been further shown that the virulence of the pieces of cord slowly and quite regularly disappears when kept in dry air and remains unaltered when preserved in carbonic acid gas. An understanding of these principles makes it possible to have constantly on hand hydrophobic poison varying in strength from harmless mildness to deadliest virulence. It is upon these graduated poisons that Pasteur depends for his remarkable method of protecting the animal system from hydrophobia. Experimenting first with dogs, a little meat broth containing weak virus was injected under the skin the first day, and was followed daily by injections of increasing virulence—that is, preparations from cord of shorter exposure to air—until in a few days the fresh or strongest virus was used, when it was demonstrated that, without injury to the animals, had become entirely refractory to rabies from bites—even when inflicted before treatment—or inoculations of any degree. The method was first tried on a human subject

in July, 1885, when immunity was conferred within ten days on a boy considered to be in great danger. Since then several hundred bitten persons have been treated, and thus far the only failure to prevent hydrophobia has been in a single case where the inoculations were attempted too late.

### Sunstrokes.

One of the peculiarities of the late warm spell is the occurrence of sunstrokes in the hot valleys of the interior portion of the State. Some of our cotemporaries have connected them with the thunderstorms which have recently occurred not only in the bay counties but in the Colorado desert region. One of our city cotemporaries says: We have already called attention to the fact that our last storm had its counterpart 10 years ago, and that season was remarkable for its sunstrokes, seven cases occurring near the town of Turlock in one day. Much higher temperatures are felt almost every year than characterized the late heated spell, and no such results have followed. It is embarrassing, however, to be obliged to explain to our Grand Army visitors how exceptional thunderstorms and sunstrokes are in this State, for there are some who will be ungenerous enough to be incredulous.

The following cases of sunstroke were reported within a day or two after the late electric display: At Oroville the deaths include Mrs. T. J. Coffin, a nurse, and Mrs. John Pollock.

Four cases of sunstroke are reported from Moore's Station, Butte county.

In Tehama county there were two deaths from sunstroke on Friday and Saturday. Both were harvest laborers, one being named Leslie and the other Domingo.

Two more deaths are reported near Stockton—James Dooley, a laborer from San Francisco, and Christ. Wall, who was a deckhand on a schooner.

At Sacramento, Saturday, Patrick O'Brien died suddenly from the effects of the heat.

## DOMESTIC ECONOMY.

### Cheap and Nutritive Luncheon.

EDITORS PRESS:—As many of your readers, particularly farmers' wives, are looking to ways of comfort these hot days, I would like to put some of them on a way of saving labor, and at the same time getting up a simple and healthful luncheon for these hot noontimes. No hot fire, no work getting ready, and dish-washing reduced to a minimum. I refer to

### Curd and Cream.

I have never seen the dish in this country, but in Scotland it is quite a favorite dish, and townspeople will often make excursions into the country to enjoy the luxury at the farmers' houses. There it is accounted as great a treat as ice cream is here, and far more healthful. The requisites are unskimmed sweet milk and calf's rennet. The rennet can be had from the butcher, and is prepared by emptying the contents (if any), salting thoroughly and drying, and must then be kept as any salted and dried meat. When wanted for use, cut off a piece the size of a quarter of a dollar and put it to soak in a quarter of a teacupful of water for say 12 hours, when it is ready for use.

In the morning, take your milk and have it blood-warm, put the quantity required (say one quart for a family of four or five persons) in an earthenware vessel or tin pan, and put about half a teaspoonful of the solution of rennet with it, stirred well through, and set it away until noon in a cool place, when it will be like clabber in appearance, but perfectly sweet and with all the cream in it. Dish it out as you would pudding, pouring good sweet cream over it, eating with bread and butter, and you have a dish fit for a queen or a granger, and which, if eaten in the way directed, will agree with many stomachs that could not use milk in the ordinary manner. Nothing else is needed to make a hearty and nourishing meal, and one that commends itself to overworked farmers' wives, and no disagreeable washing of greasy dishes in hot water.

FARMER'S WIFE.

Riverside, Cal.

**A DREAM CAKE.**—Make a rich batter, and bake it in three layers. The layers should be frosted with confectioner's sugar and the white of eggs. The frosting for the first layer should be flavored with lemon, for the next layer with vanilla, and the top layer should be flavored with a few drops of rose water and thickly covered with cocoanut.

**TONGUE TOAST.**—A very nice dish is prepared from cold boiled or potted tongue. Slice the tongue, and cut each slice into small, fine pieces; heat it in a pan, with a little butter. To prevent burning, moisten with warm water or clear soup. Add salt and pepper; stir into it two beaten eggs. When set, arrange neatly on toast.

**MILK LEMONADE.**—Dissolve in one quart of boiling water one and one-half cups of loaf sugar, add one-half pint of lemon juice, and lastly, one and one-half pints of boiling milk.





A. T. DEWEY.

W. B. EWER.

Published by DEWEY &amp; CO.

Office, 252 Market St., N. E. cor. Front St., S. F.  
Take the Elevator, No. 12 Front St.ADDRESS ALL literary and business correspondence and  
Drafts for this paper in the name of the firm.

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A. T. DEWEY.

W. B. EWER.

G. H. STRONG

SAN FRANCISCO:

Saturday, July 31, 1886.

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Fruit Pitter—Wiester & Co.  
Business College—E. P. Heald & Co.  
Rupture Cured—Dr. Pierce & Son.  
Draughtsman—W. H. Smyth.

See Advertising Columns.

## The Week.

The prevailing topic of conversation is still the extra session, although the Encampment is coming to divide honors with it. Indications multiply that the Legislature now in session is not to be as greatly feared as some have thought. It displays signs of caution and evidently has a conscience as well as an intellect. We are inclined to hope well from it. It has had experience. It was only monopolized by a scratch last time, and some of the members should have gained wisdom since that experience. They now have a chance to do some telling work in the public interest, and we are hopeful a majority will conduct themselves so as to win lasting honors.

The coming week will witness the beginning of the great social event of the year, the Encampment, to which allusion is made elsewhere. Aside from the hosts from the East, there will probably be more Californians in San Francisco than ever before. They are coming from up and down the coast, arriving by rail-

way, and even floating down the rivers on nicely furnished barges, which will be both transportation and hotel during their sojourn here. It promises to be a gala occasion for all concerned, and to furnish scenes which will be memorable for a life time. In other columns of this issue the main features of the event are outlined.

## Uses of the Extra Session.

It argues a happy disposition to find some good in everything, and we propose to base our claim to geniality upon the good which we can find in so trying an affair as the extra session of the Legislature now in progress in Sacramento.

It is now quite settled that it will not do the evil for which it was claimed to be convened. There were to be discovered in its horizon most threatening clouds of revolutionary and monopolistic trouble. Many of them were swept away by the strong breeze of popular protest even before the Speaker's gavel fell for the first time. The most revolutionary feature of the work laid out was abandoned before the members reached the capitol. The third house saved the heads of the judges—or, rather, the people saved the State that outrage upon decency—and the lobby dropped its axes almost before they were well in hand. We see in this fact alone, demonstrating as it does national safety because of the irresistible force of public opinion, a lesson in the strength of our popular sovereignty which is of great value, not alone to the State and nation, but to the world at large. In a true republic a *coup d'etat* is impossible; all things must be done decently and in order.

But we see other and more direct benefit in the experience which we are now gaining. In the better understanding of the right to water and the use of this life-blood of an arid State, there will be popular progress in a few weeks, which, in the usual course of events, might have required months and years. Our general understanding of water rights and water distribution has been too vague and shadowy. We have agreed that irrigation is essential to the development of vast areas of our State; we have seen little colonies grow into rich and large communities within a decade; we have seen wealth and population grow quickly and sturdily, just as vegetation grows, when water is brought upon our barren wastes. With these facts before us we have been ready to throw up our hats and cry: "Hail to irrigation, it is the State's greatest need!"

Such perhaps it is—but very few really saw that there might be such a manipulation and such direction of the popular appreciation of the benefits of irrigation that it might really constitute a menace to the popular weal. The waters were so smooth and beautiful upon the surface that few discerned the current which was drawing toward sunken rocks. If there is any selfish individual or corporate greed in the movement which has been so strenuously promoted in the name of the general welfare, the very best method has been adopted to bring it into view in all its hatefulness. If there had been less zeal, less precipitation, less stickling for certain forms and methods of action, certain measures might have been carried through which might have riveted the chains of monopoly upon our water supply even more effectually than does the English riparian law. People grew apprehensive some weeks ago. The convention, the proceedings of which we printed in full, was not the popular body we expected it would be. The institution of the literary bureau without any visible means of support, and other matters of similar character, indicated that the movement was being over-managed. It is not common to see enterprises of merely general popular welfare conducted too well. This was the condition of the popular mind when the call for the extra session came, and that, bearing the insignia of the same motive force as the preceding features of the movement against riparianism, not only aroused but alarmed the press and the people. It was apparently a time for alarm, but whether there was really occasion for it or not, the popular arousing which has resulted is the most fortunate thing, it seems to us, which could have happened for the advancement of true irrigation enterprises and interests in this State. As we have said, the people bid fairer now to understand the irrigation problem than ever, simply because it now comes before them in the strongest possible light, and every feature and tend-

ency will be thoroughly discussed. It seems to us that it is quite possible that those who were instrumental in bringing about the extra session builded much better than they knew, for the welfare and general progress of the commonwealth.

The Legislature has already appropriated about \$50,000 to pay its cost. There is some objection made to the extra session on account of its expense and its burden upon the taxpayers. It is quite true that every dollar added to the tax levy is a burden to the people and the burden should be made as light as is consistent with safety and true advancement of popular interests. But it seems to us that the State will really obtain very cheaply the lessons which this extra session will teach. It will probably show that the waters of the State cannot be monopolized, and this is certainly a valuable demonstration, whether there was really immediate danger of such evil at the time or not. It seems probable also that there will be some preliminary legislative steps taken which will be indeed in the popular interest, and if so the enactments will be worth what they cost, and the elaboration of an irrigation system which shall embody and conserve the general interest, can be based upon them and secured through coming Legislatures. If these fundamental enactments are secured, it will clear the coming general election from the clouds of dust raised by contending monopolists and will enable people to see more clearly the character of the men who appeal for their suffrages and more calmly to choose between them. We believe, in any event, that the extra session has aroused the voters to the great danger to the interests of the State, and that the chances are now far better than they otherwise would have been for securing an honest Legislature for the coming two years. The times are full of matters of the greatest moment and it behooves all to be vigilant and active and to use their utmost influence that the right shall prevail, and the true interests of the State be guarded from lurking dangers.

In an address before the Senate Committee on Irrigation, Mr. Marks, of Fresno, claiming to represent the small irrigators of that county, is reported to have said that it is unfortunate that Haggin & Carr have figured so prominently on the irrigators' side of this issue. It is indeed unfortunate, except perhaps that having monopolists on the other side of the question, it is well to have monopolists to fight them with; for when monopolists fall out it is likely that popular rights may lie between them. What we want, and what, perhaps, the present Legislature may give, is the enactment into our organic and statute laws some plain propositions which shall free our waters from the burden of ill-suited foreign precedents and favor their distribution upon equitable principles to all who can make good use of them. We do not want laws which will cinch anybody out of the rights to which they are justly entitled, whether they be large proprietors or small. We do not want the water monopolized either for greed or for waste, but husbanded, distributed and used, to the full extent of the possibilities in it, for increasing the productivity, the population and the prosperity of our State. We apparently never stood a better chance of obtaining just such legislation as that than we do at present, and for that reason we look with expectation and with a degree of complacency upon the assembling of the Solons at Sacramento.

## Better Times.

The signs all point to an improvement in business matters here from this time on. Nearly everywhere the crops show well. There will be a large harvest and good prices for both fruit and grain. A big yield affects not only the farmer but the tradesman and mechanic as well, for it makes money more plentiful. The money received for the wheat and fruit crop will be distributed, and that will bring an improvement in all sorts of business. The pressure of hard times will be loosened. People will be able to purchase more freely of both necessities and luxuries, thus spreading the coin in all channels of trade.

The future of California is bright with promise. A staple and industrious class of people is settling up our spare lands, and thousands have come within the past few years to make their homes with us. The building of railroads in all directions is bringing new regions and

tracts into use. The unsettled portions of the State are fast filling up. The lands are more salable, and are cultivated in a more diversified manner than formerly. Our markets are more extended, and our products better appreciated outside our borders. The railroads now carry our perishable products to distant markets, where good prices are obtained.

These and other things indicate a certain prosperity for the future. The climate, soil, and other natural advantages of California are bound to tell in time, and as they become better known, the State will become more prosperous and more largely settled. We are getting out of many old ruts and becoming more progressive in our ways. The "new blood" of late years is doing us good in the main. The temporary hard times of the past few years have made our communities more frugal and taught them to be less extravagant.

Good crops make the country prosperous, and on the prosperity of the country depends good times in the cities and towns. It looks now as if the era of hard times was passing away, and that soon money would be more plentiful in all branches of business.

## The Peach Crop.

The peach crop will be light in this State and values high. There has been a sharp demand from canners to fill orders, which have been unusually large because of the great reduction in Delaware and other Eastern producing districts. Those who have peaches to sell this year will get plenty of money for them, and if we had only been favored with a generally good crop, the peach would have had a notable boom. The measure of our prices depends largely upon Eastern crops. Heretofore this has mainly acted through the canners, though the fruit shippers have done good service; but this year there is a brisk canning demand added to a greatly increased opportunity to sell fresh peaches at the East, and it is no wonder that prices are so good.

Our peach-growing readers may like to know more definitely the condition of affairs in our competing peach districts at the East, and we give such information as we have. The report of Prof. Dodge, statistician for the Department of Agriculture, for July, says that the prospect for the peach crop is not encouraging, the condition having seriously fallen off during the last month. In the States of heavy production, condition is somewhat low, standing at 84 in New Jersey, 60 in Delaware and 86 in Maryland—100 being the standard or average crop. In the Southern States, Kentucky and West Virginia, fruit is rotting badly and the crop will be very small.

Concerning the Delaware crop, a correspondent of the New York Tribune of recent date says:

The peach crop will be a small one. Few are so sanguine as to put it above 2,750,000 baskets, while some get it as low as 1,500,000. These are extremes, however. The consensus of opinion among growers and shippers points to a total of about 2,300,000 baskets of good fruit, and it is upon this basis that preparations for marketing are being made. Over on the eastern shore of Maryland the yield will be very large, however, so that the total of peaches shipped from this entire peninsula will scarcely be less than that of any former year. How much Delaware has suffered may be seen in the fact that the range of crops for the past dozen years has been from 3,000,000 to 4,000,000 bushels, against only 2,300,000 this year.

It is also stated that Delaware is counting less on her peach crop than formerly, as other fruits seem more valuable and trustworthy. This seems to be in harmony with the general decadence of the peach at the East, and points more clearly to California as the future peach-producing country.

**THE DOG SHOW.**—The bench show of the California Kennel Club, which has been noticed in previous issues of the RURAL, is in progress this week in Platt's hall. There were over 200 entries made and nearly all were in place on Tuesday, the opening night. An opening address was made by Mr. Robert Ferral, which was received with much applause from the benches. There are a number of famous and valuable dogs on exhibition, the highest value placed on any single animal being \$10,000, said to be the equivalent of an English setter owned by a man from Cincinnati; the highest priced California dog is also an English setter owned in San Francisco and valued at \$2500. The show will continue during the week.



## The Organizations of Mercy.

Upon the assembling of the hosts of the Grand Army, it is fitting to remember only what is bright and beautiful in our country's history, and we cannot refrain from calling attention to the new form of religion which traveled along the burnt path of the war. At the first gun of battle not only did many of the best surgeons of our cities hasten to the front and gratuitously offer their skill and experience, but gentle and refined women left their homes of comfort and luxury to live in tents near the armies, so as to be ready to serve the sick, wounded and dying. Besides the religious teachers furnished by the Government, many congregations spared to their brothers in the field their ablest ministers.

This noble, patriotic sentiment gradually took shape in the Sanitary and Christian Commissions. To the Sanitary Commission the Government gave a most earnest support; the people gave it their hearts. They did more: the rich gave lavishly of their abundance, the laborer no inconsiderable portion of his scanty earnings. The poor widow cast in her mite. The people gave it more than three millions of dollars in money, of which one million came from the Pacific States; they sent it nine millions' worth of supplies. The Christian Commission, emulating the noble conduct of the Sanitary Commission, aided the surgeon, helped the chaplain, followed the armies in their weary marches, went into the trenches, along the picket-line, went everywhere. Wherever there was a sick, a wounded, a dying man, an agent of this Commission was near by. Many of them were tender-hearted women.

These beautiful charities dotted the scenes of war from Paducah to Port Royal, from Belle Plain in Virginia to Brownsville in Texas, with homes and hospitals, caring alike for friend and foe. They had an independent transportation of their own. They had tents, wagons, ambulances, cars. They soon invented better litters, better stretchers, better ambulances. They secured transportation for the wounded soldier from the battle-field to the hospital. On the railroads they had hospital cars, with kitchen, dispensary and a surgeon's car in the midst. They gave Christian burial whenever possible; they marked the graves of the dead. The Christian Commission distributed nearly five million dollars in money and supplies.

Such an organization of private charity was never seen before in the history of the world. Even that grim, surly old man, Thomas Carlyle, had to confess that "the Sanitary Commission was a genuine expression of the people. It was to America in this century what the Orders of chivalry were to Europe in their day." An eloquent writer in the *North American Review* said: "To the end of time it will stand in history as a worthy monument of the patriotism, the humanity and the religion of a Christian democracy."

One of our war correspondents, who had an eye for the beautiful, relates that after the terrible cannonading at Gettysburg, when four hundred cannon answered each other along Cemetery Ridge, there came a lull while Pickett's division was getting ready for its grand charge, and then the birds, which had been chased away out of the peach orchards and plum trees, came flying back through the smoke and began to sing. Over that field of fratricidal strife, where ten thousand corpses lay on the earth with hearts scarcely stopped beating, the sweet birds sang. But later in the afternoon, after that awful storm of human rage and passion had spent itself and the two great armies lay panting and gasping for breath, a still more beautiful spectacle was seen when the divine form of religion, in the shape of Protestant clergymen and Roman Catholic priests, Protestant women and Sisters of Charity, came from every tented hospital on both sides of the line, tenderly caring for the wounded, consoling the dying, and dropping hot tears like rain as they sent the last words of the dead to the loved ones at home.

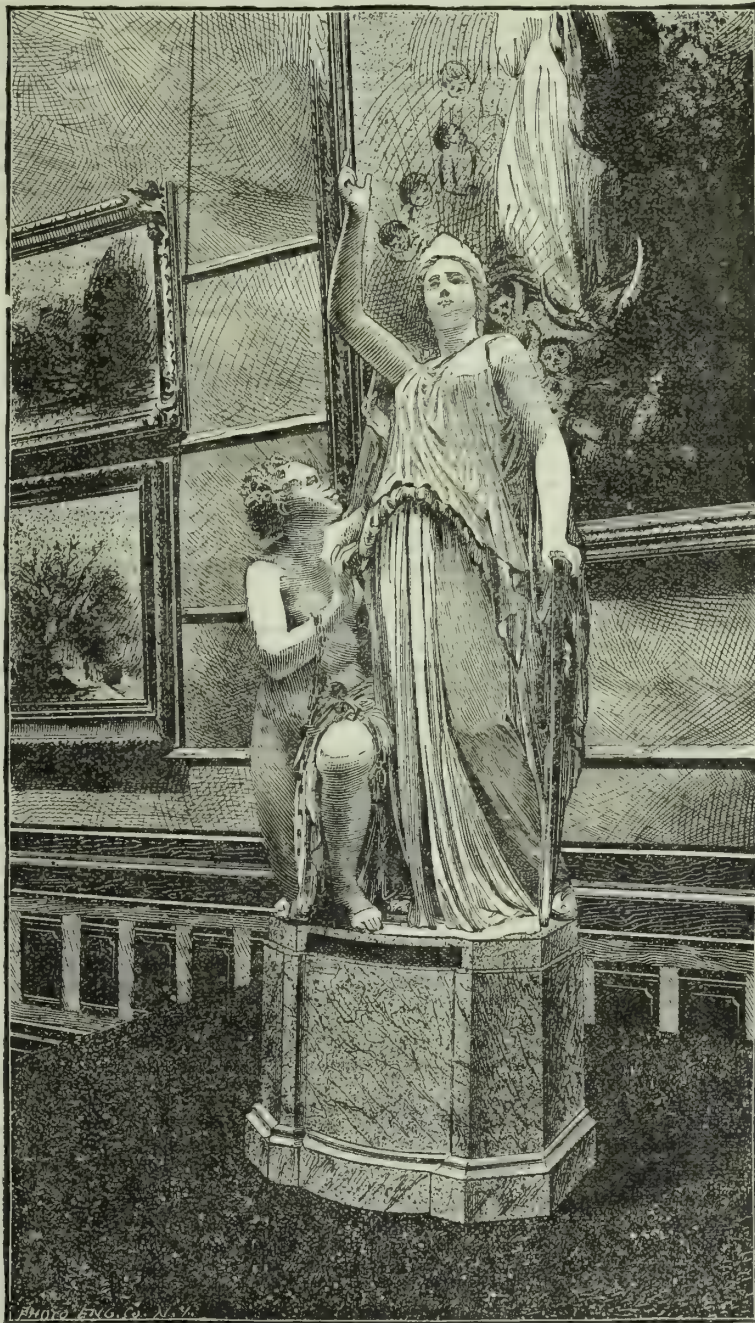
**THE IRRIGATION ISSUE.**—It has always been the aim of the RURAL PRESS to furnish full and trustworthy information on important industrial issues. We give this week the leading propositions advanced for consideration of the legislators. We expect to continue this course in the presentation of other important matters hereafter.

## Time as a Healer.

Time is a great healer. It levels every hillock in the graveyard, mingles the dust of friend and foe, and covers with one common sod the wars and strifes and mad agonies of a past generation. It touches with curative gentleness the hurts of the mind and the wounds of society. Two men part in early manhood mutual enemies, full of hate and revenge; but late in life's afternoon they meet again, recognize each other, shake hands and are friends once more.

Twenty-five years ago these war veterans now coming among us were marching to the front, singing, "We'll hang Jeff Davis on a sour apple tree," and they meant it. Now he can travel all over the land, write books and make speeches in vindication of the "lost

livered an address of welcome on the part of the ex-Confederate soldiers, and was responded to by General Keifer on the part of the Society of the Army of the Cumberland. Among many beautiful things Major Key said: "Your country is our country; your flag is our flag; your destiny is our destiny; and we here and now give you our pledge that we will stand by you in defense of this country and that flag." And General Keifer replied: "We warmly and fraternally touch hearts with you under the same flag on this historic field." This mingling of the blue and gray that day on Cameron Hill, under the National flag and in sight of the bloody field of Chickamauga; Lookout Mountain, where Hooker fought above the clouds; Missionary Ridge, with its two cemeteries, one Union and one Confederate, now tenanted with seventeen thousand



THE GENIUS OF AMERICA—Halbig.

cause," and every one smiles at the old man as they would at the antics of one that had escaped from the lunatic asylum. Had we been told immediately after the surrender of Lee that in a few swift years the men who fought for the Union and the men who tried to pull it down would meet in the halls of Congress and in the most friendly manner legislate for the good of our common country, it would have been regarded as a madman's dream.

What surprises there are in history! A few days after Garfield had panted out his life in the little cottage by the sea, the officers and soldiers of both armies that had fought each other with desperate courage at Chickamauga, Lookout Mountain, Missionary Ridge and other historic places, assembled at Chattanooga for a peaceful and pleasant fraternization. The old flag, heavily draped in mourning, was hoisted to the top of the flagstaff by Major M. Grant of the Federal Army and Major I. L. McCullum of the Confederate service, the band playing "The Star-spangled Banner;" and as it was lowered at half-mast the band played "Nearer, My God, to Thee," more than ten thousand people standing uncovered. Major Summerfield A. Key, brother of the ex-Postmaster General, de-

livered an address of welcome on the part of the ex-Confederate soldiers, and was responded to by General Keifer on the part of the Society of the Army of the Cumberland. Among many beautiful things Major Key said: "Your country is our country; your flag is our flag; your destiny is our destiny; and we here and now give you our pledge that we will stand by you in defense of this country and that flag." And General Keifer replied: "We warmly and fraternally touch hearts with you under the same flag on this historic field." This mingling of the blue and gray that day on Cameron Hill, under the National flag and in sight of the bloody field of Chickamauga; Lookout Mountain, where Hooker fought above the clouds; Missionary Ridge, with its two cemeteries, one Union and one Confederate, now tenanted with seventeen thousand

## The Genius of America.

We adorn this page with an engraving of a marble which now stands in the art gallery of the State University at Berkeley, being one of many gifts to the institution by Henry D. Bacon. It is entitled the "Genius of America," and is by the sculptor Halbig. The theme is very appropriate to the occasion which is at hand—the Encampment of the Grand Army in this city. The group will explain itself to all. The freedom for which the nation was established came last to the slave. Columbia, with her face lighted with joy, points her finger to heaven, as if to say, "This is the decree of the Most High." A slave, kneeling at her feet, lifts up her eyes in gratitude for the deliverance. America became at last the "home of the free" indeed, and The Genius of America triumphed.

## The Legislature.

## Irrigation Propositions Now Pending.

As stated in last week's RURAL, the Legislature assembled in extra session in the State Capitol on Tuesday, July 20th. The Senate, in the absence of Lieutenant-Governor Daggett and of Senator Knight, of Santa Cruz, president pro tem, was called to order by Senator B. F. Langford, of San Joaquin, and in the House the Speaker, W. H. Parks, presided.

## Governor's Message.

STATE OF CALIFORNIA, EXECUTIVE DEPT.,  
SACRAMENTO, July 20, 1886.  
To the Senate and Assembly of the State of California:

GENTLEMEN: My proclamation in bringing you together in extra session of the Legislature calls on you to legislate and take action on only two subjects, namely:

First—Irrigation and water rights; and  
Second—Reorganization of the Supreme Court.

The proclamation sets forth my views fully on these subjects, and the urgent reasons which impelled me to call you from your homes and occupations at this sultry summer season.

The emergency is great and pressing. It demands prompt, wise and careful action. Reliance upon our statutes and upon the judicial interpretation of the law to regulate satisfactorily water and water rights in this State, has practically failed. Public opinion is united and irresistible in the demand for legislative action, which will prevent threatened disaster to our vast agricultural interests.

In many sections of the State—embracing a vast area now attracting a rapid tide of immigration—a feeling of dissatisfaction and irritation prevails regarding the claims and threatened or pending action of riparian owners, which may culminate in danger to the peace and good order of the State, unless averted by just and timely legislation.

Until the contentions arising between the riparian and irrigation interests are adjusted upon an equitable and practical basis—intruded in our Constitution and laws, and safe-guarded in our courts—immigration will be retarded, agricultural development checked and all the industrial resources of the State crippled or impaired.

The merchants and business men in general feel at this juncture that their prosperity is at stake. They unite with the farmers and fruit-growers in this urgent call for a redress of grievances on the all absorbing water question. Property worth millions of dollars, including alike the large tracts owned by the rich and the small farms owned by the settler, is threatened with destruction pending the settlement of the question of riparian ownership. It is a question of far-reaching and vital importance which materially affects the interests of agriculturists in many States and Territories, and one which, in this State, has reached a painful crisis in consequence of the recent decision of the Supreme Court in favor of riparian owners.

That you are alive and earnest in the interest of the tillers of the soil—the interest of all—is evident from the fact that such a large majority of your honorable body have united in a request to me, as Chief Executive, to call this extra session of the Legislature.

Believing with you in its imperative necessity, I have done my part in the good work by promptly responding to your call. It now remains with you faithfully and energetically to do your part by legislating on the lines indicated in my proclamation. One of the certain and not remote results of such action by you will be the division of large land-holdings into small tracts where men can, by industry and thrift, convert the arid land into productive fields, orchards and vineyards. Thousands of happy homes will then dot the land.

With regard to the second subject recommended in the proclamation for legislative action, my views are therein clearly put forward. That the Supreme Court, under its present cumbersome operative system, has failed to realize the aims and accomplish the results intended by the framers of our State Constitution, is palpably evident to all interested in the efficient and satisfactory working of our judicial system.

The legislation recommended for enactment is not of a character in which considerations of political or party advantage should enter or are involved.

This fact will tend to make smooth your deliberations and shorten the duration of a session from which the people have reason to expect decisive and highly beneficial results.

GEORGE STONEMAN, Governor.

## Mr. Moffatt's Amendment.

In the Assembly, by Moffatt of Alameda—An act to amend an act to establish a civil code, approved March 21, 1872.

Section 1. Section 1422 of the Civil Code is hereby repealed.

Sec. 2. This act shall take effect from and after its passage.

## Mr. Yale's Amendment.

By Yale of Trinity—An act to propose to the people of the State an amendment to the Constitution of the State of California, relative to water and water rights.

Section 3. The water of every natural navigable stream, within the State of California, is the property of the public and is dedicated to



the use of the people of the State, subject to appropriation, diversion and use for irrigation and other beneficial purposes; and the right to divert unappropriated waters of any natural navigable stream to such beneficial uses shall never be denied. Prior appropriations to any such use, whether heretofore or hereafter made, shall give the better right, and the right of appropriation shall be exercised under legislative regulations. The English common law of riparian rights, so far as it conflicts with this section, shall not be recognized as a rule of decision in any of the courts of this State.

#### Mr. French's Amendment.

By French of San Francisco—An act to propose to the people of the State an amendment to the Constitution of the State of California, relative to water and water rights:

Section 1. The use of all water now appropriated, or that may hereafter be appropriated for irrigation, sale, rental or distribution, is hereby declared to be a public use, and subject to the regulation and control of the State, in a manner to be prescribed by law; provided, that the rates of compensation to be collected by any person, company, corporation or irrigation district in this State for the use of water supplied to any county, or city and county, or city, or town, or irrigation district, or the inhabitants thereof, shall be fixed every three years by the supervisors, or city and county, or city, or town council, or other governing body of such county, or city and county, or city, or town, or irrigation district, and shall continue in force for three years and until new rates are established; but in establishing such rates they shall take into consideration the cost of construction and maintenance of the works by which the water is supplied, and the rates so established shall be such as will yield to the person, company or corporation so supplying water, a net return of not less than six per cent and not more than eight per cent per annum upon the amount invested in the construction and maintenance of such works. Such rates shall be fixed in the month of February, and take effect on the first day of July thereafter. Any board or body failing to fix the water rates where necessary, within such time, shall be subject to summary process to compel action at the suit of any party interested, and shall be liable to such further process and penalties as the Legislature may prescribe. Any person, company or corporation collecting water rates in excess of those so established shall forfeit the franchise of such person, company or corporation to the county, or city and county, or city, or town, or irrigation district from which the same are collected for the public use.

#### Ownership to Water.

By DeWitt of Tulare: An act concerning the ownership of water in natural navigable streams and providing for the acquisition thereof by appropriation.

Section 1. The water of every natural navigable stream, within the State of California, is hereby declared to be the property of the public, and is dedicated to the use of the people of the State, subject to appropriation, diversion and use for irrigation or other beneficial purposes; and the right to divert unappropriated waters of any natural navigable stream to such beneficial uses shall never be denied. Prior appropriations, whether heretofore or hereafter made, to any such use, shall give the better right, and the right of appropriation shall be exercised under legislative regulations. The English common law of riparian rights, so far as it conflicts with this act, shall not be recognized as a rule of decision in any courts of this State.

Sec. 2. All acts and parts of acts which in any way conflict with the provisions of this act are hereby repealed.

Sec. 3. This act shall take effect from and after its passage.

#### Mr. Edwards' Amendment.

By Edwards, of Los Angeles—An act to amend Sec. 25, Art. IV, of the Constitution, so as to read as follows: But nothing in this section contained shall be understood or construed to prevent the Legislature from passing such special laws as it may deem best, regulating the construction of ditches, canals and other works for irrigating purposes, and for the establishment of rates to consumers, as the same may be specially required in any county of the State.

#### Senator Cross' Bills

Senator Cross introduced three bills.

The first was entitled: "An act to submit to the vote of the people of the State of California the question of erecting State water works for irrigation and other beneficial uses." It provides that the people of the State of California, represented in Senate and Assembly, do enact as follows:

Thirty days prior to the next general or special State election, the Governor shall issue his proclamation calling upon the electors of the State to signify at same election their will as to the State inaugurating a system of water works for the purpose of supplying, within the State, water for irrigation and other beneficial uses, by placing upon their ballots the words "For a system of State water works," or the words "Against a system of State water works." The judges and inspectors of election at each and every poll in the State shall ascertain and make returns of the number of votes "For a system of State water works," and the number of votes cast "Against a system of State water works" in like manner as other votes are.

The Secretary of State shall make a count and the result shall be advertised in San Francisco, Sacramento and Los Angeles.

The second bill introduced by Cross provides that within 60 days after the Secretary of State shall have certified to the Governor that a majority of the votes cast were in favor of a State system of water works, the Board of Examiners shall cause to be printed \$20,000,000 of State water works bonds. One-half of amount of said bonds shall be issued in denominations of \$100, and one-half in denominations of \$1000. Said bonds to bear interest at the rate of 5 per cent per annum, and to be payable on or before 20 years from the date thereof. Said bonds shall be sold upon sealed bids to be received by the State Controller in quantities not exceeding \$1,000,000 per month, said sales to be made only upon the approval of the State Board of Examiners, and at not less than par. Said Board of Examiners shall have the power to reject any and all bids, and no sale shall be made until notice of such sale, with the time and place and amount of bonds to be sold, shall be first given for at least one month, in at least three daily papers, one of which shall be published in Sacramento, one in San Francisco and one in Los Angeles. The moneys derived from the sale of said bonds shall be kept by the Treasurer of the State in a separate fund, to be known as and designated as the fund of the system of the State water works, and shall be paid out only upon warrants issued as provided for in the acts creating the State Board of Water Commissioners.

The third bill introduced by Cross provides that within 30 days after the Secretary of State shall have certified to the Governor that a majority of the votes, cast in accordance with the act relative to a State system of water works, have been cast in favor of that project, the Governor shall appoint one competent person a water commissioner of said State. Within five days after the next Senate of the State of California shall have been duly organized, it shall select, by *viva voce* vote, two competent persons to be water commissioners of said State. Within five days after the next Assembly of the State of California shall have been duly organized, it shall select, by *viva voce* vote, two persons to be water commissioners of said State, and the five persons so chosen shall constitute the State Board of Water Commissioners. Said commissioners shall serve for four years, and until their successors are chosen and qualified. Such successors shall be elected or appointed by the same authorities and in the same manner as the commissioners hereinbefore provided for.

#### Senator Reddy's Constitutional Amendment.

Senator Reddy submitted the following amendment to Article XIV of the Constitution:

Section 3. The water of every natural or navigable stream within the State of California is the property of the public, and is dedicated to the use of the people of the State. Such water may be appropriated, diverted and used for irrigation or other beneficial purposes. The right to divert unappropriated waters of any natural navigable stream to such beneficial uses shall be regulated by law. Prior appropriations to any such use, whether heretofore or hereafter made, so long as applied to such use, shall give the better right, and the right of appropriation shall be exercised under legislative regulations. The English common law of riparian rights, so far as it conflicts with this section, shall not be recognized as a rule of decision in any of the courts of this State.

#### Senator Whiting's Bill.

Senator Whiting introduced the following bill on irrigation:

An act to declare the title to waters in rivers, streams, lakes and ponds, and the right to their use, and is as follows:

Section 1. The waters of all rivers, streams, lakes and ponds not situated wholly within the lands of a single proprietor, are the common property of the people of the State and forever inalienable. There can be no private ownership of such waters while in their natural beds or channels.

Sec. 2. Water rising upon lands in private ownership is the property of the owner of such lands until allowed to escape by natural flow beyond such lands, when it becomes common property of the people of the State. But the right to the use of such waters may be acquired by the owners of other lands, either by grant or prescription.

Sec. 3. Water developed in tunnels and wells is the property of the person first developing it, and may be controlled and disposed of as other property, but not wastefully until it passes from the lands of such person in the natural flow, when it becomes the property of the people of the State.

Sec. 4. Water falling in rain or snow is the property of the person upon whose land it falls, and may be disposed of as other property until it passes by natural flow from such lands, when it becomes common property.

Sec. 5. The waters declared to be common property are devoted to the sustaining of life and to domestic and sanitary uses, which shall always be preferred uses.

Sec. 6. The owner of lands watered by a natural stream has a right by ditches constructed so as to prevent waste in channels above, and to sufficient water for the reasonable irrigation of such lands; but such right may be lost by abandonment or non-use, or by adverse use for five years.

Sec. 7. In the arid agricultural portions of the State, subject to the preferred uses declared in the preceding sections, all lands susceptible of irrigation from the waters therein mentioned are entitled to such waters for agricultural purposes. Those parts of the State are declared to be arid, within the intent of this section, in which agricultural products cannot be profitably raised without artificial irrigation.

Sec. 8. Where the waters of a source or series of sources of supply are not sufficient for the reasonable irrigation of all the lands to which such waters may be brought, those first in the actual enjoyment shall have a preferred right to the extent of such use, by works so constructed as to prevent unnecessary waste. But no person has a right to a wasteful use of water, either in its carriage or application to the soil.

Sec. 9. It is unlawful for any person or corporation (for the purpose of irrigation), to the injury or deprivation of another, to divert or carry through any ditch, pipe or flume, any water in excess of the necessary requirements of the lands under cultivation and depending upon the use of such waters.

Sec. 10 prescribes how the Legislature shall direct the distribution of water. First, to municipal corporations for domestic use. Second, to private corporations to meet an actual need for the same purposes. Third, to irrigating districts. Fourth, to works constructed and owned by private parties and corporations for distributing and supplying water for irrigating the lands of others.

Sec. 11. The use of waters for mills and other mechanical purposes is not affected when such use can be made without material diminution or defilement.

#### After the Recess.

Both branches of the Legislature adjourned from Thursday, 22d, to Monday of this week. After reassembling, Senator Del Valle presented a protest by the City Council of Los Angeles against the passage of the proposed constitutional amendment fixing water rates.

Senator John M. Days introduced the following, which was referred to the Committee on Irrigation.

#### Senator Days' Bill.

An act to propose an amendment to Article XIV of the State Constitution by adding thereto Sections 3, 4, 5, 6, 7 and 8, in relation to water rights.

The Legislature of the State of California, at its session commencing on the 20th day of July, 1886, two-thirds of all the members elected to each of the two houses of said Legislature voting in favor thereof, hereby proposes that Article XIV of the Constitution of the State of California be amended by adding six new sections thereto, to be known as Sections 3, 4, 5, 6, 7 and 8, and to read as follows:

Sec. 3. The water flowing in all non-navigable rivers, streams, creeks and natural courses within the State of California, is the property of the public, and is dedicated to the use of the people of the State. Such water may be applied for purposes of supplying cities and counties, towns, villages and hamlets, navigation, irrigation and other beneficial uses. The use of said water to be granted or leased for a term of years not exceeding 20, upon conditions to be prescribed by law.

Sec. 4. For the administration and regulation of all systems of said water derivation, distribution and drainage, the Governor, by and with the consent of the Senate, shall appoint a State Water Commission of three suitable persons, one of whom must be a competent civil engineer; the terms, duties and emoluments of office of said commission shall be prescribed by law.

Sec. 5. For purposes of irrigation and drainage in connection therewith, there shall be established, when necessary, irrigable land districts that may be directly accessible by the waters of the aforesaid rivers, streams, creeks and natural courses, in such manner as shall most equitably apportion the distribution of the said waters upon the lands of the said districts, provided that the aggregate or total area of such districts upon any one natural water channel or source shall not require an excess of the main channel supply of water therein for irrigation and agricultural use. The location, extent and area of each district to be determined by the said water commissioners upon judicious irrigation practice and as may be prescribed by law.

Sec. 6. The State may by law undertake and complete the construction of head-works, dams and other appliances for the raising, flowing and storage of water, and the legal interest on the cost thereof shall be annually levied upon the lands of the districts for whose service they may be intended, together with the cost of their repairs and the proportional expenses of the said water commissioners' establishment estimated upon the whole number of districts under its charge; such levies to be paid annually. The Legislature shall pass all laws necessary to carry out the provisions of this article.

Sec. 7. For the application of said waters upon the lands of said districts, associations or companies—to consist of citizens of the United States—may be formed under laws to be prescribed by the State; and who shall be owners or occupants of the said lands and to which the use of said waters shall be granted or leased. The said associations or companies, under the direction of such engineer as the said water commissioners shall appoint, shall survey, locate, construct and maintain the main and distributing canals in their extension from the

head works, dams and reservoirs, their outlets, gates, etc., and keep them in repair.

Sec. 8. Whenever the owners or occupants of land in an irrigable land district are unable from want of funds to comply with the provisions of the previous section, the Legislature may prescribe by law for the construction and maintenance of said main and distributing canals in the manner provided for building head works, etc., and expense thereof as set out in Sec. 6 hereof; provided, however, that the engineer in charge shall give preference of employment in the said construction to any and every land-holder of said district, giving receipts to each for the value of his labor, which receipts must be received in payment of expenses levied against him.

#### Senator Cross' Fourth Bill

Provides for the condemnation of riparian rights and reads as follows:

Section 1. Whenever an action is brought in the name of the State of California or of the people of the State of California to condemn or acquire by the exercise of the right of eminent domain any water or water rights, or any other property necessary or proper for the purpose of obtaining water for or applying to irrigation or other beneficial uses in addition to the provisions of the Code of Civil Procedure, the plaintiff shall have the right to join in one suit, as defendants, any or all parties claiming the right to use or divert the water of any stream and its tributaries within the county within which the said suit is brought. Such suit may be brought against any or all owners or claimants known or unknown, but no judgment in such proceedings shall lie valid against any party not named, or served with process in the proceedings, unless a summons complying with the provisions of Sections 756 and 757 of the Code of Civil Procedure, duly issued in accordance with the provisions of Section 1245 of the Code of Civil Procedure, against such unnamed, unserved and unknown owners shall first have been published in said county (if there be any) in the manner prescribed in Section 413 of the Code of Civil Procedure.

Sec. 2. Upon the hearing of said cause the court or jury shall find or adjudge the amount of damages to be paid each claimant separately, and judgment shall be entered accordingly.

Sec. 3. No water or water-right actually applied to a beneficial use by its possessor shall be acquired by the State, except by purchase.

Sec. 4. In such actions or proceedings the following portion of Subdivision 3 of Section 1240 of the Code of Civil Procedure shall be inapplicable; but such property shall not be taken unless for a more necessary public use than that to which it has already been appropriated.

Sec. 5. In such actions or proceedings Subdivision 3 of Section 1241 of the Code of Civil Procedure shall be inapplicable.

#### Senator Saxe's Amendment.

Senator Saxe introduced the following bill defining riparian rights:

Sec. 1. Riparian rights as declared in Section 1422 of the Civil Code of the State of California, are hereby declared to consist of the right to the use of so much of any body of water flowing through or contiguous to the lands of any proprietor as is necessary for domestic use, the watering of stock, irrigation where practicable, and mechanical purposes where the water is returned into its original channel, and all surplus of said waters may be used by others for the same purposes.

#### Mr. Jordan's Amendment.

In the Assembly, Jordan, of Alameda, introduced an amendment to Article XIV of the Constitution, providing as follows:

The waters of all natural non-navigable lakes not situated upon private lands in one ownership, and all non-navigable rivers and brooks passing beyond lands in one ownership and the surplus waters of all navigable lakes and rivers diverted at such times as shall not impair the navigation thereof, are declared the property of the State, and no ownership in or right to the use, appropriation or diversion shall ever be granted to any person, company or corporation. The water shall be subject to distribution for municipal mechanical, mining mechanical and irrigation purposes under control of the State. In cases where water rights have already been appropriated, all such rights shall revert to the State. In the case of corporations at the expiration of the corporation's legal term of existence, and in the case of private persons at the expiration of 20 years from the commencement of use. Riparian-owners shall be protected in the use of water for household and stock purposes, but not for irrigation. Cities owning and supplying cities shall not be permitted to charge more than seven nor less than five per cent on the actual cost of improvements, besides the current expenses. Corporations or persons owning works by prior appropriation shall be similarly governed. The State may at any general election, before the expiration of corporation or personal rights, condemn all ditches and canals owned. The English law of riparian rights is abolished.

#### Against Riparian Rights.

McJunkin, of San Francisco, introduced a bill condemning the waters of Innavigable streams and the rights of persons living on the banks thereof.

#### Senator Cross' Fifth Bill.

Mr. Cross introduced a bill to amend Section 1238 of the Code of Civil Procedure, so as to apply the law of eminent domain to water and water rights.



## State Engineer's Views.

Memorandum on Irrigation, by Request of the Governor.

W. Hammond Hall, State Engineer of California, has been engaged for years upon the study of irrigation as applicable to the needs of California, and has in preparation elaborate reports embodying the conclusions at which he arrives. As these reports will not be immediately available, the Governor requested an outline of his conclusions for immediate use by the Legislature. As the document presents concisely the results of long thought and investigation, we present it with the explanatory correspondence between the Governor and the State Engineer, as follows:

STATE OF CALIFORNIA, EXECUTIVE DEPT.,  
SACRAMENTO, CAL., July 17, 1886.  
Colonel Wm. Hammond Hall, State Engineer:

SIR: I have called the Legislature to assemble in extra session for the purpose of considering certain fundamental points relating to the irrigation question in California, which are recited in my proclamation of yesterday, the 16th inst.

You have, under legislative instruction, been engaged in studying this question, and are instructed by law to report your opinion as to "the principles which ought to govern" in its elucidation. In my judgment it is essential that the results of your studies should be placed before the members of the Legislature immediately on their assembling, and in as condensed a form as possible. You will, therefore, please prepare an abstract of your opinions on the points at issue, and which are to be treated under specifications first, second and third of my proclamation, and hand it to me at the earliest practicable moment for transmission to the Legislature.

GEORGE STONEMAN,  
Governor.

OFFICE OF THE STATE ENGINEER,  
SACRAMENTO, July 20, 1886.  
To His Excellency George Stoneman, Governor of California:

SIR: Your communication of the 17th inst., calling upon me for an abstract of my report upon the irrigation question as now presented in this State, has been carefully considered, and, in response, I beg leave to hand you the inclosed brief statement. As you have suggested, I have endeavored to make it as concise and pointed as possible. To accomplish this end, many statements are left unsupported by argument or explanation or relation of facts. I can only say that I stand ready to explain them in any particular they or any of them require it.

Very respectfully,  
Your obedient servant,  
WM. HAM. HALL,  
State Engineer.

## The Irrigation Question in California.

California is pre-eminently an irrigation country, and the proper settlement of the questions now before the public on this subject is not only of vital interest to the present irrigation districts but is of primal importance to the future well-being of every county in the State.

There must be irrigation laws in irrigation countries. Such countries are, perforce, classed as "irrigation," because subjected to physical conditions, which render necessary customs and laws not desired in other climates.

There are no irrigation laws worthy of the name in California. In this respect our State is far in the rear of any other civilized country where irrigation has attained nearly so high a degree of development.

The detriment which this condition of things has been to the country—the extent of its check on advancing prosperity—is immeasurably great, and can only be appreciated upon intimate acquaintance with the physical facts and the history of our agricultural growth.

## A Basis for Systemization.

Some defined water-right policy must underlie every system of irrigation, legislation and administration.

The ownership and control of streams—whether by Governments, by the people in common, or by individuals—constitutes the starting point of all water-right systems.

In countries where irrigation is highly developed, streams and their waters are, generally, the property of the public, or of the people in common, and are under control of and supervision by governmental authorities.

In such countries riparian proprietors have certain limited privileges defined by statute, but rights to divert water from streams are conceded to individuals, communities, and companies, generally, by the Governments as representing the people.

In England, where irrigation is not a common practice, and in several of her colonies and the States of the United States where irrigation is just now struggling for legal existence, there are no general systems of public control and supervision of streams.

In England the common law virtually makes riparian proprietors guardians of streams, and these persons, companies, or corporations appealing to the courts in defense of their individual rights, protect the water-courses but indirectly.

In projecting any system for the promotion and government of irrigation and the conservation and administration of streams in California, it is necessary that we know at the outset upon what basis, as to ownership of natural water-courses, we are to proceed.

Although it is not my province officially to express an opinion as to whether or not the English law of riparian rights has become a rule

of property in California, I freely say that, in my opinion, it is a great misfortune for the State if it is the law.

This law, which accords to the riparian, or bank-owning, proprietors a property right in natural streams, has never yet been made the basis of an irrigation system, and is wholly unsuited for such application.

Irrigation in a country like California is a necessary common or public use of waters, which can only be efficiently founded upon public control of water supplies, and this, in turn, must rest on public ownership of streams.

Hence, the irrigation legislative system for California should be based upon the principle of public ownership of water-courses, and not upon that of private ownership of streams which the English riparian-rights doctrine recognizes.

Such privileges or rights as it may be just and equitable to accord riparian proprietors should be defined by statute, at least if they cannot be by the courts, and be protected by administrative action as well as by power of appeal to courts.

The custom of appropriation of waters, practiced in California, is an application of the doctrine of public use of waters. But it is not the only alternative to the system of condemnation necessary to be set up if private ownership of streams is recognized.

We must clearly distinguish between the fundamental principle of public ownership and control of streams, and the unguarded custom of appropriation, which no legislation and crude legislation has permitted and encouraged to grow up under it.

Because in the past California has permitted and encouraged unlimited and unregulated appropriation of waters is no reason why the ownership of natural streams which, by the law of nature, belong to the public, should be vested in riparian land-owners for the protection of such streams.

Because two opposing, powerful, private interests champion, respectively, "appropriation" and "riparian rights"—each affirming that the other is actuated only by private concern—is no reason why the fact should be lost sight of that the first right is founded on public ownership and is or can be subjected to public control, and that the other is founded on private ownership of streams, and cannot be thus regulated for the public good.

Once vest in the State the ownership of all water-courses and waters not rising and continuing on one piece of private property, and excepting, also, those the property of the United States, and we will have established the basis of safe and efficient water-course laws and administration, on which alone can rest an operative system of irrigation legislation.

Once vest in the individual owners of lands bordering on streams a right of property in the streams themselves and we have set up a right contrary to natural law, which must of necessity conflict with public administration, and on which an operative system of irrigation legislation cannot be founded.

The State of California has everything to fear from the private ownership of natural water-courses. She can have nothing to fear from owning and administering them herself. The people of California compose the State. Their prosperity and safety in the future depend upon the conservation and economical use of waters. It is time that the State Government were acting in behalf of the people.

The custom of appropriation of water should rest upon the principle of inalienable public ownership thereof, namely, that all things which are necessary for human use in common, such as air, running water, etc., are public; and hence, that the State, representing the people, may sanction appropriation as a means of apportioning the waters to those who can distribute them to best advantage for the public good.

The riparian right of property in streams is upheld upon the principle that all which rests upon, grows out of, or lies underneath of land belongs to the land-owner, and is subject to his exclusive use and control; and, hence, streams, inclusive of waters, resting upon lands in private ownership, belong to the proprietors thereof.

The principles of public ownership and control of streams are correlative with those of a fair measure of popular freedom from monarchical and feudal rule, and in history they have been repeatedly striven for, and obtained by measures akin to revolution.

That of private ownership of natural water-courses is the outgrowth of monarchical and feudal monopoly of the choice and controlling property interests of a country, and has everywhere been antagonized by popular opinion and resisted by popular clamor, protest and action for centuries past.

It would certainly be an odd spectacle, in this day and generation, and under a popular Government, to see the great commonwealth of California appealing to the few riparian proprietors to protect the courses and conserve the waters which drain from wide empires of public domain, leaning, under pretext of public necessity and common welfare, upon that principle of private monopoly of an element, the use of which is necessary to all men, against which the people of countries under monarchical governments have been openly fighting for generations, and which they have in notable instances set aside or abridged for the public good.

The English riparian ownership of streams

may be an established rule of property in California; but if so it will prove here a multiplication of the established curse it has been to the country where it originated.

The principles which I have said ought to govern may now be impracticable here, because the individual owners of bank lands own the waters which touch them; but it should not be understood that such ownership is a conservator of public interests or is founded on any principle of popular right.

It may be that the custom of water appropriation which has grown up in this State will, unmodified, lead to onerous monopoly of diverted waters and the unjust injury of private rights without due compensation; but this should be no excuse for welcoming a ruling which fixes as a part of our law an exclusive private property right in waters in natural streams.

We should, if possible, ground our system upon the true principle of inalienable public ownership of water-courses—channels and waters—and establish regulations which will prevent the evils of water monopoly in artificial works.

If the streams—channels and waters, whether appropriated or not—belong to the State, it is entirely within the province of the Legislature to correct any and all abuses which have grown, or to prevent such as might grow, out of the custom of water appropriation in California.

It is within the power of the Legislature to provide for the protection of equitable private rights on streams, even though riparian proprietors be denied the right of property, in the stream itself, which the English common law accords them.

It is within the power of the Legislature to provide for the complete protection of streams if the common-law property rights therein, of riparian proprietors, be denied in this State.

It needs neither the recognition of the common-law rights of riparian proprietors nor the action of Legislature, to establish a basis for the protection of navigable streams, although it is necessary to provide State administration of water-courses to check practices which insensibly damage them.

But it is not within the power of Legislature to provide for an efficient administration of streams, or operative system of water-rights, under a law which accords a property right in the streams themselves to the bank-owners.

The difference of result under the two general systems of water-course law results from this:

Under the common-law system, both public and private use of waters, and public control of water-courses, are subordinated to private ownership of streams and waters.

Under the civil-law system, all rights to streams or waters, or to their use, are subordinated to public ownership and control thereof.

Public control does not mean construction of public works, interference with private industry, or the maintenance of an army of officials. After due adjustment, a very little inspection would constitute the State's part of such a system for California.

It is not alone the irrigation interest which has made State control of water-courses necessary in California, as has been abundantly proven by experience.

The mining debris evil is an outgrowth of the common-law system of riparian rights. It never would have assumed damaging proportions under a civil law system of State supervision of water-courses. Capital would never have been largely invested in hydraulic mining if warned in time.

The time is coming when the deposit of sewage and factory offal in our streams will render them foul and even noxious, and will impair their channel-ways. This result will grow under a common-law system of riparian rights, as it has elsewhere, because it cannot be stopped by a riparian complainant until a damage is imminent, will not be stopped until it is apparent, and is always hard to put an end to under this system.

Under the English system of riparian rights invariably grow up many riparian and public wrongs which are noticed and appreciated only after it is too late to prevent and often too late to ameliorate them.

Under this system the right to protect one's self and the stream because of riparian proprietorship, is accompanied with the unregulated right to do many things to the stream which in the aggregate result in great harm.

Under a civil-law system of control of streams, all acts which may affect the stream or its waters are subject to supervision and conditions from the beginning. No seriously damaging results can accrue if the administration is efficient.

The general ownership and management of irrigation works by the State or United States, as a basis for irrigation development and practice, while it might be made to do away with the present riparian-right conflict and with those conflicts which now arise between appropriators, would insure an unending series of contests between governmental officers and the users of water, and would necessitate such an army of employes as would make the system a curse to the land.

This State or the General Government could to much better advantage own and operate railways, telegraphs, city water supply works, or even gas works, than the irrigation works in California. These latter, as a general thing,

are not and cannot be made large unified systems, which may to advantage be operated by employed overseers. The irrigation works of California are destined to number in the thousands, as they do now high up in the hundreds, and for the most part can only be profitably managed by those who use the water.

The ownership of all natural streams—channels and waters—not rising and flowing on one piece of property, and not the property of the United States, should be vested in the State, and remain forever in the State, whether heretofore appropriated or at any future time appropriated or not.

The ownership of all irrigation works and of the water-rights thereto belonging should, in each case, become attached to the lands served in irrigation.

This end is being accomplished in many cases of irrigation development in California, and may be brought about in all, under a proper system of State laws, in the course of time.

It cannot be imposed as a condition at the outset of irrigation work, without so far hampering enterprise as to be a very serious hindrance to the growth of industry—indeed, without absolutely prohibiting very many enterprises of all sizes and grades, and of the first importance to State prosperity.

Under proper State laws the interests of land-owners, irrigators, and of the public generally may be conserved, the dreaded evils of water monopoly be averted, and the desired end of control of distribution by those who actually use the waters may be accomplished, and without embarrassing or prohibiting private or corporate enterprise in the construction of new works.

Irrigation in California cannot be developed under any one form of enterprise. The physical, social and political conditions are such that great latitude must be allowed individual exertion in inaugurating and carrying out works, else our plains and foothills will very long remain unirrigated. There are not only many examples at home but a great fund of precedent abroad to substantiate this conclusion.

The State may impose conditions upon diverters, which will insure the conservation, economical use of, and accounting for public waters, and their ultimate attachment to the lands irrigated; may direct and control works in streams, so as to guard these public properties from injury; may advise upon and collect and furnish information concerning works and practice, so as to contribute to and enhance good results; but she cannot interfere with private enterprise, direct the forms of organization, specify rigidly the location or style of works (except in the stream beds and banks), or designate beforehand the lands to be irrigated by any system of works or diversion of waters, without actually paralyzing the chief and growing industry of the country.

A system of irrigation cannot be developed in a barren, desert country, as is a large part of California where irrigation is most to be desired, upon the basis of an original valuation in the lands to be irrigated, and through the offices of a community of people resident upon those lands: First, because the value is not in the land until after water is put upon it and cultivation has progressed; and second, because people cannot live and be supported on the lands until after capital, in some form, has been expended in bringing out the water.

Therefore, the use of capital in some form must, in almost every instance, precede the presence of population sufficient for the organization of "farming communities," in very many irrigation districts in California.

The acquirement of, or prior claim to, the water rights must precede the use of capital and labor in construction of works, else capital and labor are in jeopardy, and will not undertake the enterprise.

Hence, a system which necessitates the organization of "farming communities" and the acquirement of water-rights by condemning riparian rights before irrigation works can be constructed, would have doomed a large part of the present irrigated districts of California to perpetual sterility, may, if enforced, unnecessarily and unjustly return much of this reclaimed land to its barren condition, and will prevent the development of very much of that which yet lies unoccupied.

The public good in California demands that all available waters be used in irrigation.

In South California this means all waters that can be taken on the surface or brought to the surface of the ground; and the taking and the bringing should be exercised where and how the least measure of loss will be sustained. All interests unite in wanting the waters out of the streams and not in them.

In the southern part of the great central valley of the State the same rule applies, and the unity of interest in the demand for water out of the streams holds good, save only that lower riparian proprietors insist that the water be allowed to run to them so that they may divert and use it, or so that it may spread and naturally irrigate their lands.

Wherever, as in the San Joaquin and Sacramento valleys, there are navigable rivers, the availability of water for irrigation must be secondary to the requirements of navigation as interpreted by the United States authority, which alone has power to permit the abridgment of the navigable qualities of a stream.

The proposition that irrigators should be con-



tent with using the "surplus waters of streams" is not reasonable as a solution of the question in the half of the State where irrigation is most needed:

First, in South California, because there is absolutely no surplus over and above the necessities of irrigation at the time when the crops there raised most need water; second, in the southern half of the great central valley, because, if its resources are to be developed, there will be required for the purpose much more water than riparian proprietors will rank as being surplus; and, third, in both regions named, because, as understood by those who propose the compromise, it would result in the loss of enough water by percolation into stream beds to irrigate and make fruitful an empire of territory.

The proposition that the surplus waters of full and flood periods of streams flow be stored for use in irrigation at times when demand is greater than current supply, is impracticable as a general solution of the irrigation water-supply question:

First, because practicable storage sites of nearly sufficient number and capacity are not in existence; and, second, because the storage of water, as a general rule, costs more than pioneer irrigation enterprise can afford.

That there are very many good and some most excellent sites for water storage, commanding irrigation districts, is true. That some of these are being availed of, and others will be brought into use from time to time, is equally true. But with all that can or ever will be done in this way, in the southern half of the State, the waters of streams, not required in them because of greater public necessity, will be needed out of them to meet the general public necessity for irrigation.

The doctrine of riparian rights, as laid down in the recent decision of the Supreme Court of California, is opposed to the public welfare in any country, but especially in one where irrigation is a necessity, as it is in this State.

It virtually gives to the owners of stream banks a monopoly of streams, including the waters thereof; the public control and use is subordinated to the private property rights of those who hold the waters, and not necessarily for use.

The fact that these rights can be condemned by "farming communities," for use in irrigation, does not alter the case. All private property is subject to condemnation for public use, when the use can be shown as a public necessity.

There can be no question but that by nature the waters are public, and if the law of nature were followed out we should accord the public waters a primordial right to occupy channels carved by them on the face of nature, as by the hand of God, without subjecting them and their channels to the ownership of him who happens to possess the property bordering thereon, or even the soil of their beds.

In this connection we must clearly hold in view the difference between a channel and the soil which constitutes its bed and banks, for this ground may yet be in private ownership.

In the same way, public waters being taken under plea of public benefit by diversion and use, should always remain public property, subject to State control, although the channels or works into which they are taken be in private ownership.

In establishing a system of irrigation laws for California, if we are to proceed upon the basis of the English common law as applied to water courses, we must provide for the organization of all irrigation enterprises, excepting those of individual riparian proprietors, into public or quasi-municipal corporations, with power to assess or levy taxes within themselves, and to condemn private rights for their public use.

Under this system it will yet be necessary to have a State administrative control to guard the streams and administer rights, else we will have eternal wrangling as bitter as now. Yet such administration under this system of law will not and cannot prevent those conflicts which will arise between the administration and riparian proprietors, and between these latter themselves.

If we are to proceed upon the basis of public ownership of streams and waters, we must have a system recognizing the right of appropriation, but regulating diversion and use under rights thus acquired; or one providing for the issuing of water-rights by administrative authority, and for the regulation of water diversions, by such authority.

This system will necessitate local control of streams in natural water districts, and an accounting to and power of appeal to a central State authority.

Under this system, or any, in fact, it will be not only expedient but necessary to have a law for the organization of farming neighborhoods into irrigation districts with the powers of quasi-municipal corporations.

Such organizations will not necessarily be of those who own the canals, but always of those who use the waters, and would be necessarily formed only where the land-owners in a district desired organization of the kind.

That which has thus far been said relates entirely to the principles and forms which ought to underlie and shape an irrigation system in California. As to the definite measure of privilege which ought to be accorded riparian pro-

prietors, it is not a part of my duty to report an opinion.

There will, of course, always be differences of opinion on this point. The exact extent of privilege to be accorded different classes of land-owners or citizens is a subject for representative legislative determination. It is my duty only to indicate the principles which ought to govern in framing irrigation legislation, and the outline of general measures embodying such principles.

The point made and insisted upon in this memorandum, as a matter of principle, is: That riparian privileges should rest, not upon the, so-called, natural ownership of streams, but upon statutory enactment and be subjected to the same measure of control that those of the public, or other individuals, are subjected, in the matter of diversion of waters and management of streams, as they are in other irrigation countries.

Riparian proprietors should have grounds for actions at law to recover for actual damage consequent upon diversions above.

They might be given preferred rights to water for stock and domestic purposes.

They might be given authority to appropriate, and thus hold, water in streams to the extent of their actual, demonstrable, and economical use thereof.

They might be given preferred privileges of appropriation for diversion and irrigation.

In other words, they might, by statutory law, be given all the advantages which, as now claimed, the situation of their lands naturally commands for them, to the extent of actual benefit availed of by them, or to any other extent, if equitable and the people as represented chose to make the law.

But they never can be given the ownership of the streams and of the waters in an irrigation country, as is contemplated by a recent decision of the Supreme Court of this State, and have recourse by injunction against all diverters of waters, not riparian proprietors, without its proving an incalculable hindrance to the development of the country, and almost an insurmountable barrier to the inauguration of a proper public control of water-courses.

The affirmance of the riparian-rights doctrine might drive water appropriators to an opposite extreme ground in order to combat it, and in the endeavor to escape this incubus of private ownership of natural streams and waters, an unregulated right of unlimited appropriation might be set up which might lead to monopoly of waters in private canals and reservoirs. But this result may very readily be averted in legislative action.

If by legislation and constitutional amendment the streams and waters in this State—whether already appropriated or not, or appropriated at any time or not—can be assured as public property—not susceptible of private ownership by any one—and their use clearly declared to be subject to legislative control and regulation, it ought to be done; and when it is done, the foundation will have been laid for operative and equitable irrigation legislation, and administration of water-courses.

These conclusions are grounded upon a study of the fundamental principles spoken of, as applied to the facts we have to deal with in California, and I am confirmed in them by a review of the lessons afforded by countries, such as England, France, Italy, Spain, and others, where experiences with several systems have developed contrasting results.

This memorandum is necessarily general in its terms, and dogmatic in style, seeing that it is intended to announce only primary conclusions. To fully substantiate all its assertions by illustration and argument would prolong its preparation beyond the limits of time available now for the purpose. The third part of the final report on irrigation, now in preparation, of which this is a partial outline of conclusions, will deal with each point here made, in all necessary detail.

Very respectfully submitted,

WM. HAM. HALL,  
To His Excellency, State Engineer.  
GOVERNOR GEORGE STONEMAN.

ETNA SPRINGS, Pope valley, some 16 miles from St. Helena, Napa county, are mostly surrounded with fine scenery and bold mountain views. The grounds form a nearly level park, uniquely laid out, with many cottages placed in irregular yet attractive and neighborly order. The dining-room, library and assembly hall, steam and swimming baths, are kept in good order, and an air of neatness and comfort prevails about the place. The postoffice, kept by Mr. Wm. H. Liddell, proprietor of the springs, affords a great convenience to guests.

FARES TO THE ST. LOUIS CONCLAVE.—A reader of the RURAL asks if there will be a general reduction of fares to St. Louis during the Templars' Conclave, or whether the reduction will be to Knights only. We understand the reduced rates will be made only to Knights and their families and female relatives. All information on the subject may be had by addressing I. P. Allen, care of Bank of California, S. F.

A GOOD PAINT for sheet iron is made as follows: Good varnish, one-half gallon; boiled linseed oil, one-half gallon; add red lead sufficient to bring to the consistency of common paint. Apply with a brush. Applicable to any kind of iron work exposed to the weather.

## PROGRAMME.

### Twentieth National Encampment, Grand Army of the Republic.

SAN FRANCISCO, CAL., AUGUST, 1886.

#### FIRST DAY—MONDAY, AUGUST 2d.

Details from all Posts in the city to be on duty for escort and reception purposes to arriving comrades and organizations, in pursuance of general or special orders.

All of the Posts located in this city, as well as any others in this Department who may feel disposed to do so, are requested to establish headquarters in some public hall or rooms, where they may be prepared to receive and greet all visiting comrades as they arrive, continuing same through the week.

Meeting of Executive Committee of the National Council of Administration at National Headquarters, Occidental hotel.

"Society of the Army of the Potomac."

Business meeting for Army Corps Societies, 11 o'clock A. M.

Business meeting of Society of the Army of the Potomac, at 2 o'clock P. M.

EVENING, 8 O'CLOCK.

Review of the Second Brigade of the National Guard of California, General W. H. Dimond Commanding, at the Mechanics' Pavilion, at 8 o'clock P. M., tendered to the Commander-in-Chief of the Grand Army of the Republic; to be followed by a reception and grand ball to the officers and delegates to the National Encampment, G. A. R., and of the National Convention of the Woman's Relief Corps.

Reception by Mayor of city; oration, poem, etc., etc., 8 o'clock P. M.

#### SECOND DAY—TUESDAY, AUGUST 3d.

Grand Parade, 10 A. M.—Grand parade of the National Encampment, the Grand Army and all kindred societies, in accordance with special programme to be prepared by the Committee on Grand Parade.

EVENING, 8 O'CLOCK.

Parade and escort to Commander-in-Chief and Staff, National Officers and Members of Encampment, and general reception at the Mechanics' Pavilion; said reception to be tendered to the National Encampment, the Army of the Potomac, the Loyal Legion, Woman's Relief Corps and all kindred societies, with addresses of welcome by the Governor of the State, Mayor of the city and Department Commander, in accordance with a special programme prepared by the Committee on Reception.

#### THIRD DAY—WEDNESDAY, AUGUST 4TH.

National Encampment.—10 A. M.—Meeting of the National Encampment in legislative session, to continue through the day.

Meeting of the National Convention of Woman's Relief Corps, at Irving hall, commencing at 10 o'clock A. M.

Excursion, via the San Francisco & North Pacific Railroad, to Santa Rosa and Sonoma Valley, Cal., and reception by citizens thereof.

EVENING.

Grand testimonial concert at the Mechanics' Pavilion, tendered to the Commander-in-Chief of the G. A. R., the Governors of the several States and other distinguished guests, together with the members of the Grand Army and other kindred societies, with chorus of 1000 voices, assisted by 100 musical instruments to render national airs and lyrics.

"Society of the Army of the Potomac."—Grand banquet to the Society, 8 o'clock.

Reception at the several Post headquarters of G. A. R. throughout the city.

#### FOURTH DAY, THURSDAY, AUGUST 5TH.

DURING THE DAY.

Meeting of the National Encampment continued.

Meeting of the National Convention of Woman's Relief Corps continued.

Excursion to and reception by the citizens of Santa Cruz, Cal.

EVENING.

Grand Banquet.—Grand banquet tendered to the officers and members of the National Encampment, to be arranged by the Committee on Grand Banquet.

General reception and entertainment at the Mechanics' Pavilion and at the various Post headquarters.

#### FIFTH DAY—FRIDAY, AUGUST 6TH.

DURING THE DAY.

Meeting of National Encampment continued.

Meeting of the National Convention of the Woman's Relief Corps continued.

Excursion to Monterey, Cal., and grand picnic excursion over the North Pacific Coast R. R.

EVENING.

General reception at the Metropolitan Temple, at 8 o'clock, tendered by the National Convention of the Woman's Relief Corps to the National Encampment of the G. A. R., Society of the Army of the Potomac, Military Order of the Loyal Legion of the U. S., and all kindred societies, with address of welcome by Sarah E. Fuller, National President Woman's Relief Corps, followed by addresses by the Governor of the State, Mayor of the city, Commander-in-Chief and Department Commander of the G. A. R., and other able representatives of the Grand Army and Relief Corps, together with a special musical program, to be prepared for the occasion.

Reception at the several Post headquarters.

#### SIXTH DAY—SATURDAY, AUGUST 7TH.

DURING THE DAY.

Grand excursion tendered to the officers and members of the National Encampment, around the Bay of San Francisco.

EVENING.

Grand Camp fire.—Closing exercises of the week, with a grand camp fire of the combined forces at the Mechanics' Pavilion.

#### MONDAY, AUGUST 9TH.

Excursion to Oakland. Grand reception by the citizens of that city, tendered to the newly elected officers of the National Encampment and members thereof.

#### TUESDAY, AUGUST 10TH.

Excursion to San Jose. Grand reception by the citizens of that city, tendered to the newly elected officers of the National Encampment and members thereof.

#### WEDNESDAY AND THURSDAY, AUGUST 11 AND 12.

Excursion to Sacramento, via Napa valley, reaching Sacramento Wednesday evening, August 11th, where a grand reception will be tendered to the newly-elected officers of the National Encampment, together with members thereof, and continued until the following day.

By order of the General Committee.

S. W. BACKUS, Chairman.

H. BARTLING, Secretary.



## Fertilizers.

The use of fertilizers is constantly increasing in California, but not as rapidly as the interests of producers would warrant. Many held that California soils were different from other soils, and that they had some mysterious way of enriching themselves from air and water which no other soils possess. This is a mistake. It is true that they gain from these agencies, but not enough to compensate for the drain by steady cropping. Of course, some soils need replenishment sooner than others; but it is a fact here, as everywhere, that sooner or later our soils need feeding with fertilizers. Our orchardists, vineyardists and gardeners learn the lesson first, and the receipts from their crops allow them to make investment in fertilizers, which will pay them good returns.

For years the rich fertilizers made from bones and other offal have been shipped out of the State to enrich distant fields. This process should be stopped and there should be a good home demand for all material of this kind. Our advertising columns contain the announcement of the California Bone, Meal and Fertilizer Co., which is now engaged in preparation of fertilizers, and offers them to the farmers of the State. They have issued an interesting pamphlet, which contains description and an analysis of their special manures adapted to different crops, with prices, etc. This pamphlet should be generally read, and can be had by addressing the company at their office, 116 California St., S. F.

## Fruit Drier on Exhibition.

One of the Meeker Sun Fruit Driers, with all the latest improvements suggested by the experience of last season, is now on exhibition at the factory, 5th and Bryant streets, on and after Monday, Jan. 25th.

As now arranged we consider it much the most perfect and economical of any of the various driers to which the attention of fruit-growers has been called. Its various productions are the perfection of purity and excellence, and at the same time the most economical in cost of production. Fruit-growers are invited to examine and test the drier and the fruit prepared in it. Those using this drier last season realized handsome profits on their fruit.

## Complimentary Samples.

Persons receiving this paper marked are requested to examine its contents, terms of subscription, and give it their own patronage, and, as far as practicable, aid in circulating the journal, and making its value more widely known to others, and extending its influence in the cause it faithfully serves. Subscription rate, \$3 a year. Extra copies mailed for 10 cents, if ordered soon enough. If already a subscriber please show the paper to others.

## Successful Patent Solicitors.

As Dewey & Co. have been in the patent soliciting business on this Coast now for so many years, the firm's name is a well known one. Another reason for its popularity is that a great proportion of the Pacific Coast patents issued by the Government have been procured through their agency. They are, therefore, well and thoroughly posted on the needs of the progressive industrial classes of this Coast. They are the best posted firm on what has been done in all branches of industry, and are able to judge of what is new and patentable. In this they have a great advantage, which is of practical dollar and cent value to their clients. That this is understood and appreciated, is evidenced by the number of patents issued through their Scientific Press Patent Agency (S. F.) from week to week and year to year.

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FROZEN MILK IN FEVER.—Dr. E. J. Janeway, a New York physician of some note, acting on a suggestion from a colleague practicing in the country, has given frozen milk to patients whose stomachs did not tolerate ice-cream, and speaks highly of its use in fevers.

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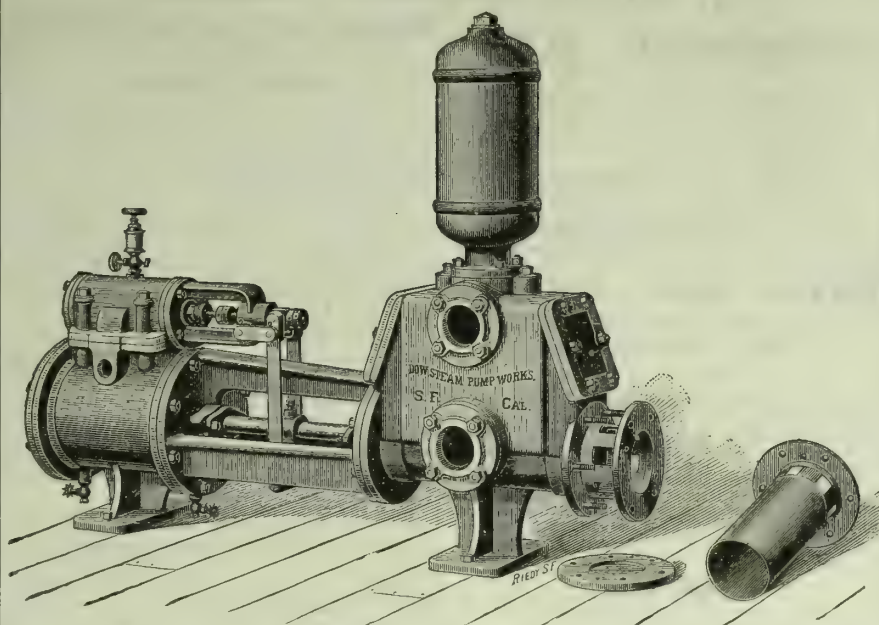
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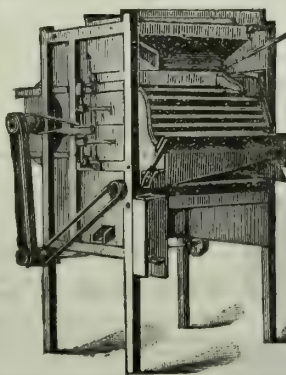
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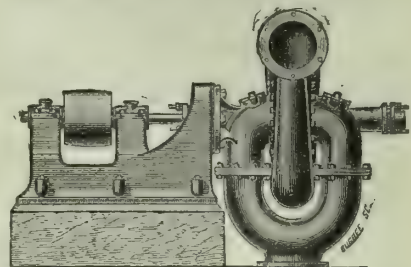
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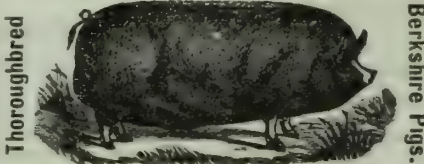
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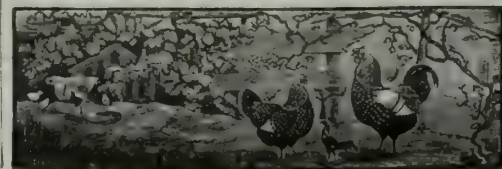
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## CALIFORNIA STATE FAIR—1886.

At Sacramento, Sept. 6th to 18th.

TWO WEEKS.

The Attention of the Farming Community of this State is particularly called to the Liberal Awards, and advantages offered for COUNTY EXHIBITS.

The importance of an exhibit made by separate counties, showing the productive qualities of the various sections of our State, has become more apparent each year since the system was inaugurated by this Board. Recognizing the interest made manifest in the past by both the public and the exhibitors, through whose energy and enterprise valuable agricultural lands have been brought to the notice of the world, and counties with small populations have increased in a manifold degree, by reason of the producer having come forward with his products that were of such quality as to enable him to meet all competitors, the Board have deemed it proper to increase the premiums in this Department, and to that end have appropriated \$2000 to be distributed among the various counties making displays under the following provisions: To those who may have charge of the exhibits, we would call their attention to the fact that these awards will be made for the most extensive, perfect, and varied exhibit of Farm Products (exclusive of live stock) exhibited as a County Production. Thus it will be seen that it is to be wholly devoted to the products of the farms located in the county where the exhibit is made from, and does not include manufactured goods of any kind or character except those grown and raised in the county from whence the display comes.

For the best display, as per explanation above, First premium of \$500, cash. The remaining exhibits shall receive premiums in proportion to their excellence, as compared with that receiving the First Premium. Competition to be between counties only. That is to say, that the entire exhibit made by one county must compete against the entire exhibit of another county. The premium awarded to each county exhibit will be paid to the committee in charge of said exhibit.

The State Board of Agriculture earnestly desires the hearty co-operation of the various subordinate Granges throughout the State, in making this exhibition of California's products a success, whereby the varied products of different localities may be fully shown. We would ask the appointment of a committee from the Grange in each county to call upon and urge the patrons to make a display representing their respective counties.

Address the Secretary at Sacramento for Premium Lists and other information. JESSE D. CARR, President. EDWIN F. SMITH, Sacramento.

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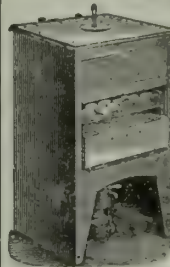


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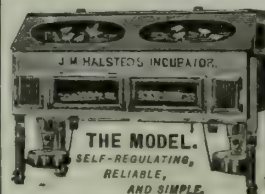
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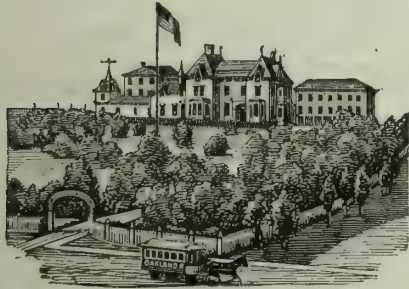
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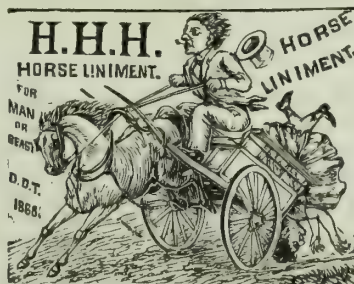
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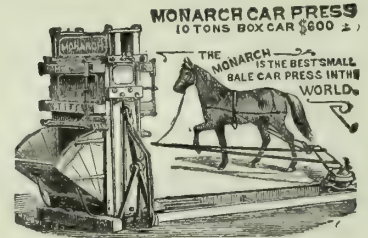
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## DOMESTIC PRODUCE, ETC.

SAN FRANCISCO, July 28, 1886.

There is a fair trade in leading staples, but without notable change in values. Sales of wheat are reported in the interior up to an equivalent of \$1.30 in the city, which is rather above the city rates. Reports of lessened production, as shown by harvesting, continue, and general opinion is changing notably as to the probable amount of available supplies for the year.

The following is the latest by cable:

LIVERPOOL, July 28.—WHEAT.—Firm. California spot lots, 48 to 50 cts; off coast, 38s just shipped, 34s, nearly due, 35s; cargoes off coast and on passage, firm; Mark Lane Wheat and Maize, firm. English country markets, strong; French quiet. Wheat in Paris, turn dealer; quantity of Wheat on passage to Continent, 600,000 qrs.; Wheat and Flour on passage to U. K., 2,000,000 qrs.

## Foreign Review.

LONDON, July 26.—The *Mark Lane Express*, in its review of the British grain trade, says: "A large acreage of the best cereal crops has been damaged by rain. The supplies of native wheat are much restricted, causing values to improve 6d to 1s. The sales of English wheat during the past week were 27,294 quarters, at 31s 6d, against 32,254 quarters, at 33s 11d during the corresponding week of last year. Flour is steady. Foreign wheats are lifeless. Buyers do not show the slightest anxiety as regards the future. The prices of American red wheat favor the buyers. There were 11 arrivals and 5 sales; two cargoes were withdrawn and four remained, one of which was American. In to-day's market wheat was of slow sale, and prices were not improved. English flour was scarce and prices were against the buyers. Foreign flour was dull and neglected. American corn was 3d dearer. Round corn was steady, but prices were no dearer."

## English Wheat Markets.

LONDON, July 26.—The wheat market has rather a weaker feeling.

LIVERPOOL, July 26.—The wheat market is quiet and lower to sell.

## London Agricultural Seed Trade.

MONDAY, July 12, 1886.

Messrs. John Shaw & Sons, seed merchants of 37 Mark Lane, E. C., write that the quietude usual at this season continues to characterize the market for farm seeds. Some little business is taking place in new French lettuce, lower and more tempting rates having now come to hand. Mustard and Rape are without quotable variation. Cloverseed, in the absence of transactions, call for no remark. Less money is asked for Hempseed, but Canary keeps fairly steady. Orders still come to hand for Blue Peas. In Feeding Linseed there is no alteration of importance.

## New York Wheat Market.

NEW YORK, July 25.—Wheat closed heavy at a slight rally, with net declines of 3/4c for August at 84 1/2c, 10c for September at 85 1/2c, October at 86 1/2c, and November at 87 1/2c, 11c for December at 88 1/2c and 1 1/4c for January at 90c.

## Hops at the East.

NEW YORK, July 22.—The first bale of the new crop of hops, known as "Palmer Seedlings," grown at Cooperstown, N. Y., was received at the Produce Exchange by John R. Scott & Co. yesterday, and was bought by the Long Island and New York Ale-brewing Company at 50 cts per pound.

UTICA (N. Y.), July 23.—The *Herald* prints to-day reports from 10 hop-growing counties of the State, touching the present condition of the crop. From every quarter comes the same story of devastation and the same predictions of failures. None of the writers estimate the yield at more than half the usual average, while most of them put it at one-eighth to one-fifth. All through the hop-producing region it is evident the vine has gone to pieces in the low grounds, while upland yards are not so badly off, owing to the later growth of the vine. Taking the whole territory into consideration, it is estimated the crop will not exceed one-third the usual yield.

CANAJOHARIE (N. Y.), July 27.—The last ray of hope entertained by the hop-growers throughout New York State vanished this morning. During the night a heavy rain occurred. The growers thought that this would have a good effect, but instead, the yards which yesterday appeared green and healthy, are now black and utterly ruined. Many growers destroyed their yards a week ago, and their example will now be followed generally. Where one week ago it was thought that a quarter of an average crop would be harvested, now it is believed that not a pound will be picked. Growers are very much disheartened, and their predicament is only equalled by that of the hop-pickers. Good 1885 hops now bring 30c per pound against 10c six weeks ago.

NEW YORK, July 25.—There has been no change in the situation. Brewers buy only for current needs, and holders sell only at prices somewhere near what the market can be expected for. In the critical condition of the crop no one is inclined to indulge in wild speculation. Some contracts for 1886 hops are said to be still entered here at 30 cents, but parties considered good, will not name less than 40c. Reports from Central New York state that the hop yards are looking worse, with the loss increasing. The *Union Herald* estimates the crop at from a third to a quarter of a full yield, and places the crop of the country as follows: Coast, 50,000 bales; New York, 45,000; West and New England, 15,000. The normal yield is 200,000 bales, of which 125,000 are needed for home consumption. Coast, crop of 1885, common to choice, 20 to 25 cents.

## Eastern Wool Markets.

NEW YORK, July 25.—Trade is slow, chiefly because holders are unwilling to offer any concessions

At the same time, manufacturers are loth to invest until fully satisfied with the outlook for the product. Prices remain high, with the demand chiefly for medium wools, on which some gain has been made. Among the sales were 23,000 pounds of spring California at 41 cents, and 40 bales of California at 20 1/2 to 21 cents. The market is more active, manufacturers having shown greater interest. Prices are steady, holders making no concessions. There is a sharp call for medium wools, which are fully 20 per cent higher than at the same time last year. Fine wools are quiet, though unwashed wools—California and Territories—are in greater favor. California wools range from 10 to 25 cents, Oregon and Washington Territory from 18 to 27 cents, Nevada from 19 to 22 cents, Wyoming from 18 to 27 cents. Among the sales were 397,000 pounds of California spring and Oregon at 19 to 21 cents. The Philadelphia market is strong and sales are fully up to the average. Holders are independent about realizing except on their own terms. Among the sales were 2000 pounds of scoured California at 52 cents, 10,000 pounds of scoured California at 54 cents, 15,000 pounds of scoured California at 56 cents and 50,000 pounds of California at 23 cents.

NEW YORK, July 27.—Wool is firm and fairly active. Domestic fleeces, 27@36¢ lb; pulled, 14@35¢; Texas, 60@25¢.

PHILADELPHIA, July 27.—Wool is steady at unchanged prices.

BOSTON, July 27.—Wool is firm with good demand. Ohio and Pennsylvania N fleeces, 33@34¢ lb; N. X., 32@33¢; Michigan N fleeces, 32@33¢; N. 1 Wools, Ohio, 37@37 1/2¢; do Michigan, 36@37¢; medium unwashed Wools, 25@26¢.

## California Fruit at the East.

CHICAGO, July 22.—A special train of eight cars, with a large consignment of California fruit, arrived to-day, and the shipments will be distributed among the following firms: Earl Bros. receiving three cars, Butts & Fry two, and Thacker Bros. three. The fruit was mostly in good condition. The prices were low, owing to a cut made by Porter Bros. Bartlett Pears sold at \$2@2.50, Plums at \$1.50@1.85, Peaches at \$1.50@1.90, according to their condition; some in poor order, not bringing more than \$1; Nectarines, \$1.50@2; Grapes, \$1.50@1.90. Oranges, which are rather late in the season, are quoted at \$3.75@4.75, according to quality.

## Local Markets.

BAGS.—Purchases have been more free and rates are slightly advanced. It is reported that 10,000 Detrick Wheat Bags, 22x36, in perfect order, were sold by auction Tuesday at 6 1/2c; balance of offering of 50,000 withdrawn. The market is apparently firmer, as there are no bags offering under 7 1/2c.

BARLEY.—Various descriptions have advanced considerably since our last report, the best lots rating 7 1/2c higher per cbl. There has been a reaction, however, and to-day the market is softer. We note sales on call to-day: Buyer 1886—100 tons, 94 1/2c; 100, 95c. Seller 1886—500 tons, 88; 900, 88 1/2c. No. 1 Brewing, buyer season, after September 1st—200 tons \$1.17 1/2c cbl. Buyer season—100 tons, 87 1/2c. Buyer 1886—200 tons, 94 1/2c; 200, 94c. Buyer 1886, after August 1st—100 tons 94c. Seller 1886—100 tons, 88c; 200, 87 1/2c; 200, 87 1/2c; 100, 87 1/2c; 400, 87 1/2c; 200, 87c. No. 1 Brewing, buyer season, after September 1st—100, \$1.17 1/2c; 100, \$1.17 1/2c.

BEANS.—There has been a slight improvement in most kinds.

CORN.—Corn holds last week's advance, and Nebraska has advanced again to \$1.15. Choice California corn is out of sight.

FEED.—Bran is \$1 per ton higher. Hay rates are as follows: Alfalfa \$5@9; Barley, \$3@8; Oat, \$2@6. Wheat, \$6@13 1/2 per ton. Trade is fair and supplies moderate.

HOPS.—Old Hops have advanced to \$15@17 1/2c and new are generally quoted from 25 to 28c. It is telegraphed from New York to-day July 28th: "We hear that a prominent brewer, who had a representative in the hop district, offered 34c for 1886 Pacifics, laid down here, while 30c, free on board, on coast is the highest price actually touched thus far." It is evident that the New York crop is in shocking shape as shown by dispatches printed elsewhere.

OATS.—New Oats are being well received, owing to a bare market. Black Oats are selling much higher than quoted last week.

WHEAT.—Wheat is selling moderately as described elsewhere. To-day call sales were as follows: Buyer season—700 tons, \$1.23; 200, \$1.22 1/2. Seller 1886—1700 tons, \$1.22; 500, \$1.22 1/2; 600, \$1.21 1/2 per cbl. Buyer season—200 tons, \$1.22 1/2. Buyer 1886—200 tons, \$1.22 1/2. Seller 1886—100 tons, 1.21 1/2; 500, \$1.21 1/2 per cbl.

## Our Agents.

OUR FRIENDS can do much in aid of our paper and the cause of practical knowledge and science by assisting Agents in their labors of canvassing, by lending their influence and encouraging favors. We intend to send none but worthy men.

JAMES C. HOGAN—California.  
G. W. INGALLS—Arizona.  
E. L. RICHARDS—San Diego Co.  
R. G. HUSTON—Idaho and Montana.  
Geo. McDowell—San Luis Obispo and Santa Clara Co's.  
FRANK W. SMITH—Idaho and Montana.

## Cheap Money for Farmers.

Farmers in this State will be glad to learn that they can borrow on mortgage any amount, from \$5000 to \$500,000 from S. D. Hovey, 330 Pine St., San Francisco, at 6 to 7 per cent and taxes.

Misfit institutions bring grist to the mill. Muller's optical depot, 135 Montgomery St. x

## Market Information.

## Bags.

Sales the past week have been unusually large to consumers at a wide range in prices. It is claimed that the bulk of outside holdings has been sold, and consequently, values are on the advance. It is reported that the balance of the San Quentin bags were sold this week at 6 1/2 cts; now jobbed out at 7 1/2 cts. Heavy sales, in lots, are said to have been made in the interior to farmers direct, at prices shaded on asking rates here.

## Cereals.

London cables have given the past week two advances in wheat in the English country markets, aggregating 1s to 2s per quarter, or about 5 to 10 cts per cental. The advance was brought about by cold, wet weather, and reported damage to the crop. Although English-grown wheat advanced on an average about 7 1/2 cts, yet foreign wheat only went up in sympathy 2 cts.

Telegraphic and mail advices report that estimates of the wheat crop of this country have been reduced until as low as 390,000,000 bushels is given by a good authority. Advices also concur in saying that the exports from the Atlantic seaports will be unusually heavy.

The corn crop of this State promises to be considerably larger than last year; but the crop of the United States will be below last year's, owing to the drouth at the West.

It is claimed that western farmers will market their grain early, owing to their being pressed for funds, and consequently exporters and millers are bearing the wheat market so as to buy cheap. The same tactics, it is said, are being pursued in this State through the Call Board by mining stock speculators, aided by a few grain dealers. It is claimed they will cross orders and otherwise fool with trading on call so as to keep prices down until they have bought the bulk of the farmer's crop, after which they will send prices up. It is claimed by well-informed parties that over three-quarters of the sales recorded on call are cross-orders, so as to crush out small operators and keep prices down.

Throughout the week, wheat, barley and oats have held to strong prices, with an advance obtainable for parcels to meet pressing wants. Lower charters for ships and quite a number of vessels, having laid about up, caused higher prices for wheat, while barley advanced under strong eastern buying to ship before an advance in overland freights. Old oats did better under very light stocks and a fair demand, while new continued firm and steady.

The bulk of new oats received so far this season are poor, and would not command attention were it not for stocks being exhausted.

It is claimed by well-informed parties that more barley has been purchased this month for shipment East than was purchased the entire season of 1885-86.

Farmers not being free sellers have disappointed exporters and ship-owners, and consequently ships have accepted lower charters, with the rates weak at the decline.

Wheat closed very strong for sample parcels, but barley and oats under heavier supplies favored buyers.

Press telegrams from England gave a firm wheat market, without an advance, but private cables report an advance obtainable for cargoes for prompt shipment.

## Dairy Product.

Gilt-edged butter continues in demand at from 21 to 22 cts in consignment lots with an advance of 1/2 ct. obtainable in jobbing lots from stores. But the stock and also receipts of second and third grade butter are very heavy, with dealers reporting considerable trouble to place consignments even at concessions on the low prices quoted. Cheese continues to hold to strong prices, with a good home trade reported. At the close to-day gilt-edged butter sold at 23 cts to 24 cts by the box.

Receipts of Eastern eggs have been very heavy, and as they have been forced on the market, the price of fair to good California eggs had to be sold low, but strictly choice have held up. It is now stated that the shipments of Eastern eggs have stopped, owing to an advance in the supply market. Private telegrams from shipping points East quote the price 17 cents, which is more than they sell for here.

Poultry of all kinds except ducks were strong and in good demand up to Tuesday, with an advance obtained for choice, large, well-conditioned stock. On Tuesday, under free receipts, dealers were more offish, and the market was weaker, although prices were maintained. The consumption is all of 30 per cent more than at the beginning of the present month.

Retail poultry dealers have an association for mutual protection and also to keep, so said, prices of poultry reasonably low. Recently they notified poultry commission merchants they would not buy from a firm that sold to a retail dealer not in the association. It is claimed that by this action strong buying competition is kept down and therefore not as high prices paid as would if all were allowed a fair chance.

## Fruits.

Blackberries have continued to arrive freely throughout the week, but prices were well maintained up to Monday, when they fell 50 cents a chest. Several canners contracted early in the season at \$3 a chest for from 1000 to 2000 chests each.

Apricots are going out, yet prices do not improve as canners will not pay over four cents for the very best, down to three for fair.

Peaches have been coming in more freely, allowing canners to buy the more choice varieties at from 80 to 90 cts a basket. On Monday only 1200 baskets came in, which caused an advance to be asked, but yesterday nearly 4000 were received when prices went off again. The local trade is increasing, but then to the canners, dealers look to market the bulk received.

Strawberries and raspberries have moved slowly throughout the week at lower prices. The trade is not running on them, consequently canners have it their own way.

Figs, if choice, and in good condition, found buyers at 75 cts for large boxes, but those in poor condition sold at almost any price.

Apples held up to good prices up to Monday when freer receipts sent prices off. The quality is improving.

Grapes are coming in more freely, but the bulk

received are hard to sell, owing to their being too green. The market is weaker and lower.

Nectarines sell steadily at \$1 to \$1.35 a box.

Currants come in quite freely for the time of the year, and sell at from \$3 to \$4 a chest, first price by the chest, and the last named by two or three drawers at a time.

Pears are coming in very freely, but as the bulk is under contract to canners, choice varieties hold to strong prices.

Sweet apples are about unsalable. A consignment is now on the market at 50 cts without finding buyers. Choice apples were in good demand for shipping, and fetched fully \$1.75 a box.

To-day the following fruits closed weak: Peaches, apricots, raspberries, blackberries, strawberries, grapes; and the following closed firm: Canning apples and choice pears.

## Hops.

The market presents very few features worth note. Buyers talk indifferent, yet they are taking all contracts for new crop delivery at a range of 20 to 27 1/2 cents per lb for fair to extra choice. European advices report the crop prospects in England and also on the continent good for about an average yield to the acre; but it is also stated they will yield the new crop with a lessened stock compared with last year. The light stocks combined with a crop reports from New York brought on a large speculative consumptive demand both in England and Germany, which sent prices to a good round figure.

## Live-stock.

Beef, sheep and lambs are unchanged. The supply offering on the market is not excessive, and consequently choice commands full prices. Buyers are talking hogs down and will not make full bids. It is claimed that when the packing season commences, grain and dairy-fed hogs will rule higher than at present. For the block there is only a moderate call. In cows there is nothing doing, so far as can be ascertained. The horse market is in a contradictory condition. Some dealers report a good inquiry for work horses, while others report no demand. For horses for general use there is a fair inquiry, with matched animals fetching good figures. Single-lotters are scarce and wanted.

The following are to-day's meat prices: Beef—Stall-fed 7 1/2c @ 7 3/4c lb; grass-fed, extra, 6 1/2c @ 7c; first quality, 5 1/2c @ 6 1/2c, second, 5 1/4c @ 6c; third, 4 1/2c @ 5 1/4c. Calves, small, 8@9c; larger, 6 1/2c @ 7 1/2c lb. Mutton—Ewes, 4 1/2c; wethers, 4@5c. Lamb—Spring, 6@6 1/2c lb. Pork—Live hogs on foot, 3 1/4c @ 4c for grain and dairy fed; 2 1/2c @ 3c for soft; dressed, 6@7c for hard, and 4@5c for soft. Grass-fed stock sell on foot, gross weight, at one-half the price they fetch dressed; stall-fed, on foot, fetch one-third less than they sell at dressed.

The *Grocer and Country Merchant* of July 24 contains the following sales of live-stock for the week as follows: San Francisco Stock Yards—749 cattle (large); choice, \$4@5; 813 cattle (medium); fair condition, \$3@5; 213 cattle (mixed); rather thin, \$2@3; 891 calves, \$3@5, \$5@6, \$9@10, \$13@15, \$15@17.50, 6245 sheep, \$2@3, \$2@3, \$2@3, \$3@4, \$3@4, 2896 lambs, \$1.50, \$1.75, \$2.00, \$2.15, \$2.35; 2487 hogs, 3c, 3 1/2c, 3 3/4c, 4c. Oakland Stock Yards—243 cattle (large); fair, \$4@5; 141 cattle (medium); good, \$3@4; 206 calves, \$3@5, \$4@5, \$5@6, \$6@7, \$14@15; 938 sheep, \$2@3, \$2@3, \$3@4, \$3@4, \$2@3, 621 lambs, \$1.50, \$1.75, \$2@3, \$2@3; 387 hogs, 3 1/2c, 3 3/4c, 4c, 4 1/2c.

NOTE.—Since putting the above in type, an advance of 1/2c per lb has been made on beef; and it is also reported that an advance of 1/2c in sheep and lambs is under contemplation by wholesale butchers.

## Vegetables.

Onions have ruled low throughout the week under heavy receipts and a strong selling pressure.

Potatoes ruled weak and low up to Monday, when an improved feeling set causing the market to close firmer with a slight advance followed on yesterday. Choice, well matured, suitable for distant orders, are given the preference. Considerable arriving are either wormy or rooty, which operate on their being placed quickly at satisfactory prices; some sold as low as 50 cents.

String beans continue slow, owing to canners' indifference in buying above 1 1/2 cents for the more choice varieties.

Cabbage and carrots are in liberal supply and weak, but beets and parsnips continue firm and steady.

Egg plants, green okra and green peppers have ruled slow throughout the week, with quotations hard to obtain correctly.

Cucumbers have fluctuated slightly, but as soon as an advance of 5 or 10 cts was established heavy receipts broke them again.

Green corn under a good demand and lighter receipts have been steadily advancing. After this week, it is claimed, receipts will be extremely light up to about the middle of August, when late corn will come in. The crop of late corn is unusually large.

Tomatoes are coming in more freely, causing lower prices to rule. Yesterday over 1500 boxes came in, and broke prices until it was difficult to sell choice at over 30 cts for large-sized boxes. Canners buy at from 20 to 30 cts a box.

## Wool.

Receipts are light, as are the stocks in this city, which cause lessened trading owing to the poor selections to offer buyers. Sales have been made the past week at extreme prices. Some medium to fine merino, clean, healthy and light, was placed at as high a figure as 28 cents per lb. It is also said that some crossbred has also sold well up. Buyers and sellers are very reticent regarding the higher prices and it is only in an indirect way they can be learned. Eastern and foreign advices continue to report a strong market, with still higher prices looked for before the close of the year.

## Miscellaneous.

Beans are strong at a slight advance, particularly white varieties. The tonnage movement compares with last year at this date as follows:

	1886.	1885.
On the way	318,834	227,481
In port, disengaged	52,064	100,519
In port, engaged	51,651	16,562

Totals 422,549 344,562  
The above gives a carrying capacity as follows:



1886, 675,126 short tons; 1885, 551,139 short tons, increase over last year, 124,987.  
Choice to extra choice hay is in light supply, with the market firm.  
Bran is higher, as are middlings, with a strong closing.  
San Francisco, July 28, 1886.

Domestic Produce.

WEDNESDAY, July 28, 1886.	
<b>BEANS AND PEAS.</b>	
Bayo, cal.....	1 35 @ 1 45
Butter.....	1 35 @ 1 40
Custor.....	1 75 @ 1 85
Pea.....	1 15 @ 1 25
Red.....	1 15 @ 1 25
Pink.....	1 15 @ 1 25
Large White.....	1 75 @ 1 85
Small White.....	1 75 @ 1 85
Lima.....	1 75 @ 1 85
Mid Peas, blk eye.....	1 50 @ 1 60
do green.....	1 00 @ 1 10
do Niles.....	1 25 @ 1 35
<b>BROOM CORN.</b>	
Southern.....	3 @ 4
Northern.....	4 @ 5
<b>CHICORY.</b>	
California.....	4 @ 5
German.....	6 @ 7
<b>DAIRY PRODUCE, ETC.</b>	
<b>BUTTER.</b>	
Cal fresh roll, A.....	22 @ 23
Pickle roll.....	20 @ 21
Parkin, new.....	10 @ 11
Eastern.....	10 @ 11
<b>CHEESE.</b>	
Cheddar, Cal. B.....	7 @ 8
Eastern style.....	10 @ 11
<b>Cal. ranch, doz.</b>	25 @ 26
do store.....	20 @ 21
Ducks.....	15 @ 16
Oregon.....	15 @ 16
Eastern, by ex.....	15 @ 16
Pickled here.....	20 @ 21
Utah.....	20 @ 21
<b>FLED.</b>	
Bran, am.....	15 @ 16
Commercial.....	24 @ 25
Hay.....	5 @ 6
Middlings.....	16 @ 17
Oil Cake Meal.....	28 @ 29
Straw, bale.....	35 @ 36
<b>FLOUR.</b>	
Extra City Mills.....	3 75 @ 4 00
do Country Mills.....	3 60 @ 3 85
Superfine.....	2 75 @ 3 00
<b>GRAIN, ETC.</b>	
Barley, feed, cal.....	85 @ 90
do Brewing.....	1 50 @ 1 60
do new.....	1 00 @ 1 10
Chevalier.....	1 25 @ 1 35
do Coast.....	1 25 @ 1 35
Blackhead.....	1 00 @ 1 10
Corn, White.....	1 10 @ 1 20
Yellow.....	1 10 @ 1 20
Small Round.....	1 25 @ 1 35
Nebraska.....	1 30 @ 1 40
Oats, new.....	1 30 @ 1 40
do No. 1.....	1 10 @ 1 20
do No. 2.....	1 00 @ 1 10
do Oregon.....	1 10 @ 1 20
Wheat, No. 1.....	1 25 @ 1 35
do No. 2.....	1 10 @ 1 20
Choice milling.....	1 30 @ 1 40
<b>HEBES.</b>	
Dry.....	15 @ 16
Wet, salted.....	8 @ 9
<b>HONEY, ETC.</b>	
Beeswax, B.....	20 @ 21
Honey in comb.....	30 @ 31
Extracted, light.....	3 @ 4
do dark.....	3 @ 4
<b>HOPS.</b>	
Oregon.....	15 @ 16
California old.....	15 @ 16
do new.....	25 @ 26
<b>ONIONS.</b>	
Red.....	20 @ 21
Silver skin.....	20 @ 21
<b>STUTTSBURG.</b>	
Walrus, Cal. B.....	7 @ 8
do Chile.....	7 @ 8
Almonds, hd shd.....	6 @ 7
Soft shell.....	10 @ 11
Strail.....	11 @ 12
Pecans.....	10 @ 11

Fruits and Vegetables.

WEDNESDAY, July 28, 1886.	
<b>FRUIT MARKET.</b>	
Apples, box.....	1 50 @ 1 60
do red.....	1 50 @ 1 60
Apricots, bx.....	1 00 @ 1 10
Bananas, bunch.....	1 75 @ 1 85
Blackberries, ch.....	3 00 @ 3 50
Cherries, cr.....	35 @ 40
Cherries, blk.....	35 @ 40
do white.....	35 @ 40
do Royal Ann.....	40 @ 45
Cherry plums.....	25 @ 30
Cranberries.....	7 00 @ 10 00
Currants, chest.....	3 00 @ 3 50
Figs, bx.....	40 @ 45
Grapes.....	50 @ 55
do Rose Perle.....	1 00 @ 1 25
do Marcat.....	75 @ 1 00
Limes, Mex.....	9 50 @ 10 50
do Cal box.....	3 50 @ 4 00
Lemons, Cal, bx.....	2 50 @ 3 00
do Sicily, box.....	3 50 @ 4 00
do Australian.....	75 @ 1 00
Nectarines, box.....	1 50 @ 1 75
do Tahiti, M.....	1 50 @ 1 75
do Mexico, M.....	1 50 @ 1 75
do Panama.....	1 50 @ 1 75
Peaches, bx.....	50 @ 55
do basket.....	40 @ 45
Crawfords, bx.....	75 @ 1 00
do basket.....	85 @ 1 00
Pears, bx.....	50 @ 55
do basket.....	30 @ 35
do Bartlett, bx.....	1 25 @ 1 50
do do basket.....	40 @ 45
Persimmons.....	1 @ 1 25
Jap, bx.....	1 @ 1 25
Pineapples, doz.....	4 00 @ 5 00
Pomegranates, b.....	1 @ 1 25
Plums, B.....	1 @ 1 25
Prunes, bx.....	1 @ 1 25
Quinces, bx.....	1 @ 1 25
Raspberries, ch.....	6 00 @ 9 00
Strawberries, ch.....	4 00 @ 5 00
Watermelons.....	5 00 @ 12 00
<b>DRIED FRUIT.</b>	
Apples, sliced, B.....	1 1/2 @ 1 25
do evaporated.....	6 @ 7

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Funk's Calf Nipple is just as important for calves as the nursing bottle is for children. The saliva fluid is necessary for proper digestion of the food, and without the Nipple the calf drinks too fast, takes the milk in bulk and causes bloating, scours and indigestion. The Feeder was invented to raise better calves with less trouble. No air swallowed, no fingers chewed, no ears sucked. It teaches the calf to feed from the pail without assistance. The Nipple always connects with the milk and the calf will soon wean itself. Price, 75 cents; post-paid, 85 cts.



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AND SUCKING-COW MUZZLE,

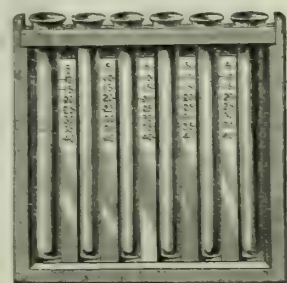
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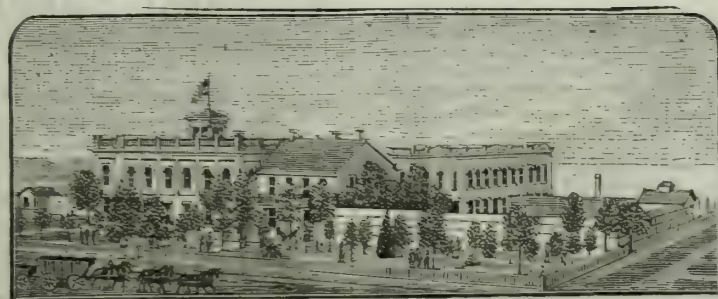
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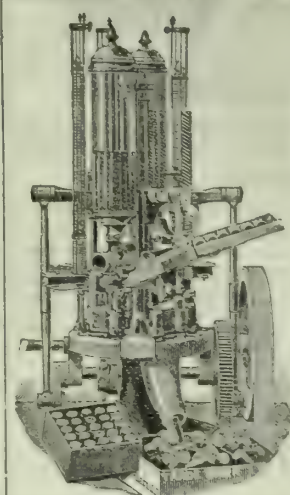
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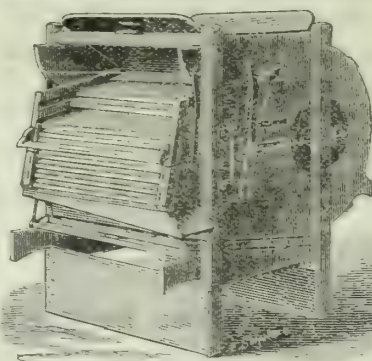
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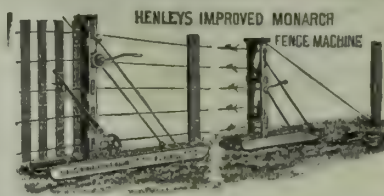
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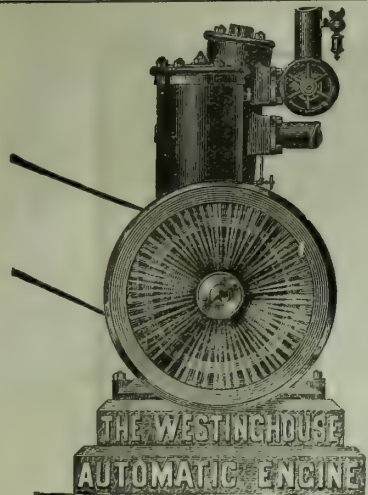
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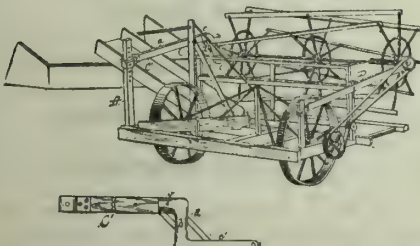
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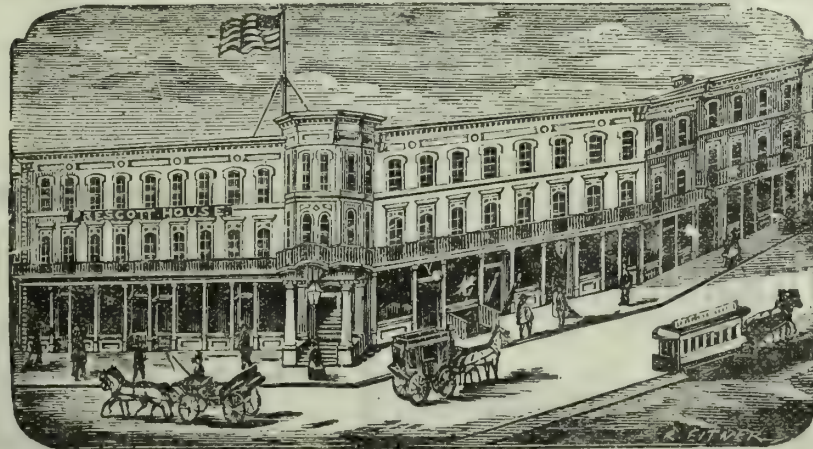
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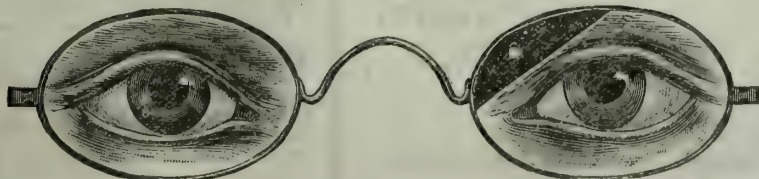


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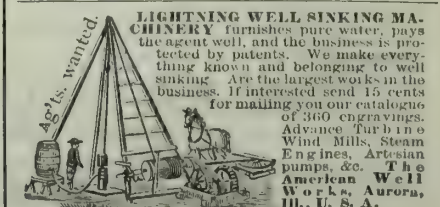
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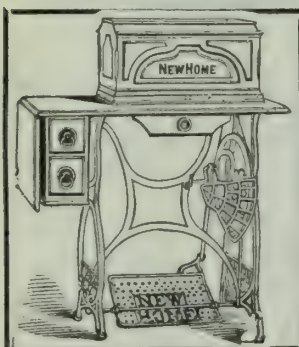
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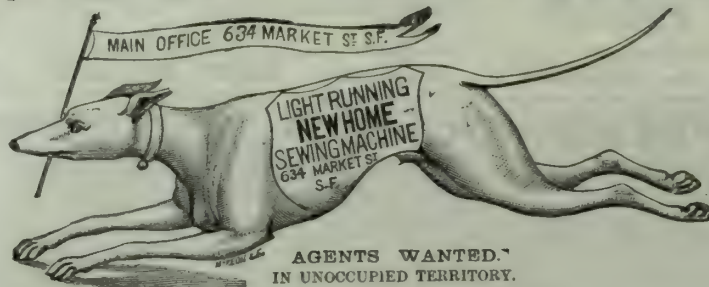
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# PACIFIC RURAL PRESS

Vol. XXXII.—No. 5.]

SAN FRANCISCO, SATURDAY, AUGUST 7, 1886.

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## A Heroine of the War.

One of the actors in the late war, whose form is not seen in the ranks of the veterans, and whose name is not made prominent in the lists of distinguished attendants upon the Encampment of the Grand Army, is the quiet lady whose portrait appears upon this page. She is in truth a heroine of the war and deserves a share in the glory which justly pertains to the country's defenders. Her work was quiet and unostentatious, but it was nevertheless full of patriotism and self-sacrifice and noble accomplishment, as many of the soldiers who are with us this week can testify. We have deemed it fitting to mention her as deserving a portion of the honors which the popular heart is now so freely pouring out upon the veterans, and we are sure that her deeds will find no warmer appreciation than in the thoughts of RURAL readers.

One of the noted figures of the War of the Rebellion, who has since made her home in California, is the lady who was known among the soldiers as "Mother Bickerdyke," and who did as much as any single individual could do to alleviate the sufferings of the sick and wounded. She is a true heroine, having sacrificed her comfort and her time for years in carrying on the benevolent work she commenced at the beginning of the war. She followed the armies to the field with the sole intent of caring for and nursing the soldiers who might become injured or sick while on duty.

Mrs. Mary A. Bickerdyke's father, Hiram Ball, was a soldier in the war of 1812. She was born in Knox county, Ohio, July 19, 1817, and was married to a widower, Robert Bickerdyke, in 1847. They resided in Cincinnati until her husband's failing health induced him to emigrate with his family to Gainesborough, where he died in 1853. Mrs. Bickerdyke supported herself and her two younger children by working in the hospitals.

She was thus well prepared for her noble work in the war. During the spring of 1861 she went to Cairo to take charge of sick and wounded soldiers and also to distribute sanitary stores. After this she was constantly laboring in the military hospitals and on the battle-fields until the end of the Rebellion, her course having been with the great Western armies.

The places where she did her most noted work were Fort Donelson, Shiloh, Savannah, Corinth, Memphis, Vicksburg, Huntsville, Chattanooga and Missionary Ridge. During the Georgia campaign she was at Resaca and Kingston in the hospitals. At Altoona Pass and Marietta she was in the field hospitals, and was at Atlanta during the whole siege. The following January she went to Wilmington to care for our prisoners, and to Beaufort, and from thence to Washington. She was engaged in work for soldiers for several years after the war.

The labors of Mother Bickerdyke were highly appreciated by the surgeons, and among the soldiers she was honored with the greatest esteem and affection. Many of the prominent generals testify to her energy, faithfulness and great value in her chosen sphere. In all the prominent sanitary organizations during the war she was well known and appreciated. A woman of great courage, strong common sense and physical strength, she was enabled to go through scenes that most women would have shrunk from.

A good portrait of her is shown on this page.

The great good she did in her field and hospital work, thousands of soldiers remember and appreciate. For some years past she has resided in San Francisco, but not in such circumstances as her patriotic work deserves. She has a small pension which is inadequate to her wants. The story of her life has been published at this office, giving an account of her work and adventures during the war, and is offered the public at the remarkably low price of one

## At Rest.

It is with feelings of deep regret that we chronicle the death of Martha D. Ewer, wife of Warren B. Ewer, of the firm of Dewey & Co., who died July 31st, at her residence, 1516 Folsom street, San Francisco, at the age of 51 years. Her death is a sad surprise, for though she had been ailing for some time she was believed to be hopefully convalescent. Mrs.



[MRS. MARY A. BICKERDYKE.]

dollar per copy. We are confident it will be a work which many will prize, not only as a memento of the stirring scenes of the war, but also as the history of one of the few women who took a prominent part in it in the field. Moreover, the purchase of the book will aid this heroic lady in her old age.

THIS WEEK'S "RURAL."—We drop back this week to the regular size of the RURAL, 16 pages, in sympathy with the prevailing holiday spirit of the week and to allow our employees an opportunity to participate in the various exercises. There is in fact very little doing except in the way of celebration. We have had visits from a large number of RURAL subscribers who have availed themselves of the visit to the city to bring us kind words of cheer and something else rather harder and heavier which is calculated to brighten the printer's pathway. To all such, thanks.

THE electric lighting plant for 40 lamps has been completed at Tulare.

Ewer was a native of Massachusetts, having spent her girlhood days in the neighborhood of Martha's Vineyard. Her companion, an aged mother, son, sister and brother mourn her loss. She was a member of Temescal Grange, Patrons of Husbandry, Ivy Chapter No. 27, Eastern Star, and the Knights and Ladies of Honor. Mrs. Ewer possessed in a remarkable degree the happy faculty of making a sunny home and winning and retaining the confidence of many friends. Her sweet and amiable disposition, cheerful manners, kind and generous impulses, will cause her loss to be deeply felt in the circle in which she moved.

Mrs. Ewer's funeral was held from her late residence on Monday afternoon, August 2d. The services, which were conducted by Rev. N. L. Rowell and Rev. Dr. Pendleton, were very impressive. A fitting tribute was paid to the character and worth of the deceased. The concourse of mourning friends, the beautiful floral offerings, the earnestness of the sympathy which was tendered to the bereaved ones, were all sig-

nificant of the fact that home and society had lost one whose life has been precious to all who came within its influence.

## Tuesday's Pageant.

A more sublime spectacle than the grand parade and review on Tuesday has never been witnessed in San Francisco. The Knights Templar parade of 1883 was more gorgeous in symbolism and showy regalia, more brilliant in military evolutions, but never were the streets crowded with such a vast mass of eager humanity, made more sonorous with bursts of martial airs, and the sight of the old grizzled veterans of the war, with their bullet-riddled flags, awoke sentiments of gratitude and admiration akin to those of religion in sacredness. The day was charming, a genial ocean breeze fluttering the moving forest of banners. All the principal streets were profusely decorated with bunting, streamers, badges and evergreens, and from every window and housetop floated thousands of smaller flags and signs of welcome.

The figures of Washington, Lincoln, Garfield and other noted soldiers were seen everywhere, together with battle-pieces, camp scenes, soldiers on picket duty with such inscriptions as "Welcome," "Welcome to the Brave," "Welcome to California." To one looking up Market and Kearny streets the flags, streamers and pennants seemed to cover the streets. The superb triumphal arch on Market street added greatly to the imposing occasion; for elaborateness and beauty of historic designs it has probably never been surpassed on the continent. The reviewing platform, erected at Lotta's fountain, was occupied by the commander-in-chief of the Grand Army and many distinguished gentlemen. The reception given to Generals Sherman and Logan must have been extremely gratifying. As their carriages passed along the line the cheers that had been before very enthusiastic, became almost deafening. Sherman's genial face beamed with smiles, and the more grave and somber features of Logan showed a blossom of lively appreciation.

"Marching Through Georgia" seemed to be the favorite tune, and along some parts of the line the veterans sang the soul-stirring air, hundreds of spectators taking part. It is estimated there were 12,000 persons in the procession. The torch-light parade in the evening was simply indescribable. The whole heavens seemed aflame with rockets, Roman candles and bombs, while the flashing torches and glare of red fire gave a weird appearance to everything. No one who witnessed this splendid spectacle can help feeling that in this mammon-hungry, commercial age, patriotism is more than a name, and the memory of the gallant heroes of the Union will be held in everlasting honor.

THE LEGISLATURE.—Since our last report the Legislature has continued its committee work on the various irrigation measures which we described last week. It has also disposed of the senatorial problem by the election of Williams to fill out Gen. Miller's term. It has attended the Encampment in San Francisco, and as we write on Wednesday is in session again in Sacramento, and ready, we presume, to pursue the water problem to some conclusion. Next week we expect to give more interesting information on this subject.

OVER 450 tons of fruit have been shipped East from Sacramento this season.



## CORRESPONDENCE.

Correspondents are alone responsible for their opinions.

## Placer County.

EDITORS PRESS: Having lived in this county nearly five years, and having thereby become somewhat conversant with its respective features, we are induced under peculiar circumstances to reader a few brief but impartial statements thereof, which, it is confidently expected, will be of interest to those who have not as yet had the opportunity of visiting the foothills and the mountain slopes of this flourishing region. Time and space being so limited, we shall endeavor to describe only those features which are practically important. The various topics that might be mentioned would respectively constitute a series of interesting papers.

In discussing the physical and industrial characteristics of the counties of California, many writers are inclined to be enthusiastic in their descriptions, and in consideration of this fact it may be well to remark that Placer county stands in the front rank. Sketches thus written are sources of valuable information, especially to those whose object it is to seek homes, investments or speculations. The wonderful resources developed, the material improvements brought about, the educational advantages, the numerous real estate speculations and many other profitable enterprises in which one may embark, together with varieties of delightful climate, are the chief wonders of California, descriptions of which are frequently received by people abroad with considerable allowance for exaggeration; although, hearing of these striking features, thousands of persons from various parts of the globe are continually immigrating here to seek homes, health and wealth, the anticipations of whom are realized only by earnest application to active pursuits. Certain individuals erroneously assert that it is over-estimated. Such assertions are evidently erroneous, for the simple reason that California, generally speaking, is not only what it is represented to be, but is far beyond any descriptive powers hitherto manifested, especially in the capabilities of its various industries and the unsurpassed salubrity of its climate. During the past half century the State has proved itself very great in many respects; and we entertain no doubts that our hopes will be more than realized in the future.

## Topography of Placer County.

As regards the geographical position of Placer county, we observe, by reference to the map of California, that it is nearly a parallelogram, extending northwest and southeast about a hundred miles. It is bounded by the counties of Nevada, Sutter, Sacramento and El Dorado. The topographical features of this section of the State, being traversed by numerous ravines and diversified by undulating hills, present a scenery rarely equaled. The chief industries are mining, granite-quarrying and horticulture, which, within the last score of years, have been very extensively developed. Mining operations are not so flourishing as formerly; but other industries are apparently attracting much attention. Many years ago placer mining was the leading feature along the foothill section, especially in the vicinity of Newcastle, where the old-time mining camps of Ophir, Virginia City and Gold Hill are located. And there are honest old miners who actually believe this the veritable "Ophir" from which King Solomon procured the gold for his temple. It is really amusing to hear the old settlers, who are yet indulging to considerable extent in placer mining operations, tell of the good times they once enjoyed. The vicissitudes which have been experienced by many experts in this pursuit are objects of interesting reflections. Having neglected the unparalleled opportunities offered in this department of labor, many who are now financially poor in their old age are very much regretting their lack of discretion; although it may be well to mention that a comparatively few persons, who were far-seeing enough to grasp these opportunities, have become the owners of handsome fortunes. Others have lost thousands of dollars, the reason for which might be assigned, chiefly, perhaps, by continuing to embark in risky mining speculations.

## The Thrifty Mongolian.

Many of these ravines have of late years been diligently prospected, more thoroughly, perhaps, by Mongolians than any other people, who are true models of patience and perseverance, especially in this pursuit. It is observable that the Chinese always live in hope. Whatever object is contemplated to be accomplished, they are determined to persevere in spite of all discouragements, though their anticipations may not be realized. An experienced miner, with whom we are intimately acquainted, recently related an incident which occurred to him many years ago in one of the mines up in the Sierras. He had purchased a claim for so much, but, within a few weeks, seeing no indication of its advancing in value, he sold it to a Chinaman for a mere song. In a very short time the investment of the latter resulted in a handsome fortune, and, as might naturally be supposed, it was not long before its owner had found his way to the "Flowery Kingdom," to enjoy the rest of his days in affluence.

This is only one of the many instances of the kind which one might mention.

## Quartz Mining.

Quartz mining is for the most part carried on in the lower section of the county, there being several mills between Penryn and Newcastle. The quartz mill which was recently erected in the vicinity of the latter village deserves mention. It was built at an expense of many thousand dollars by Mr. William Lawrence, of Newcastle. In visiting this locality a few weeks ago, we were informed that the owner is a practical expert in this line of business, the result of which has very much to do with the success of his enterprise. There were then about 12 employes at work. It was reported that work in the Julien mine, about half a mile distant, would be resumed immediately.

## Immense Deposits of Granite.

Between the towns of Rocklin and Auburn, along the Central Pacific Railway, which runs in a northeasterly direction, the soil partakes, to a more or less extent, of granite formation, production of which is to be seen in the construction of colossal buildings in San Francisco. This region of country is apparently inexhaustible in its granite resources. There are three varieties of this stone in common use in California for building purposes, namely, the blue, the black and the white granite. The quality is so excellent that it is not surpassed, if indeed equaled, by that of any other part of the continent. During the last 20 years it has been extensively used for various purposes, especially in San Francisco, and the effect is good, as may be seen by the practical tests repeatedly made of its superior quality.

## Horticultural Inducements.

The horticultural wealth of the foothills forms a very important feature, being a matter of interesting discussion among tourists and travelers. The interval which has elapsed since the completion of the Central Pacific Railway through this part of the country has wrought very important changes in the various departments of horticulture, and to those who have lived here during that space of time it is quite astonishing to realize the magnitude of this prosperity; although, great as the developments hitherto brought about may seem, this industry is destined to become much greater. No other part of California has offered greater inducements to actual settlers, and on investigation it will be found that many have been far-seeing enough to grasp the golden opportunities thus offered by this Government to secure cheap and permanent homes. Although the greater portion of Government land has been taken, there remains a vast acreage of tillable railway land susceptible of profitable cultivation, which may be obtained at various prices, according to the quality of the soil and the location. In speaking of these lands, reference is more particularly made to the foothill section, which occupies about one-third of the county. Opinions of scientific men have been expressed concerning the fertility of its soil and its adaptability to the growth of cereals, fruits and vegetables. Judging from the rapidity with which these fruit farms have covered this part of the country within the last few years, it will not be very long before vast tracts will have been converted into beautiful homes of enterprising orchardists.

## The East a Great Consumer.

The products shipped in large quantities to Eastern markets find ready sales at highly remunerative prices, the demands therefrom having rapidly increased, and the facilities to meet these demands will in the near future be amply supplied. It is a fact worthy of mention that those who have been permanently and earnestly engaged in this industry have finally acquired a competency. Really, it is wonderful to contemplate what can be accomplished in any pursuit by industry and perseverance. These requisites are universally conceded as being among the chief elements of success, and without them it is impossible to attain any prosperity in life.

## Representation at the Fair.

That Placer county is in the foremost rank for horticultural resources there is not the slightest doubt, even to the most skeptical observers, as the fact thereof has just been satisfactorily demonstrated by the quality and the variety of its productions exhibited at the Citrus Fair. This is a prophecy and a fulfillment of the future of this county. Pears, oranges, plums, peaches, etc., are from year to year produced in great abundance. Alfalfa yields from four to six crops every year, but it requires a certain amount of irrigation. Notwithstanding the exorbitant price charged for the conveyance of water, any capital invested in this industry becomes highly remunerative.

## Price of Land.

No definite information can be given regarding the prices of these lands, as it depends almost exclusively upon the quality of the soil and the location. Hence, the better way in determining the true value comes only within the range of personal investigation. A piece of land in one locality may be purchased very cheaply, while, perhaps, a few miles distant another piece, containing an equal number of acres, may be obtained only at an exorbitant price. But notwithstanding the selections which have already been made, there remains within this county thousands of acres of land

unsurpassed for horticultural purposes that may be obtained at very moderate prices. In some districts, lands are rapidly advancing in price, owing chiefly to rapidly-increasing population and the adaptability of the soil to the cultivation of so varied a line of products. And it is equally true that capitalists are availing themselves of these opportunities. In view of this fact, we may cite one of the many instances which have come even within the scope of our own observation. An acquaintance of ours had recently purchased half a section at so much per acre, but he little thought that within a few months thereafter his investment would have realized to him twice the amount of money laid out. Most assuredly, he was delighted with his success, and those to whom the property had been offered previously on precisely the same terms are very much chagrined at their shortsightedness. Any capital judiciously invested in lands becomes highly remunerative, although, of course, there may be rare exceptions.

The reason that real estate speculations are steadily increasing is mainly attributable to the fact that prices are tending upward, differing from mining stocks and other risky enterprises that for 20 years have been so detrimental to the prosperity of this State. In rendering these statements, it is not the object of the writer to indulge in what may be construed as an exaggeration, but simply to express candid views.

The cultivation of the orange is carried on with success, and they grow luxuriantly, producing fruit of delicious flavor; and to those who have never seen such large oranges a description of them would seem almost fabulous. About Christmas, when this luscious fruit is matured, the golden yellow, blended with the dark green foliage of the orange trees, presents a sight beautiful beyond description.

Grape culture is no less interesting to visitors who are not accustomed to see the vines as they grow here. The immense clusters and their profusion surprise those not accustomed to see this viticultural wealth.

Placer county contains about 15,000 inhabitants, most of whom are representatives of American and English nationalities, and the flourishing population which constitutes a cosmopolitan character is being augmented by immigrants from various parts of the globe. Owing to sundry inducements offered in many departments of labor, this number is destined to become much greater. Those who are inclined to industrious habits will do well here, as this region is yet but sparsely settled, considering the extent of its square miles.

## The Climate

Is exceedingly salubrious, as shown by the appearance of the inhabitants. Another evidence of the fact is, that 90 per cent of the children reared within its limits are perfect types of health. During the summer months it is warm in the valleys, the thermometer at times ranging as high as 100° in the shade, and even higher. But notwithstanding this, the nights are delightfully cool and pleasant, thus rendering sleep refreshing; and if it were not for the genial and invigorating breezes that one enjoys, such intensity of heat would be almost unbearable. And even when it is really warm, those who have been inured to this extreme of climatic influences are seemingly not in any manner affected by it. For nearly two-thirds of the year the temperature is almost uniform, and very appropriately has the remark been applied that it is "identical with that of Southern Italy." It is a fact worthy of mention, that during the time it is intensely cold in some parts of the continent in winter, out-of-door laborers find it here to their advantage to pursue their work in their shirt-sleeves. Owing thus to the climate, many of the well-to-do business men of San Francisco find it advantageous to visit these foothills for a few weeks in the summer for recreation, and on returning to the city are prepared to resume their labor with renewed energy. During the summer season, Auburn, Blue Canyon and Lake Tahoe are special resorts of hundreds of invalids, and it is gratifying that many individuals who were apparently in advanced stages of consumption have found relief. Being so conducive to health and comfort and to all other requisites that are deemed indispensably necessary to render life enjoyable, they attract also the admiration of hosts of pleasure-seekers. Auburn, the county seat of Placer county, and which, judging by the healthful appearance of its residents, might be termed the sanitarium of the Sacramento valley, is one of the oldest towns in the State. It is very beautifully situated at an altitude of 1350 feet above sea level, with a population of 1000, the town proper extending about a mile below the railway station, sheltered by lofty hills and approached by a long narrow ravine which runs in a southwesterly direction toward the villages of Ophir and Newcastle. In many instances it compares favorably with any other town on the Pacific Coast. The immediate vicinity is dotted with fine orchards and handsome villas, the sites of which only a few years ago were densely covered with brush and chapparal; and to persons who have inhabited this part of the country during that interval it seems almost impossible to realize the magnitude of the improvements made in so short a time. In reference to its public buildings, suffice it to say they are at all times in good repair. As the Courthouse is, in all respects, well adapted to the administration of the governmental requisites, so also the county hospital is equally well conducted for

the accommodation of those who are homeless, decrepit and aged. On investigation, we find that this hospital has a capacity for 70 patients, 15 minus that number being the average attendance. The money required to defray all expenses sums up about \$10,000 per annum. The entire property embraced within 60 acres of land is roughly estimated at \$20,000. There is no doubt that the object of so prominent a structure is of inestimable value to impecunious invalids and those to whom railway accidents occur. Many other costly buildings, including churches, schools, hotels, etc., of architectural beauty, speak well for the taste of this community. The Putnam house, which is decidedly the finest and most imposing caravansary in this section of the "Golden State," was, if we have been correctly informed, built at the expense of \$15,000.

In traveling through this part of the country, one cannot fail to observe the beautiful panorama of the Sacramento valley—scenery so grand, so indescribably picturesque. How wonderfully the majestic mountains with their lofty peaks and highly romantic features form a panoramic combination of unrivaled beauties!

Such scenes are simply beyond description. Down in the distance the State Capitol which looms up 350 feet can be seen very distinctly, and while catching a glimpse of the surrounding country, one is absorbed with the grandeur of the Sierras on the one hand and the beauty of the valley on the other. DAVID GRIFFITH.  
Penryn, Cal.

## FRUIT MARKETING.

## California Fruit at the East.

The following paper was read at the meeting of the State Horticultural Society by Dr. W. P. Gibbons, of Alameda:

From personal observations in Boston, New Haven, New York, Philadelphia, and elsewhere, I am satisfied that the time which elapses between the shipping of fruit in California and its distribution at retail stations is so long that the essential qualities of the fruit are obliterated to such an extent as to render it undesirable for table purposes. Moreover, the retail prices are so high as to amount to prohibition among those who would otherwise be regular consumers. This may probably be owing in part to its being packed too green and in part to the manner of packing. Thus, in Boston in June, California cherries were retailing at 25 cents a pound. Currants at the same rate. Cherries were second rate in quality and condition and would not be marketable with us. Small apricots 50 cents for about 30, and 20 cents a dozen for medium size. In Philadelphia, apricots of small size were selling three small ones for five cents, and five cents apiece for medium sized ones. The small ones had no flavor whatever, and yet they were considered a great delicacy in some quarters. A retailer in Philadelphia told me that a box of apricots cost him \$2.50. He was selling them three for five cents. In Pennsylvania, Delaware, and Southern New York there is no crop of plums; the curculio destroys the fruit. At a first-class hotel table was a dish of California fruits—dwarfed Bartlett pears, apricots and plums of fair size. The latter were acid as vinegar and without flavor; the apricots not much better.

The Middle States receive their early fruits a little later than the arrival of California shipments, from the South. A fruit dealer told me he thought the time was near when California fruit would thus be forestalled, as it came to the market in an inferior condition; that the more Northern States would consume more California fruit if greater care were exercised in selecting the best varieties. In Washington city I saw California fruit I have no doubt that the demand would consume all of our extra supply, if the factors of quality, shipments and prices were properly regulated. As it now is, our eastern friends pay exorbitant prices for very indifferent products of our orchards. A gentleman in New Haven told me that he paid 20 cents for one California pear, and he thought that it was worth the money. Diversity of opinion exists as to our pears; many complain of their being coarse-grained. There is no reason why the best variety for shipment should not be cultivated in our State. There is increasing attention being paid to the cultivation of the grape in eastern States. Along the banks of Seneca lake a gentleman informs me there were thousands of acres now planted out, and the acreage was increasing. It was so further east and south. The Catawba flourished best. The vines are planted 8 to 12 feet apart and trained along wires—not headed in as in California vineyards. The dampness of climate renders this kind of cultivation necessary. California can always maintain her supremacy in the cultivation of this fruit.

Our Black Tartarian cherries are spoken of in very favorable terms. A Californian may know the fruit of his State at a glance when in good order, by the neatness of packing and the beauty of the article. Eastern cherries come to market principally in baskets, and they sell by the quart in most localities. The past season was unfavorable for cherries in New York, owing to cold and rainy weather. Further south and west the crop was good.

Observations lead to the final conclusion: That in many cases the desire to realize from fruit induces orchardists to ship some varieties



so green that by the time it comes to the consumer it has lost its characteristic flavor.

That second-class winter pears should not be cultivated for transportation.

That the problem of placing fruit on Eastern markets and distributing it in such manner and at such prices that everybody could afford to eat it, has not yet been fully solved.

**CALIFORNIA FRUIT IN CHICAGO.**—Chicago, July 28th: The weather here for the last three or four days has been extremely warm, and to-day it was very hot, the thermometer ranging from 90° to 95° in the shade. Fruit from California, which is said to have been packed during cool weather, arrived here in very good condition. A special train of eight cars, heavily loaded with California fruit arrived to-day, Earl Bros. receiving three cars and the rest going to numerous other firms in the city. Prices are ruling very low, as it is reported that Porter Brothers received a shipment of 10 cars containing California fruit from the California Fruit Union, and are selling pears as low as \$1.90, while other firms are trying to get from \$2 to \$2.50. This is the first shipment of California fruit that this firm has received by special train, and it is thought that these shipments by the Fruit Union to Porter Bros. will not be satisfactory, as it takes several days for the union to make up the train, which would naturally necessitate the arrival of a large portion of the fruit in poor condition. So much fruit coming to one firm in one day must always have an unfavorable effect on the market. Peaches are quoted at \$1.50@1.75; plums, \$1.50@1.75; Fontainebleau grapes, not all in good order, 1@1.75, according to quality.

**THE DISPLAY IN NEW YORK.**—A New York telegram, dated Aug 1st, quotes from the *Tribune*, as follows: California is giving a fine display of choice pears, plums and peaches in the fruit stores. The Pacific offering is magnificent and acceptable to those who do not want much change out of a dollar. Pears turn out large and handsome, and now include many choice varieties, with the Bartletts leading. Peaches, for so tender a fruit, stand the long journey well. In plums there are rich table varieties and the showy purple McLaughlin. This is not named after the great jockey, but its originator, who is here at present, thinks there may be something in the name in getting ahead.

## SHEEP AND WOOL.

### The Mohair Industry.

"The weight of all with our last hope relies."—MILTON.

**EDITORS PRESS:**—In response to the request expressed in your issue of July 24, 1886, I submit the following as my ideal of the model mohair goat ranch of the future in California.

The first essential of our model mohair goat ranch is climate. Two hundred miles inland lies Angora, 4000 feet above the level of the sea. My information is that Angora has a very peculiar climate and surroundings, and my belief is that the mohair goat is the natural product of the climate and soil of Angora. Hence, it follows that the nearer we come to placing the goat in a similarity of conditions, the easier it will be to succeed. Having located the camp within a southerly exposure, our first care should be to procure a nucleus of heavily-fleeced stock bred to the factory standard. This nucleus is to supply the males for propagation. At this time it will not be necessary to take the common goat for females. Neither would it be judicious to use heavily-fleeced nannies, for it would be altogether too expensive to obtain them on the factory standard; and if they are not on the factory standard and are heavily fleeced, they might be prepotent over our sires and transmit a fleece that would be worthless. Both these extremes can be obviated by selecting females that have no determinate characteristics of their own from the edge of the mohair zone. Mark me, it is a doctrine of mine that the common goat is a degenerate fleece goat. Now, what will take place when these nannies are moved to the mohair zone? In the first place, there will be a strong tendency to regain the fleece that had been rejected generations before. And secondly, they will have no power to resist our sires. Consequently in two generations we would obtain a fleece of first and second quality, in all probability the first quality predominating. While it would be necessary to keep the choice breeding stock within inclosures, the rest of the stock should be unrestrained, and a hunter should be placed upon the range to protect them. Open sheds should be built at suitable places, surrounded by corrals, and a part of the duty of the hunter should be to salt the goats within the corrals. The principal value of these corrals would be to inclose the goats at shearing time. The principles of selection and rejection should never be lost sight of, and such females as do not breed well should be noted and disposed of for mutton. When the stock would accumulate on the range the wethers and wether yearlings should be drafted and placed upon an adjacent range, so as not to interfere with the breeding females. Of course, a record of the transactions of the whole business should be kept and a register of the breeding stock, and

there is little doubt but when the enterprise would be established considerable profit would be derived from sales of the surplus breeding stock to persons starting similar enterprises, as well as the lease of males to others who would keep (say) a couple of hundred head of nannies, and who had no desire to be the owner of the male. As I began with Milton, I will end with him: "Who can (still) advise may speak."

MARTIN KIRBY (73).

Darrah, Mariposa Co.

## THE FIELD.

### Barley Review.

**EDITORS PRESS:**—This season's barley crop in California is estimated as follows:

Counties.	Centals.
Alameda.....	340,000
Amador.....	205,000
Butte.....	90,000
Calaveras.....	305,000
Contra Costa.....	270,000
Fresno.....	315,000
Kern.....	120,000
Los Angeles.....	1,250,000
Mariposa.....	80,000
Mendocino.....	60,000
Merced.....	340,000
Monterey.....	110,000
Napa.....	35,000
Sacramento.....	210,000
San Benito.....	180,000
San Bernardino.....	950,000
San Diego.....	275,000
San Joaquin.....	420,000
San Luis Obispo.....	1,320,000
San Mateo.....	120,000
Santa Barbara.....	330,000
Santa Clara.....	1,215,000
Santa Cruz.....	190,000
Siskiyou.....	73,000
Solano.....	180,000
Stanislaus.....	330,000
Sutter.....	120,000
Tulare.....	540,000
Tuolumne.....	40,000
Ventura.....	710,000
Yolo.....	430,000
Yuba.....	130,000
<b>Total.....</b>	<b>10,060,000</b>

Although this is the largest crop grown in this State, yet had it not been for the north winds last month and also such large quantities cut for hay, it would have been all of 60 per cent larger than it now foots up.

The following table gives the crops for several years past:

Year.	Centals.	Years.	Centals.
1869.....	6,147,000	1878.....	7,475,000
1870.....	3,699,000	1879.....	8,250,000
1871.....	3,643,000	1880.....	7,360,000
1872.....	3,679,000	1881.....	5,070,000
1873.....	5,107,000	1882.....	4,560,000
1874.....	5,500,000	1883.....	5,060,000
1875.....	4,525,000	1884.....	8,100,000
1876.....	5,970,000	1885.....	5,900,000
1877.....	3,900,000	1886.....	10,060,000

The stocks in the State on the first day of July for several years past, as returned to the Produce Exchange, were as follows:

Years.	Centals.	Years.	Centals.
1886.....	114,850	1881.....	595,000
1885.....	608,150	1880.....	908,000
1884.....	640,000	1879.....	806,505
1883.....	820,009	1878.....	147,598
1882.....	162,000		

The stocks do not take into consideration the invisible—only the visible stock. It is claimed that the invisible—that held on the farms—was quite large each year, except this year, when farmers sold very close owing to the high prices ruling. It is claimed by reliable parties that many farmers who have carried a considerable quantity in their granaries had to buy toward the close of the season.

The highest, lowest and average prices for the past 12 months were as follows:

Year.	Average.	Highest.	Lowest.
July.....	\$1.16	\$1.22½	\$1.10
August.....	1.29	1.32½	1.20
September.....	1.29	1.37½	1.25
October.....	1.39½	1.50	1.30
November.....	1.35½	1.40	1.30
December.....	1.32	1.42½	1.22½
January.....	1.31	1.35	1.27½
February.....	1.27½	1.32½	1.22½
March.....	1.26½	1.32½	1.22½
April.....	1.23½	1.37½	1.27½
May.....	1.30	1.32½	1.27½
June (new).....	87½	1.00	76½

The average price by seasons was as follows:

Season.	Price.	Season.	Price.
1882-83.....	\$1.25½	1884-85.....	\$ 97 1-10
1883-84.....	94½	1885-86.....	1.28

The arrivals of new barley in this city and price brought were as follows:

Year.	Date.	Price.	Year.	Date.	Price.
1870.....	June 19.....	\$1.20	1879.....	June 30.....	75
1871.....	" 12.....	1.57½	1880.....	" 24.....	68½
1872.....	" 6.....	1.40	1881.....	" 21.....	90
1873.....	" 5.....	1.10	1882.....	" 12.....	1.65
1874.....	" 9.....	1.45	1883.....	" 25.....	95
1875.....	" 20.....	1.35	1884.....	" 9.....	90
1876.....	May 30.....	90	1885.....	" 16.....	1.25
1877.....	June 30.....	1.55	1886.....	May 27.....	1.10
1878.....	" 11.....	80			

The exports of barley the past crop season were as follows:

Destination.	Centals.
British Columbia.....	3.487
Central America.....	79

China.....	7,600
Hawaiian Islands.....	84,304
Liverpool.....	8,103
Mexico.....	134
Overland.....	21,888
New York.....	95,536
Panama.....	51
Russian Possessions.....	540
Tahiti.....	4,074
<b>Total.....</b>	<b>219,886</b>
Same time in 1884-85.....	480,654
" " 1883-84.....	399,271
" " 1882-83.....	264,597

By deducting the exports from the crops, it will be seen that the consumption of this State is very large; for, in addition to our own crop, Oregon sends us considerable each year. Taking it as an average, the consumption has been the past four seasons, by adding the Oregon receipts to the California, about 300,000 tons a year. This season, it is claimed by well-informed parties, the consumption will be from one-third to one-half more than the average. This is based on the very large increased number of work-horses sold to contractors on railroads, and also for farm use. Not only this, but there is marked increase of horses reported in this city and Oakland. For exporting there has been so far an unusually good demand, and it is claimed that the exports will be the largest ever before known, particularly to the Eastern and Western States of brewing grades.

S. F., July 23, 1886.

J. R. F.

### New California Harvesters.

California easily leads the world in the invention of complete harvesters. Our readers are familiar with the several styles which are manufactured at Stockton, and which have this year harvested quite a respectable fraction of our wheat crop. We have also had allusions to still newer devices, and we consider it our duty to keep our readers well informed of the remarkable progress which is being made in cheapening wheat production, for this seems to be the one great power which will enable us to retain our hold upon the wheat markets of the world.

We gave some weeks ago a description of the Berry steam harvester, brought out in Tulare county. We find in the *Visalia Delta* a fuller account of this machine which will be read with interest:

Mr. Berry first conceived the idea of making such a machine five or six years ago, and has been working on the plans ever since, until the completion of the harvester under consideration. He has been operating combined harvesters that run by horse-power ever since they first came in use, and has had 20 years' experience with all kinds of farming machinery. During the last 12 years he has resided in Tulare county, and has been engaged in farming and harvesting. He began late last spring to put the harvester together. All the work was done on the ranch except some special casting.

The huge machine is 38 feet wide and of about the same length, making it nearly square. It can only operate in a level country like the San Joaquin valley, but as the different sections are hinged together the whole is quite flexible, and does excellent work in rough hog-wallow lands, missing less wheat than the common header or harvester, notwithstanding the great width of the knife.

The harvester has two engines, and they are mounted independently of all other machinery. The main engine, which runs the traction power, moves the harvester along, and also works the header knife when desired. This is a 25-horse power Mitchell-Fisher engine, made in Oakland. The smaller engine is a 6-horse power Westinghouse, which runs the separator. Both take steam from the same boiler. The latter gives a steady motion to the thrashing machinery without being affected in any way by the motion of the machine. The main driving wheels, which are five and a half feet in diameter, with faces two feet broad, are placed under the boiler, near its center, so that they may carry, and not be made to pull, nearly all the weight of the engines, and the principal weight of the header as well. This enables it to move over soft, sandy ground very easily. The steering wheels, which are two and a half feet in diameter, with six-inch faces, are placed behind, with proper gear. An endless chain communicates with a wheel, where the steersman sits, in the front part of the engine and just back of the header-knife, by means of which power is transmitted to the rudder-wheels. The steersman has perfect control of the machine, and turns it in any direction, or round a sharp corner, without any difficulty.

The right or outside end of the header frame is supported by a wheel; the left is attached by hinges to the main body. The separator is attached to the left side of the front part of the body in the same way, and is supported by a wheel on the outer side. A tank cart, for supplying water to the boiler, is also attached to the right side, in the rear. When empty, an other full one takes its place, while the one detached is hauled by horses to the pumps or tanks to be refilled.

The header-knife operates on the same principle as that of any mowing machine or header, while over it revolves a reel similar to that of

the ordinary reaper. The machine moves fast or slow as the grain being cut stands thick or thin on the ground. The knife can be lowered to the ground or can be raised two feet from the ground, and works with the same motion at any elevation. It is 22 feet long and cuts a swath of that width.

The stalks of the grain, after being cut, of any desired length, fall on a draper back of the knife, which carries it to the thrasher, on the left of the machine, where a feeder passes it on to the cylinder, where it goes through an ordinary separator. The straw is separated from the chaff, and passes alone over a chute which carries it to the platform near the furnace, where it is used for fuel. When the supply on the platform is sufficient, the chute, which works with a hinge, is raised, and the straw falls to the ground. The use of straw for fuel reduces the cost of operating the machine considerably. The stack is tall and has a free exhaust, and no damage has been done in consequence from sparks. There is less liability to loss from this cause than is the case with a stationary thrashing outfit planted near a large strawstack and using wood or coal for fuel. The use of a large exhaust fan to assist the draft, and the tall stack, reduce the chances of loss by fire to a minimum. The *Tulare Register* also mentions that around the furnace water is constantly kept spraying and everything is kept wet until there is little or no chance of scattering fire in the rear.

The separation of the grain and chaff from the straw has been described. The chaff and grain are separated at the end of the grain-carrier by a contrivance of Mr. Berry's, and are conveyed to sieves. The chaff is blown out on the ground, and the grain passes into an elevator and thence into the sacks, which are sewed up when filled and dropped in the field.

The harvester can travel from place to place without working the header-knife or the thrashing machinery, or the header can be set in motion if so desired. The power to run the traction wheels is taken separately, and no other part of the machine interferes when it is in motion. The harvester can also remain stationary beside a stack of grain, and run the thrashing machinery or separator alone, and can change position with much less trouble than the ordinary thrashing outfit.

Back of the engine and over the rudder wheels is a rack in which straw is deposited at night, that the supply may be sufficient for getting up steam in the morning, which takes 20 to 30 minutes.

One team is employed to haul water for use in the boiler and one to follow the harvester and pick up the sacks of wheat. These are the only horses employed. The men engaged are the engineer, fireman, steersman, header-tender, sack-sewer, water-hauler and sack-hauler. With these seven men 50 acres can be headed and thrashed in a day, and the grain piled in stacks as fast as it comes from the harvester. Thus the wheat standing in a field of 50 acres in the morning could be left piled in sacks in the evening.

Mr. Berry's actual cash outlay for running the harvester, in his own field, not taking into account allowance for wear of machinery and interest on value of same, amounts to about 40 cents per acre. And he can make a profit on harvesting for others at one dollar per acre, whereas the lowest rate charged by other harvesters is two dollars. It requires 25 to 30 horses to run other harvesters, and they have to be fed in addition to paying for harvesting. The expense for each animal is about 40 cents a day. The cost of Mr. Berry's whole machine is about equal to the value of the horses or mules required to pull the others. Mr. Berry's harvester will also cut just about double the amount each day that the others will. And another advantage, in case any accident should occur to the machinery, is that there are not a large number of idle horses to feed. About the same number of men are required on both kinds of harvesters.

Mr. Berry has about 3000 acres of his own to cut this year. Most of this is on ground as level as a floor. But, as said in the first part of the article, the harvester works well on uneven land, having been tried in the hog-wallow region near the foothills. The knife is raised or lowered readily, so that in going over these successive elevations and depressions it can be gauged to suit.

Much careful study was expended on the machine before the final plans were made, and every one of the many difficulties that presented themselves seems to have been overcome. It works well in every way. It moves over the ground with the greatest ease. It heads the standing grain and thrashes it well, and from experiments made elsewhere it may be said that it saves more grain than the old way of heading, stacking and thrashing. It has now been in constant use for two months, and has given complete satisfaction in every particular. Such a harvester as this can only be used, of course, in an even country like this. But even in this immense valley, where grain growing is the principal agricultural industry, many of them could be used with profit. It is a very important invention, and will assist materially in lessening the expense of harvesting the wheat and barley crops.

**SUNKEN TIMBER.**—When vessels or timber sink to great depths in the ocean the pressure is so great that the water is forced into the pores, and the wood becomes too heavy to rise again. It is this pressure that makes it possible for divers to descend to any great depth.



## PATRONS OF HUSBANDRY.

Correspondence on Grange principles and work and reports of transactions of subordinate Granges are respectfully solicited for this department.

## Bro. Webster on the Water Question.

Bro. J. V. Webster writes for the *Patron* a letter on the present great issue in his usual trenchant style. We quote as follows:

In all this controversy the chief end sought to be attained by the anti-riparianists and their busy agents is to make it appear that if the decision of the Supreme Court is sustained irrigation will be at an end, and that all the sparkling waters of the State must inevitably run waste to the sea.

It is rather late in the history of the world to make many converts by misrepresentation, and he who endeavors to foist a fraud upon his neighbor is usually the first to bite the dust.

The use of the waters of the State for the irrigation of its dry lands is inseparable from the prosperity of the commonwealth. To let flow our rivers to the ocean as they now go, is to banish the fondest hopes of our glorious State's future.

No man in his senses will undertake to maintain such a proposition. No man endowed with sufficient reason to come in when it rains will seriously consider a proposition so absurd.

No! The land and water must be united, that its progeny may feed and shelter, not only this generation, but millions yet unborn. That not water, but wealth of its products, shall run to the sea in an everlasting stream.

The Legislature of the State has upon its hands this great responsibility of equitably wedding water and land—not in the interest of corporations, but in the interest of the whole people.

A railroad may be so exorbitant in its charges for transportation as to bar its use by the producer, nevertheless he has his old facilities of hauling or driving his products to market; but with the waters of the State under the control of corporations, there is no alternative left the producer in the irrigated districts but to pay the price demanded for water or perish!

The *Post* and *Examiner* advocate packing the Supreme Court in order to get a decision favorable to the anti-riparianists. When Stanford, Crocker, Gould & Co. were packing the Supreme Court of the United States, with the persons of Stanley Matthews and Judge Field, in order to get a reversal of the court's decision in the "Granger cases," how these same spasmic virtue papers did howl with indignation; now they are advocating the same thing in an aggravated form.

Being without soul or conscience, nothing better could be expected of monopoly corporations. Papers printed for the reading of the general public ought to be consistent and easy with their railings, at least show the semblance of honest purpose. It will be well for every man who is not trying to rob somebody else to keep an eye on the influence these papers have on their party nominations this coming fall, and fall down hard on the party that dares leave off its State ticket either of the Supreme Judges who in the face of threats and intimidations had the honesty and manhood to give an opinion in accordance with all precedent.

Now, Mr. Editor, I cannot more fittingly close this article than by repeating words used by Bro. I. C. Steele, as published in the *RURAL PRESS* of May 22d. He says:

"To own the water unrestrictedly is to own the country. Can the State permit such a monopoly? Is there any justice in permitting a few men to possess themselves of the water that Nature supplies in abundance for all who have use for it?"

"This question is before the people for solution, and every interest involved in the controversy should be treated fairly."

## Sacramento Grange.

EDITORS PRESS:—Sacramento Grange had a good representation of brother and sister Grangers far and near to-day. An extra call was sent forth in connection with a meeting of Pomona Grange, No. 2. We had the pleasure of the presence of W. M., W. Johnston, W. L., Daniel Flint, Flora, Sister Plummer, of the State Grange; also Brothers Kelsey, Nelson, Dr. Caples, A. M. Plummer, H. Kerr, McConnell and others of the sister Granges, with the sisters of the same.

The day was specially set to confer the third and fourth degrees on six brothers and one sister. Grange opened at 10:30 A. M., and after the labors of the field were over, 100 members marched up-stairs to the banquet hall and partook of an elaborate dinner. It was such a feast as all Matrons know how to prepare to tempt the inner man, and wound up with ice-cream, after which the Grange reassembled. It was decided to donate \$20 to the benefit of the G. A. R. reception on "Sacramento day," Grange closed, and in a few minutes the

## Pomona Grange, No. 2.

Opened with W. M., C. A. Hull, in the chair. After taking up the various orders of business the meeting passed to the Good of the Order.

The Grange appointed the W. M. as chairman of the Committee on County Exhibits for the next State Fair, which committee had pre-

viously been appointed; they had already been at work and would try to make as good a showing as they can.

Dr. Caples presented a well-written memorial which he read on the calling of the Legislature by the Governor, showing its utter fallacy and inconsistency. It commented at length on the call by reading extracts from it, and asked the Grange to adopt the same and present it to both houses as emanating from this body.

Remarks followed from Bros. McConnell, Kelsey, Nelson, Hancock and others. The Grange voted unanimously in favor of the memorial with a rising vote. Copies were ordered sent to the *Daily Record-Union* and *RURAL PRESS*. G. T. R.

Sacramento, Cal.

## Ceres Grange on Irrigation.

At a meeting of Ceres Grange held on Friday, July 23d, the following resolutions on the subject of legislation for irrigation were passed and ordered published:

*Resolved*, That we are in favor of the doctrine that all the running water of the State is common property, to be held for equitable distribution.

*Resolved*, That we are in favor of amending the proposed amendments to the State Constitution offered by the late Irrigation Convention held at San Francisco (Sec. 1), by striking out "the rates so established shall be such as will yield to the person, company or corporation so supplying water a net return of at least 7 per cent per annum upon the amount invested in the construction and maintenance of such works," and inserting in lieu thereof the following: "The rates so established shall be such as will yield to the person, company or corporation so supplying water, a return of not less than 3 per cent nor more than 7 per cent per annum of the cost of construction of such works. And, in addition to the aforesaid amount, the Supervisors shall, when fixing rates for water, authorize the collection by means of the said rates of an amount sufficient to defray the expenses of maintaining such works."

*Resolved*, That we are in favor of an amendment to our State Constitution, forbidding, under heavy penalty, the "watering of stock," after the style of railroad corporations, by canal owners. Also, we are in favor of an amendment whereby to compel owners of canals to furnish to Boards of Supervisors an account of all receipts and expenditures, and to compel them to furnish for inspection all papers and books of account pertaining to the business of their respective canals upon demand of the supervisors.

## Walnut Creek Grange.

The following resolutions were adopted by the Walnut Creek Grange, at a regular meeting held on the 24th day of July, 1886:

WALNUT CREEK, July 24, 1886.

WHEREAS, It has become a settled conclusion that the use of water for irrigation is absolutely necessary for the successful cultivation of the large tracts of land known as the dry valleys of this State; and

Whereas, The waters of the streams and rivers are being diverted from their natural courses without regard to the riparian owners, and an effort is being made by certain parties to monopolize said waters to the injury of actual settlers; therefore be it

*Resolved*, That we are in favor of the State assuming the entire control of the waters of the State, to be used in a manner that will secure the greatest good to the greatest number, rendering due compensation to all whose acquired property rights it may be found necessary to condemn.

*Resolved*, That we regard the decision of the Supreme Court in the case of *Lux vs. Haggis* as a just and correct interpretation of not only the common law, but of our statute laws governing property rights. L. A. STEELE, Sec'y.

## No Gambling or Liquor at Concord Fair.

An appeal was made last year to the directors of the Agricultural Fair by the Grangers and the several Women's Christian Temperance Unions of the county to prohibit gambling and liquor-selling on the fair grounds at Concord. The effort was made too late to effect its purpose in 1885, but the request has been granted for this year.

It now devolves upon the petitioners to testify to the sincerity of their demand by attending the coming fair and in every way contributing to its success.

The Women's Christian Temperance Union of Contra Costa county entertains all the temperance people, and especially all members of Granges and I. O. G. T. Lodges, fraternal orders to which so many white-ribbon women belong, to give such moral support and financial assistance to the directors as may insure permanence to the "new departure" so long desired.

MRS. S. J. WILLS,

President Co. W. C. T. U. and W. M. Point of Timber Grange.—*Contra Costa Gazette*.

## Curing Sultanas.

EDITORS PRESS:—Will some of your correspondents kindly inform me as to the best method for curing and treating Sultan grapes, in order to impart to them a bright, attractive appearance.—NOVICE.

SEVERAL horses died in Tulare recently from the effects of the horse disease which is prevalent in that county. It affects the horses that are at work as well as those that are running in pasture.

## The late Samuel J. Tilden.

As we go to press the telegraph announces the death of the distinguished citizen whose portrait appears herewith—the Hon. Samuel J. Tilden, of New York. Mr. Tilden has occupied for many years a prominent place in



public affairs. He won his first great honors in the overthrow of the Boss Tweed dynasty in New York City, and was shown the people's thanks for that service by election to the governorship of New York State. He was the Democratic candidate for the presidency against Hayes, and which one really beat is a mooted question with many. Mr. Tilden was of Quaker parentage, and was born in 1814. His death will be generally regretted, and his public services will cause his name to be long remembered.

## AGRICULTURAL NOTES.

## CALIFORNIA.

## Alameda.

HAY.—*Livermore Herald*: The hay shipment from Livermore station for the 13 months ending July 1, 1886, was 13,689 tons. There were remaining in our warehouses at the beginning of the last shipping season about 2000 tons of hay, which would thus give about 11,600 tons, as the surplus of the section tributary to Livermore last year. We predict that that amount will be doubled this season. John Clark gives us the following data of work on James Doolin's Aylward Hay Press, while he was watching it, the other day. In two hours 18 bales were turned out, in light hay, which weighed 4855 pounds, or an average of 270 to the bale. In a lot of 74 tons of good hay the average weight was about 335 pounds to the bale. The rate of work on the light hay would give for a day's work of 14 hours, 18 tons and 900 pounds.

FOUR CARS OF MULES.—*Pleasanton Star*: There arrived at the Pleasanton depot last week four carloads of young mules, direct from Texas, consigned to W. H. Norris, of San Ramon valley. In conversation with Mr. Norris he stated that he had just returned from Texas, where he had recently gone to purchase the animals. He stated that the young mules are not any cheaper there than here after you pay their freight. The only advantage is that you can buy them in large numbers, whereas in this State you would have to travel over much of the country to get that number. There are 25 animals in each car—100 in all. They are all about two years old, and will average, when grown, about 800 pounds. Mr. Norris says that he would sooner have a 750-pound mule than a 1000-pound one for ordinary farm purposes. The little mules will wear the big ones out and still be in fine order. These mules will be used on his immense ranch in San Ramon valley.

BARLEY-GROWING.—*Haywards Journal*, July 31: The 440-acre tract of H. W. Meek, on the Mt. Eden road near Haywards, has all along been considered the most promising chevalier in the valley, and the general opinion was that it would yield a heavy crop. About one-half was sown broadcast and the remainder drilled in. The lower end, running toward the railroad, is low ground and was rather wet this year. This part did not come up to the remainder and naturally brought down the average of the whole tract. The drilled grain went from 28 to 30 sacks to the acre, while the broadcast fell considerably below that figure. The quality of the grain is conceded on all sides to be the finest raised in the valley, and samples have been in demand from grain men in the city and elsewhere. The entire tract yielded something over 12,000 sacks, the average weight of sacks being 131 pounds. The average of the whole was 34.6 cents to the acre.

## Butte.

THE RANCHO CHICO.—*Chico Chronicle*, July 29: The Rancho Chico is sending away a great deal of fruit this season to other markets. Yesterday a carload consisting of 990 boxes of plums, peaches and pears, was shipped by ex-

press to Chicago. To-day a carload goes to Sacramento, and to-morrow morning another car of fruit leaves for Chicago. The products of this great farm have a national reputation, and the brand of Rancho Chico on the boxes at once places the fruit in active demand in the markets. None but the very choicest fruits are sent abroad, so that parties in the East get the very best fruits that the Rancho produces. General Bidwell at present employs more laborers than any one man in Butte, as there are 275 persons now at work in orchards and fruit cannery.

EGYPTIAN CORN.—*Oroville Register*, July 29: More attention is being paid to Egyptian corn this year than ever before in Butte. About Gridley and Biggs there are many acres planted, and on the east side of Feather river not less than 15 or 20 farmers have small patches growing for chicken and hog feed. Mr. P. Nash, who owns a farm a few miles west of Oroville, planted this season six acres of Egyptian corn; the corn is now six feet high and promises a bountiful yield. Nash thinks that it may go 100 bushels to the acre. This is planted on summer-fallow land, and he says that he can raise a crop of this corn one season and then a crop of wheat the next, and thus use the land instead of letting it lie idle one year while waiting for the summer-fallow.

## Colusa.

FINE GRAPES.—*San*, July 31: We received from the farm of Jerry Becker, situated about eight miles southwest of Colusa, a box of Seedless Sultan grapes, which were very fine indeed. These grapes were grown on the plains without irrigation of any kind. Good cultivation will work wonders, but good cultivation with judicious irrigation will double any result that can be made without irrigation. The more irrigation, the more cultivation becomes necessary.

## Fresno.

EDITORS PRESS:—Harvesting is drawing rapidly to a close in our section. All the farmers have long since put their estimates on their unthrashed stacks way below their guess per acre previous to heading. This is because of the very discouraging and unexpected reports from some of the few neighbors who have thrashed, some of their stacks not yielding one-half the anticipated number of bushels. Examination into the reasons for this diminution has convinced all that grain this year has shelled much more than usual. Many are the grain farmers I have heard say, lately, that "there is nothing in raising grain." And I agree with them, for just so long as our Government sanctions the existence and work of those human sharks who speculate in the breadstuffs of the land, just so long will the poor farmer nibble at the crib of poverty. He can put up with an occasional shortage in crops, but when he must add to this probability the certainty of being compelled to buy and give away all his sacks each year—owing to another syndicate of sharks—instead of employing canvas bags, as does the Eastern man in emptying his grain into an elevator, which allows him to retain his sacks a lifetime; and that other California certainty, high freight rates to tide-water, it becomes very plain why the sensible farmers are beginning to cut up their great ranches into small tracts for fruit-raising, thus rapidly turning our beautiful State into what it was only intended for, the fruit, flower and vegetable garden of the world. Fresno will be the banner county for fruit this season. The estimated yield is enormous, and we have had but one week of weather that has in any way diminished those estimates. A fortnight ago the "hot spell" did considerable damage, but not nearly so much as it would have done a month earlier. It was expected that the grasshoppers would not leave a grape or anything else green, but the few that came in the early part of the season took their departure for "pastures new," much to the delight of those who suffered from their depredations last year. Raisin-making will soon begin, as will also grape-crushing, when the many large vineyards hereabouts will present a busy scene; but whether the late agitation of the Chinese question will result in more or less "pigtails" in the formation of the said scene than has hitherto been employed cannot yet be told. This part of Southern California is not "cracked up" much as an Indian corn growing section, but we "allow we are some" on Egyptian corn. If any one who reads this is disposed to doubt it, let him come here and I will take him to a small 10-acre patch that my neighbor, T. L. Loomis, is growing on his Nevada Colony lot, and I am sure he will be convinced that we do not claim any more than our due. Mr. L. planted the corn between the rows of his newly planted vineyard, and though I do not agree with his policy, I must say that I think he will make far more than enough from his corn to make up for the loss of nutriment to his vines in the future.—E. L. A., *Temperance*.

RAISIN-PACKING.—*Republican*, July 30: Indications are that the raisin crop of this section will be fully 100 per cent greater than last year, and every raisin-packer is taking special care to secure perfect and attractive packing. So important has the raisin industry become in Fresno county that Eastern dealers come here to contract with producers for their entire pack, and only last week Geo. W. Meade & Co., of San Francisco, purchased the fruit cannery in this city for the express purpose of turning it into an immense fruit-drying and raisin-packing establishment. They will endeavor to buy up



most of the raisins of the county and pack them to suit themselves.

**ANTS.**—A row of beautiful *Solanum Magnificum*, with large blue flowers, began suddenly to die, and upon examination we found the stems hollow, all eaten out by the little red ants. We then placed a small cup of sweet oil near to every plant, with such success that within a week the oil was literally one lump of ants, and not one was left in the ground to destroy the plants. If similar cups of oil are placed in pantries and wardrobes, they will soon trap all the ants at large.

#### Placer.

**ANOTHER SMYRNA FIG.**—*Republican*: At Iowa Hill Mrs. Adelia Hill has in her garden a fig tree which produces exceptionally fine fruit. The tree was grown from a cutting procured from a sea captain by Mr. Hill in 1856. Mr. Hill happened to be in San Francisco and met the captain, who was an old acquaintance and had just come in from the Mediterranean. Mr. Hill visited his friend's ship and in the cabin saw the cuttings, two of which were given to him and planted by him at Iowa Hill. Last week J. B. Hobson sent to the *Republican* some specimens of fruit from one of the trees. The figs are very large and have an unusually thin skin. They were forwarded to E. W. Maslin at Pismo, who has the reputation of being a fig sharp. Gas Leighton, of Iowa Hill, has been a sailor in the fig-carrying trade, and he thinks these figs are of the genuine Smyrna variety and has planted a good many cuttings from the trees.

#### Sacramento.

**HEAT AND GRAPES.**—*Bee*, August 2: The phenomenal "hot spell" last month did considerable damage to the grape crop in some vineyards and in certain localities, but those who have followed the plan of "staking" their vines report that the precaution proved effective. Vines tied up in this way shield the grapes from the direct heat of the sun. Staking also permits of closer cultivation. Senator Routier, of this county, whose vines are staked, expects a crop of six or seven tons of grapes to the acre this season. Thorough and skilled cultivation always tell in the vineyard. It is interesting to note that none of the Senator's vines are irrigated.

#### San Joaquin.

**LOSS OF A STALLION.**—*Independent*, July 31: W. H. Parker's fine stallion Elect was taken sick with inflammation of the bowels last Saturday night and died the following Tuesday. The animal was five years old and valued at \$5000. His gait was fast and he was constantly improving. It was expected that he would trot in 2:20. Elect was entered for the stallion stake at the coming fair. He was the father of 25 fine colts (four months) and his death will be a great loss to the stock-breeders of San Joaquin county. He has taken first premium as the best roadster stallion in the State. His dam was Stanford's Electioneer, and he is considered to be the best colt of that celebrated horse in San Joaquin county.

#### Santa Cruz.

**HORSES FOR AUSTRALIA.**—*Sentinel*, July 31: E. R. Dean, one of the wealthiest stock-raisers in Australia, in company with Chas. Fiddes and Adolphe Spreckels, visited the Spreckels ranch near Aptos for the purpose of purchasing several yearlings. Some years ago Mr. Dean bought two Speculation colts from Dolph for \$1500, and they gave so much satisfaction that he concluded to again buy colts from Spreckels. On Wednesday he bought three colts at the ranch for \$5000, and on Thursday purchased a stallion for \$5000, and will ship them to Australia by the next steamer.

#### Sonoma.

**HOPS.**—*Index*, July 31: Hop-growers of the upper end of the county, in view of the rise in the price of hops, and to encourage white labor, propose to raise the pay of pickers from 70 cents to \$1 per hundred. Hop-raising promises to prove a profitable business this season.

#### Tehama.

**SORGHUM.**—*Sentinel*, July 30: Ed. Wright, who owns a farm about eight miles northwest of town, brought to this office a few stalks of sorghum, which he will send to the Tehama county Grand Army exhibit. This sorghum was grown on gray adobe land. The seed were sown broadcast on summer-fallow land and grown without irrigation or further cultivation. The stalks attained a height of seven feet and the seed pods are very full of well-grown seed. Mr. Wright thinks sorghum will prove to be an excellent forage plant for hogs and cattle. The latter eat the stalks and seed up clean, and an acre of it will fatten more hogs than an acre of wheat or barley. He does not consider it valuable in this country for sugar.

#### Tuolumne.

**EDITORS PRESS:**—As your paper is a representative of all counties of California, it is high time a few lines appeared from Tuolumne county. Not that we have any special good news to record, but it is a social and fraternal duty to represent the industrial interests of every section of our common country. Our fruit crop is comparatively a failure, especially the peach crop. It is much worse than appearances in the spring indicated. The causes are varied. Heat, which has been oppressive, helped to dwarf the growth, prematurely ripen the fruit and destroy the flavor. Apples are affected by the same cause. The codlin moth

is particularly busy. The short crop is so general that little fruit is offered for sale by peddlers. Drying is out of the question; prices are low and there is little to dry. This may raise the price of spare fruit. The birds are making away with what is left as soon as it shows a ripeness. Complaints come in from all sections of the county regarding the numbers of birds and their destructiveness. Canned fruit will be in demand. Few families will be enabled to preserve enough for home use. Grapes and figs will be an exception. Birds and bees may preempt even these two useful specialties. If the present hot spell continues they may be prematurely ripened and value depreciated. Nature is earnest in her operations, inquiring and caring not whom it may affect. Of course, the San Francisco market will continue to be well supplied with the choicest fruit to delight the eye and please the palate of Eastern visitors. Our State is so diversified in soil and climate that if one section fails another supplies the demand. From San Diego to Shasta is a productive empire, which supplies all that other nations can boast, and that, too, in profusion. Between grasshoppers and other causes our foothills for a few years have been under a cloud. But we know what has been accomplished in producing fine fruit, and plenty of it, and still have faith in the future of the foothills of the Sierras. The planetary disturbances will not last forever. We believe the time is nigh when Nature will assume her wonted good behavior. Fruit and fruit trees will cease to be blighted by sudden electric changes. Grain begins to come into the county freely from Dry Creek and the plains. Quality is not so good as anticipated, neither is the quantity. Hay is the only crop which realized expectations; it is now selling from \$12 to \$14 in the foothills, and Sonora. The thermometer registers 104° at noon in the shade, and not a breath of air stirring. It is a season for cool shade and cool beverages. There is not so much sickness as might be anticipated; many have gone to the higher Sierras for recreation and a sound, cool sleep.—JOHN TAYLOR.

#### Tulare.

**HANFORD HOPS.**—*Times*: Young Chow, the boss Chinaman of Hanford, rented last winter, of A. Heilbron & Co., the 60 acres of hops put in on the grant several years ago. Off of the 60 acres he expects to get 60 tons. He has already harvested 30 tons, which he sold on the ranch for 15 cents per pound. He expects to get 30 tons more, and will have them ready for market by September 1st. For the remainder of the crop he has been offered 25 cents per pound on the ranch. As the hop market is now on the rise, Chow says he will not be in any hurry to sell what he has left.

#### Ventura.

**DESPITE THE FIRE.**—*Free Press*, July 23: W. T. Coleman & Co. have leased Surdam's dryer, and Superintendent Bailey and a corps of assistants are working there energetically, getting things in order to handle the balance of the fruit crop. The gentlemen comprising this firm are the kind we like to see locate an enterprise in Ventura. Set-backs which would extinguish the ardor of ordinary men seem only to afford them opportunity to display their resources. Again they are prepared to pay cash for sound fruit brought to them, and next year, we understand, will erect a big dryer of their own and probably add to it a canning establishment.

**FRUIT DRYING.**—Mr. Day has three furnaces, and a capacity of 40 tons of fruit per day; but it is now working about 20 hands, and averaging, perhaps, 12 tons of fruit daily. This is all selected fruit, however, and will be packed in two and one-half and five-pound tins and shipped directly to the Eastern market. The packing apparatus, a sort of compress arrangement, is in an insect-proof warehouse adjoining the dryer, where are now stored some 15 tons of the prettiest dried fruit we have ever seen. The tins as put up form very attractive packages. Thus far Mr. Day has fed his furnaces entirely with cuttings from his fruit trees, which is decided economy of fuel. With Mr. Day's dryer, and Finney's and Surdam's and Coleman's big one to be erected, we should certainly be able to handle our big crop next year.

**RECEIPTS OF BARLEY** at the Hueneme warehouse Saturday were 1540 sacks. Total for season, 11,000 sacks. It is estimated that for the season a total of 300,000 sacks of wheat and barley will be received at the warehouse of that lively port. Thus far the crop on the other side of the river has exceeded the farmers' estimates in nearly every instance, and should this continue, the total for the season will exceed the above estimate.

#### Yuba.

**DEBRIS SUIT.**—*Sutter Farmer*, July 30: Papers have been served in a suit brought by Yuba county against the South Yuba Water and Mining Company. The action is brought to enjoin and restrain the company from selling to any person, company or corporation, or from suffering or permitting them to use any portion of the water rights owned or controlled by said company, for the purpose of mining by the hydraulic process, or by any other process of mining with water, by which there will or may be dumped, washed or deposited into the Yuba river, or any of its forks or tributaries, any tailings, boulders, gravel or other debris. It is charged in the summons that defendants, with others, have nearly filled the bed of the Yuba, causing the stream to be widened and shallowed, thereby causing the waters to overflow and greatly damage property of plaintiff.

### PACIFIC COAST WEATHER FOR THE WEEK.

(Furnished for publication in this paper by NELSON GOROM, Sergeant Signal Service Corps, U. S. A.)

DATE.	Portland.				Red Bluff.			Sacramento.			S. Francisco.			Los Angeles.			San Diego.							
	Rain.....	Temp.....	Wind.....	Weather..	Rain.....	Temp.....	Wind.....	Weather..	Rain.....	Temp.....	Wind.....	Weather..	Rain.....	Temp.....	Wind.....	Weather..	Rain.....	Temp.....	Wind.....	Weather..				
July 28-Aug. 4.																								
Thursday.....	.00	76	N	Cl.	.00	90	N	Cl.	.00	80	SW	Cl.	.60	68	W	Cl.	.00	79	SW	Cl.	.00	70	SW	Cl.
Friday.....	.30	73	N	Cl.	.00	92	N	Cl.	.00	86	NW	Cl.	.00	64	W	Cl.	.00	79	W	Cl.	.00	68	W	C
Saturday.....	.00	68	NW	Cl.	.00	96	N	Cl.	.00	89	NW	Cl.	.00	70	W	Cl.	.00	81	W	Cl.	.00	72	SW	C
Sunday.....	.00	74	NW	Cl.	.00	99	N	Cl.	.00	91	NW	Cl.	.00	68	W	Cl.	.00	79	S	Fr.	.00	71	SW	Fr
Monday.....	.00	74	N	Cl.	.00	94	SW	Hy.	.00	85	SW	Cl.	.—	62	W	Cl.	.00	85	W	Cl.	.—	74	W	Fr
Tuesday.....	.00	79	NW	Cl.	.00	93	S	Cl.	.00	90	NW	Cl.	.00	60	W	Fr.	.00	88	W	Cl.	.00	64	NW	Cl.
Wednesday.....	.00	78	NW	Cl.	.00	99	E	Cl.	.00	90	W	Cl.	.—	65	W	Cl.	.00	88	W	Cl.	.00	73	NW	Cl.
Totals.....	.00				.00				.00				.00				.00				.00			

EXPLANATION.—Cl. for clear; Cy., cloudy; Fr., fair; Fy., foggy; — indicates too small to measure. Temperature Wind and weather at 12:00 M. (Pacific Standard time), with amount of rainfall in the preceding 24 hours.

## THE DAIRY.

### President Cleveland and Oleomargarine.

WASHINGTON, August 2.—The President has signed the oleomargarine bill, and sent the following message to the House of Representatives stating his reasons for approving it:

*To the House of Representatives:* I have this day approved the bill originating in the House of Representatives entitled "An Act defining butter; also imposing a tax upon and regulating the manufacture, sale, importation and exportation of oleomargarine." This legislation has awakened much interest among the people of the country, and earnest argument has been addressed to the Executive for the purpose of influencing his action thereupon. Many in opposition have urged its dangerous character, as tending to break down the boundaries between the proper exercise of the legislative power by federal and State authorities. Many in favor of the enactment have represented that it promised great advantages to a large portion of our population who sadly need relief, and those on both sides of the question whose advocacy or opposition is based upon no broader foundation than local or personal interest have outnumbered all the others.

This, upon its face and in its main features, is a revenue bill, and was first introduced in the House of Representatives, wherein the Constitution declares all bills for raising revenue shall originate. The Constitution has invested Congress with very wide legislative discretion, both as to the necessity of taxation and the selection of the objects of its burden; and though if the question was presented to me as an original proposition I might doubt the present need of increased taxation, I deem it my duty in this instance to defer to the judgment of the legislative branch of the Government, which has been so emphatically announced in both houses of Congress upon the passage of this bill. Moreover, those who desire to see removed the weight of taxation now pressing upon the people from other directions may well be justified in the hope and expectation that the selection of an additional subject of internal taxation, so well able to bear it, will in consistency be followed by legislation relieving our citizens from other revenue burdens rendered by the passage of this bill even more than heretofore unnecessary and needlessly oppressive.

It has been urged as an objection to this measure that, while purporting to be legislation for revenue, its real purpose is to destroy, by the use of the taxing power, one industry of our people for the protection and benefit of another. If entitled to indulge in such a suspicion as the basis of official action in this case, and if entirely satisfied that the consequences indicated would ensue, I would doubtless feel constrained to interpose the executive dissent; but I do not feel called upon to interpret the motives of Congress otherwise than by the apparent character of the bill which has been presented to me, and I am convinced that the taxes which it creates cannot possibly destroy the open and legitimate manufacture and sale of the thing upon which it is levied. If this article has the merit which its friends claim for it, and if the people of the land, with a full knowledge of its character, desire to purchase and use it, the taxes enacted by this bill will permit a fair profit to both manufacturer and dealer. If the existence of the commodity taxed and the profits of its sale depend upon disposing of it to people for something else which it deceitfully imitates, the entire enterprise is a fraud and not an industry; and if it cannot endure the exhibition of its real character, which will be affected by the inspection, supervision and stamping which this bill directs, the sooner it is destroyed the better, in the interest of fair dealing. Such a result would not furnish the first instance in the history of legislation in which a revenue bill produced a benefit which was merely incidental to its main purpose.

There is certainly no industry better entitled to the incidental advantages which may follow this legislation than our farming and dairy interests, and to none of our people should they be less begrudged than to our farmers and dairymen. The present depression of their occupation, the hard, steady and often unremunerative toil which such occupation exacts, and the burdens of location which our farmers bear, entitle them to every legitimate consideration. Nor should there be opposition to the

incidental effect of this legislation by those who profess to be engaged honestly and fairly in the manufacture and sale of wholesome and valuable articles of food, which, by its provisions, may be subject to taxation. As long as their business is carried on under cover and by false pretenses, such men have bad companions. Those who manufacture an article, however vile and harmful, take their place without challenge with the better sort in a common crusade of deceit against the public. But if this occupation and its methods are forced into the light and all these manufacturers must thus either stand upon their merits or fall, the good and bad must soon part company, and the fittest only will survive.

Not the least important incident related to this legislation is the defense afforded to the consumer against the fraudulent substitution and sale of an imitation for a genuine article of food of very general household use. Notwithstanding the immense quantity of the article described in this bill which is sold to the people for their consumption as food, and notwithstanding the claim that its manufacture supplies a cheaper substitute for butter, I venture to say that hardly a pound ever entered a poor man's house under its real name and in its true character. While there should be no governmental regulation of what a citizen shall eat, it is certainly not a cause of regret if by legislation of this character he is afforded a means by which he may better protect himself against imposition in meeting the needs and wants of his daily life. Having entered upon this legislation, it is the manifest duty of the Government to render it as effective as possible in the accomplishment of all good which should legitimately follow in its train.

This leads to the suggestion that the article proposed to be taxed, and the circumstances which subject it thereto, should be clearly and with great distinctness defined in the statute. It seems to me that this object has not been completely attained in the phraseology of the second section of the bill, and that a question may well arise as to the precise condition the article to be taxed must assume in order to be regarded as "made in imitation or semblance of butter, or when made, calculated or intended to be sold as butter or for butter." The fourteenth and fifteenth sections of the bill, in my opinion, are in danger of being construed as an interference with the police powers of the States. Not being entirely satisfied of the unconstitutionality of its provisions and regarding them as not being so connected and interwoven with the other sections, if found invalid, to vitiate the entire measure, I have determined to commend that to the attention of the House, with a view to an immediate amendment of the bill, if it should be deemed necessary, and if it is practicable at this late day in the session of Congress. The fact, too, that the bill does not take effect by its terms until 90 days have elapsed after its approval, thus leaving it but one month in operation before the next session of Congress, when, if time does not now permit, the safety and efficiency of the measure may be abundantly protected by remedial legislative action, and a desire to see realized the beneficent results which it is expected will immediately follow the inauguration of this legislation, have had their influence in determining my official action. The considerations which have been referred to will, I hope, justify this communication and the suggestions which it contains.

GROVER CLEVELAND.

Executive Mansion, Aug. 2, 1886.

**SOURING OF MILK IN A THUNDER-STORM.**—Some one sent a query to the *Manufacturer and Builder* asking the cause of the souring of milk during or immediately after a thunder-storm. After recognizing the existence of the fact, that journal says that "the most satisfactory explanation that has been offered to account for the phenomenon is that the electricity developed when a thunder-storm is passing causes the formation of ozone in considerable quantity. This is a powerful oxidizing agent, and being absorbed by the milk, converts a portion of the milk-sugar contained as one of its constituents into lactic acid, which in turn acts on the nitrogenous matter (the casein), causing this to coagulate or curdle."

**GREEN VS. SEASONED OAK.**—It is said that experiments have proved that green oak posts will last longer in the ground than those from the same variety of seasoned timber.





### Noontide and Harvest.

Inscribed to A. and M. C.

[Written for the RURAL PRESS by MALLIE STAFFORD.]

From my high perch upon the long veranda,  
Where shadows droop and fragrance fills the air,  
Where roses mingle and sweet woodbine clammers,  
I look upon a scene most wondrously fair.  
'Tis not the majesty of mountain ranges,  
Nor the deep ripple of the sparkling stream,  
Nor the fair vale with all its magic changes  
Alone that wakes the fervor of my theme.

It is the harvest time. Full ripe and ready  
The tawny fields lie 'neath the cloudless sun;  
A golden tint has burnished field and meadow  
Where'er the splendor of his course has run.  
Noontide and heat! No breeze disturbs the quiet  
That broods above the vale in restful calm,  
Save when a wanton zephyr, running riot,  
Shakes from the pine's green crest a breath of balm.

The weeping oaks, magnificent, seem wooing  
The tardy breeze that soon shall sweep their crests.  
From some far bough I hear a lone dove cooing,  
But who can guess where swings its hidden nest?  
The broad fields glow beneath the sun's full splendor,  
And the fair hills rise in their silent pride  
As tho' in homage mute they fain would render  
Their tribute to the harvest full and wide.

A train of harvesters, led by a "header,"  
Plows thro' the seeming sea of dead, gold grain.  
We hear the busy whirring strong and steady,  
We see them moving o'er the half-shorn plain.  
They charge in squads, but wield a bloodless battle.  
An army vast, unbannered tho' are they—  
Heroes of peace, whose music is the rattle  
Of the keen blade, as rank and file they slay.

Brave sons of toil! They heap the bearded treasure  
In countless stacks along the glimmering plain,  
And Ceres crowned pours out in generous measure  
Her wealth to mark the glory of her reign.  
Long may her scepter wave on plain and mountain,  
In this bright land beside the western sea,  
And Peace and Plenty, like a living fountain,  
Forever bless the fair homes of the free.

Oak Grove, Napa Co., Cal.

### From the Girl of Twenty.

EDITORS PRESS:—Through your columns I would like to thank the "Woman of 4—" for her motherly lecture, and though I appreciate it fully, yet I think she has misunderstood me a little. I can see how self-assertive my article No. 2 might have seemed to some, especially when it was known that "only a girl" was the writer. No doubt the old belief holds good for "girls of twenty" as well as for those younger, that children should be seen and not heard, although notes No. 2 had no deeper motive than to please and interest, with the exception of the subject of reading.

Many of my young friends say to me in surprise when I protest against their indiscriminate reading: "Why, don't you ever read novels?" Indeed I do. I have read more novels than everything else put together, but the books that were read to me when a child, or put into my hands, formed a taste and love for only the best, and, consequently, such books that otherwise might have been harmful did no injury whatever.

It seems to me, my lecturer has said just the right thing on the subject, about young girls living in the emotions rather than in the intellect, and therefore are more interested in such books as portray vividly these sentiments. Yet if they can be only interested in the books that are most overdrawn and sensational, surely it is not the right and true interest, but a depraved taste, that comes from wrong indulgence at first. One might overlook this in very young girls, for the very reason that a "Woman of 4—" gave, but when one sees bright, intelligent young women, some wives and mothers with little ones clustering around their knees, truly it is to be regretted.

I was discussing this subject the other day with a friend, another woman of 40, and one who has done a great and good work in the training and forming of young minds. The subject under discussion was the instruction of children of Christian parents in the Sunday-schools. A third person advanced the idea that such children should be instructed at home by their own parents, while the children of unconverted parents, who would have no Christian training at home, should be the ones gathered into the schools. There arose this question: How many mothers are there who can sit down with their little ones and intelligently explain and interest them in the stories of the Bible? How many more are there who can delight the little ones and at the same time train their young minds with the charming scraps from our literature that are so adapted to them? They know nothing about these things; their literature is limited to third and fourth-class novels, and the trashy stories that appear in some of

the fashion journals. And yet they are good, earnest, well-meaning mothers.

My friend spoke from experience, having been for years a teacher of literature in one of the large high schools. Every year, of the 50 or 100 pupils who passed under her hand, it was a mere handful that knew anything about books or reading; the rest were perfect blanks, or what knowledge they had was most deplorable.

I am afraid the "Woman of 4—" in reading of the little sister who inquired, "Who is the author?" conjured up a vision of a pale-faced, large-eyed child, bent nearly double over a volume of ancient lore. Not a bit of it. A big red cheeked, romping girl, a perfect tomboy, one who climbs trees and hay-mows, but also a girl who, in her quiet moments, loves to read, and also, already, shows a decided taste in the right direction. True, her discriminating powers, as yet, are not perfect, for only the other day I was obliged to take away from her a volume of Peck's Bad Boy (unfortunately we could not prevent an older brother from thinking it funny) that she was reading on the sly. But to show the difference in her early training and that of her playmate, Bessie, a girl nearly 13 years old, is a child who has one of the best of mothers, in the common accepted sense of the word; one who sees that she goes to school, keeps her well dressed and is quite indulgent, but never a book or a story has the child known. Often when she comes in to see my little sister, my mother has tried to interest the two children with a story, perhaps from the *Wide Awake* or *St. Nicholas*, but Bessie is restless, fidgety and uninterested, and says she does not like it at all. A Woman of 4—may say it is because her disposition is different and she does not take kindly to the restraint that is imposed upon her when she is obliged to sit still and listen to the reading of a story. Perhaps, but this is certain, Bessie will grow up uncultivated and ignorant like her mother; and think of the different influence these two girls will have as women!

Our little town boasts of a most excellent library; that is, its shelves are well crowded, but the excellent applies only to quantity, not quality. Of course, there are a few standard works, Dickens, Scott, etc., and these the young folks read from a sense of duty and because they think they "have to." The rest are mostly third and fourth-class novels. The *Century* and *Harper's* lie almost untouched—perhaps there are half a dozen ladies who read them, and I doubt even that number.

"Girls!" I exclaimed, one afternoon, impulsively, "what do you read those things for? Here are some good novels up here," and I pointed to some on the shelves, not heavy, uninteresting ones, nor even a Howells or James, but really light and charming. "If you haven't another advantage in the world," I went on, "do read a good novel when you have a chance, for that is something." They looked at me in mild horror, and I have no doubt thought me a fanatic and pitied me.

Dear me, am I saying something sarcastic? I have only a desire to do some good and to cultivate in myself, and help in others, to the highest the faculties God gave. Is not that the truest conception of a woman?

Further, a knowledge of books and authors is a liberal education. Leaving school at the age of 15, and obliged ever since to assume the management of a large farm household, the only education received has been from the companionship of books; of technical training there has been none. And yet I feel that I can take my stand among girls who have had far better advantages. This is not written in self-praise, but for the benefit of our girls—our farmers' girls—who, did they but know it, have the material and surroundings that, if properly developed, will bring out grander women than their often-envied city cousins.

I am proud that I am a country girl—not the conventional country girl, with the usual attributes, but one who glories in the open air, the liberty and breadth of thought and action that such a life gives; one who can learn a lesson from homely duties, read a sermon in the rocks or upturned earth and be inspired to nobler thoughts and deeds by the weird enchantment of a summer twilight.

A GIRL OF TWENTY.

### A Model Love-letter.

EDITORS PRESS:—No doubt the Home Circle folks will be somewhat amused at the following letter. The young lady who received this letter has given me permission to publish it, or I should not have done so. Here it is:

LACONIA, Feb. 11, 1885.

MISS ADDIE BRADLEY:—Undoubtedly some surprise and perhaps great indignation awaits this epistle, but the spirit prompts me and I write. Will you read my explanation, consider my words and carefully ponder the context? I am a stranger—an old bachelor of 45; but I have since had my eye upon you and—and you cannot see me blush—have had a great admiration for you.

I passed through my youthful days without any of that peculiar feeling that sentimental people demonstrate love. Now I realize that my days are gliding swiftly by and I have been thinking—well, thinking of you. How would you like to be a farmer's wife and live kinder easy? Have nothing to do only milk six cows morning and night, make butter, raise turkeys, do a little washing and ironing and some darn-

ing, take care of a small family of 12 and have all the leisure time to yourself? I have a steady horse you can drive some and you can have a good easy time. Realize, you are getting to be an old maid and will never have another such good offer. Now, think of this and think quick, and let me know and I will come after you at once. Please write me as soon as possible, and believe me to be your sincere admirer,

OBADIAH TOMPKINS.

There, now, isn't that a good one? I have given it just as written, only I have changed the names of the parties.

WILL B.

Los Angeles Co., Cal.

### The Chautauqua Assembly at Pacific Grove.

[Written for the RURAL PRESS by H. M. F.]

The RURAL PRESS has so long befriended the "People's College" that it surely should have a report of our holiday proceedings. The program which the RURAL PRESS printed two months ago was triumphantly carried out, and the very elements conspired to make it a complete success. Days of unbroken sunshine and nights of starlit calm have followed each other in unvaried succession. The grove, too, is always adding to its charms. Each new cottage is prettier than its predecessors, and every year finds improvements. The crowds who have filled every available tent and room on the grounds during the present season have testified to the public appreciation of this favorite spot, and the numbers which have been turned away have led the Southern Pacific R. R. Co. to plan great additions to their hotel accommodations. Another year will find room for all. They are also building a pretty little museum for the use of the Chautauquans, and which will be the receptacle of all their natural history collections. Pacific Grove is to be indeed a center of educational interest; the home of a summer school of science with a faculty of teachers such as our best schools and colleges can furnish, and a gathering place for students from all over the Golden State. Nevada has this year contributed some enthusiastic Chautauquans to the Assembly, and even Texas has sent a "lone star" in the person of a young lady from the El Paso circle.

The program, as has been already said, was almost entirely carried out. Dr. Sprague gave his four grand lectures upon Shakespeare and Milton; Dr. James B. Worden, of Philadelphia, inspired the Sunday-school workers with much enthusiasm; Dr. Spinning, of San Francisco, rivaled Mark Twain in his humorous account of his European travels; Prof. Joseph Le Conte, of Berkeley University, talked eloquently of evolution, which he regards as the true theory of creation and not at all inconsistent with a reverent belief in the great Creator; Dr. Stratton, of San Jose, gave an admirable lecture upon the place of moral and mental science in education, which he thinks should be the foremost one, and many other excellent speakers took up various themes literary and scientific and delighted their audiences, which were invariably large.

The music of the Assembly was beautifully furnished by Prof. F. L. King of San Jose, and the grand choir of the First Congregational church of Oakland, under Mr. A. M. Benham. A musical convention was held in connection with the Assembly which will hereafter be one of its features. Nearly a hundred musicians took part in it.

The commencement exercises were full of interest. Eight ladies and gentlemen graduated: Mrs. M. L. Parkhurst and Miss Langley, of San Francisco; Miss Pierpont of San Juan; Miss Fitzpatrick of Alameda; Miss Etta Miller of Napa; Mr. Leonard Todman of San Lorenzo; Mr. Fred. W. Morris of San Francisco, and Mr. Joseph Layman of Berkeley.

Bishop Warren addressed the Chautauquans in eloquent and inspiring language. Dr. Bentley spoke more particularly to the graduates, while Dr. Stratton presented the diplomas.

A glorious camp-fire on the beach ended the jubilee, around whose leaping flames the gathered Chautauquans reported their different circles, read a beautiful responsive service prepared by Rev. Dr. Vincent, president of the society, and listened to the reading of an inspiring letter from Major H. C. Dane of Boston, who last year made an enduring record in the Assembly's annals.

The Assembly has been made happy by the presentation to it of an elegant flag, and also a banner, the gift of many local circles, chiefly the "Spiral" of San Francisco. Upon the banner are the Chautauqua initials and an exquisite piece of painting representing an outstretched hand holding a torch toward which another hand is reaching. This is the artistic work of Miss E. A. Rockwell of San Francisco, a Chautauquan who evidently appreciates the society's motto, "We study for light to bless with light." The old officers were unanimously re-elected at the business meeting.

The one new feature of the Assembly has been its more thorough organization of the scientific classes. This was most successfully accomplished under the veteran teachers who have hitherto conducted these classes, Prof. J. Keep of Mills college, and Dr. C. L. Anderson of Santa Cruz. Mrs. W. A. Hughes, of Auburn, also did excellent work in organizing a class in general botany.

It is proposed to perfect this system, and the respective teachers are now preparing a schedule of scientific study which may be carried on in one's own home during the year, and then re-

viewed and enlarged under the best of instructors at the next Assembly. Thus the People's college is deepening its foundations.

Pacific Grove, July 21st.

### What May be Done.

EDITORS PRESS:—Your correspondent "Now and Then" in your issue of July 17, in her article, "What Shall We Women Do?" opens up the pro side of the Chinese question in a vigorous and lively manner. However, it appears that although she gave up her China boy her heart was not in the anti-Chinese movement, for it was simply "fear of the boycotters" that led her to do so; therefore it could hardly be expected that her action would be a success. The Southern people thought that they could not do without their "niggers," but emancipation came all the same and in a way they wot not of; in fact, the Southern people were the veriest slaves to their slaves, as many of them now see. If we are in the position that we can't get along without our China boys, are we not in a species of slavery to our Chinese? Is it not so that in many cases our China boys are so tyrannical in the kitchen that the mistress dare not set her foot inside of it for fear he may leave? Has it ever occurred to those who employ labor that the entire labor question is in a very unsettled condition? We speak from knowledge, having seen both sides of the labor question, both as an employer and an employee. If you are an employer, it often seems as if you had to work hard to give somebody an easy living and be worse off at the end of the year than the one you employ; while again, if you are an employee, your faithful and conscientious services are received with less appreciation than the merest eye service.

Many, no doubt, look to the past and wonder why we can't have the same good help that our mothers and grandmothers had, forgetting the fact that our mothers and grandmothers treated their hired girls as companions and friends, and on a footing of perfect equality and as if they were doing a service (which they were) by assisting in the household duties.

The Knights of Labor say that "Labor is noble and holy;" that they "uphold the dignity of labor" and "affirm the nobility of all who earn their bread by the sweat of their brow." Now, have we been acting as if we believed such to be the case? Have we not called household labor menial, and acted as if those who did such work were necessarily inferior? Have we not employed a servile class to do such work until a stigma attaches to all who are obliged to work in that way? Put yourself in their place. Which of us wants to go out and work in a stranger's kitchen? Who among us wants our daughters to work in the stranger's household? Do we not instinctively feel that we are virtually degrading them by doing so?

What is the remedy? Think where many of you would stand if your domestic help should stop work to-morrow? At present we are in a transition stage of labor, and the relations of employer and employee are necessarily strained. Supposed necessity compelled the employment of Chinese in the first place in our households. Pride also had something to do with it, for is not Mrs. A, who employs a China boy, socially above Mrs. B, who does not choose to do so? The true remedy, as we see it, is for us to adopt the first article in the preamble to the declaration of principles of the Knights of Labor, which declares it to be their purpose "to make industrial and moral worth, not wealth, the true standard of individual and national greatness." When we get down to the practice of the above we will not be far from the kingdom of heaven. Then we will not have a good cook spoiled by trying to make a fine lady of her, as is sometimes done. If, in that good time which is coming, any of us are so unfortunate as not to be able to do for ourselves the common services of every-day life, we will be able to obtain such help as we require—not for money merely, but because it is conducive to the good of all, and if we are unable to work in the so-called menial callings, we will still feel that society has a right to demand that our talent shall not lie buried, but that it shall be employed for the welfare of others as much as our own welfare. Let us not meantime think that that time is going to come about without effort or sacrifice on our part; but let us be willing to make any reasonable sacrifice toward bringing about a more perfect condition of things.

As long as we have a servile class to do our common labors just so long will we be unable to get other than the "poor white trash," and so if we find that we (while the transition is going on) are unable to get along in the style in which we have been accustomed to live, without help, let us try and cut off some of the superfluous luxuries and see if we do not thereby enjoy better health, and by virtue of that be better able to do the work which we thought ourselves unable heretofore to do. If we are unwilling to make any sacrifice ourselves in a like measure, we will be unable to profit by the sacrifices which have been made for us in the past.

If our Revolutionary forefathers made the sacrifices they did on our behalf that we may have the freedom we now enjoy, posterity demands that we do as much as we can for them so that they can use our example as a stimulant in time of necessity. In many cases a little self-denial is all that is required to put us on the highway to emancipation from kitchen drudgery.

PIONEER.

Riverside, Cal.



## The Moral Status of the Business.

Of the 8000 licensed rum-sellers in the city of New York, 6438 have been in jail or the penitentiary; and yet these men have satisfied the authorities that they are of good moral character. If a term in the penitentiary is sufficient to deprive a man of the franchise, why should it not be sufficient cause for withholding from him a license to conduct a business that needs the guarantee that he is a moral man? Mr. Piper, a prominent saloon-keeper in New York City, in a recent meeting of the saloon fraternity, said: "We don't wish to advertise ourselves as law-breakers, though everybody knows we are; for there is probably not an hour in the day that we don't violate the law." This is not an estimate put upon the traffic by persons opposed to the business, but the free, frank expression of one of the fraternity of liquor dealers.

In keeping with this is the preamble to a resolution passed by the Retail Liquor Dealers' Protective Association. It reads as follows: "Whereas, on almost every street in this city so-called groceries and other shops vend liquors by the glass and have no retail liquor license, and such shops are a financial injury to us as business men and tend to bring the whole business into disrepute from the fact of doing an illicit business, and acting as wholesale breeders of crime, want, misery and disgrace from the selling of liquor to women and girls."

Now mark, the evil complained of is, that these groceries bring disrepute upon the saloons, because they do an "illicit business," and, second, they are "wholesale breeders of crime, want, misery and disgrace," because they "sell liquor to women and girls." Then it "breeds crime, want, misery, and disgrace" to sell liquor to women. Will not the same business work the same results with the men? What is there in sex to prevent the inevitable consequences of drink with one, and to produce such ruin with the other? As to the selling of liquor to minors, that is too common now in the saloons for such a complaint to come from such a fraternity against the grocers. Here it is admitted the traffic is a "breeder of crime, want, misery and disgrace."

Said Senator Frye, of Maine, in a debate in the United States Senate in 1884: "I have seen a restaurant of one of these Houses become an open, notorious, low, miserable grogery. I have also seen a man, with his pantaloons inside his boots and with his coarse blouse on, standing at the bar of a restaurant of one of the Houses of Congress, drinking miserable whisky out of a cup."

"A tin cup" inquired one of the members.

"No, sir," said Mr. Frye. "A crockery cup; and I have seen whisky ordered again and again, and called 'tea,' and brought and served in a cup and saucer. Anybody, whether a member of Congress or otherwise, can sit down and order his 'tea' and drink it out of a cup."

"To me," the Senator from Maine continued, "whether there is anything wrong in it or not, there is something utterly disgusting about it, and it is entirely unbecoming the character and dignity of the capital of the United States." Think of the disgrace, of law and decency being outraged in the very buildings where our legislators assemble and under their eye. The times demand that a business self-confessed to be a "breeder of crime, want, misery and disgrace" should have no place in our public buildings. Drive the disgraceful business from every haunt it pollutes, and every community it degrades.—Selected.

A PLUCKY SCHOOLTEACHER.—Miss — (her name we withhold by request), who teaches the Glynn school in Coleman valley, displayed an uncommon amount of pluck Friday morning. She arrived at the schoolhouse a little earlier than usual, and was busying herself in arranging things in the little schoolroom for the morning session, when she was startled by the loud barking of dogs close at hand. She went to the front door and discovered two of Jim Smith's large deer hounds barking in a furious manner at the foot of a tall tree. She went to the spot and discovered a large panther crouching on one of the lower limbs, its large yellow eyes gleaming fiercely at the dogs below, while it lashed its tail viciously from side to side. One glance at those fiery eyes would have been enough for most women, and some men for that matter, but she is made of the old Puritan stock, and it takes something as small as a mouse to frighten her. She did not faint or go into hysterics, but did go into the schoolhouse and bring forth her Winchester. She then walked around the base of the tree until she arrived at a point where she could take accurate aim at a vital spot, and fired. The shot was answered by an unearthly screech, as only a panther can give, and the large spotted body fell to the ground. After one or two convulsive quivers, the huge mass was lifeless. It measured seven feet from tip to tip. It wasn't a good day for panthers, either.—Sonoma Dem.

ANDERSEN'S WRITINGS.—A card is received from Santa Barbara protesting against Prof. Foster's translating "from the German of Hans Christian Andersen," because Andersen was a Dane. It may be answered that, though Andersen was a Dane and wrote his earlier works in Danish, he had many friends and admirers in Germany and adopted the practice of issuing his writings both in Danish and German. Prof. Foster, in his translation, has the German version, and consequently translates from it.

## YOUNG FOLKS' COLUMN.

## Young Folks' Letters.

## Poultry Club Notes.

MRS. J. HILTON:—I read the letters of the boys and girls, and as I am very much interested I concluded to answer one of the questions in our last paper, the July 17 number of the RURAL PRESS. I will answer the question of F. Wood, "What makes my chickens mope about?" This moping about is the roup, and is caused by having fowls roosting in a draft, dampness, wet weather, sudden changes, or in foul and badly ventilated houses. Your little reader, JAMES MCKELVEY, Los Angeles.

DEAR MRS. HILTON:—You wanted to know how many eggs is best to put under a hen. I would put 13 under a small hen and 15 under a large one. Your little ten-year-old friend, LULU E. GODFREY, Visalia.

MRS. J. HILTON:—I live at a place eight miles east of San Bernardino, and I am nine years old. I will answer some of your questions. It is best to put only 12 or 13 eggs under a hen to set. The ones who own the hens have the best luck with those which steal their nest. The chickens which mope about do so because they are lousy.

I will ask a question: "What shall we feed young mocking birds?"—MATTIE M. STARR, Lugonia.

MRS. J. HILTON:—I think if Harry Hopkins would poultice his big dog's foot with mud or wet sand, changing it twice or three times a day, it would get well; as our dogs would always to seek the mud and lie in it for anything of the kind.

Tell F. Wood his chicks, probably, are troubled with vermin, in which case he must use lots of cold water about their roosting place; rub the roosts well with coal oil, and whitewash the coops thoroughly. Feed raw onions cut into little bits.

If any of the "young folks" hens or chickens are troubled with swelled heads, they will find showering with cold water a very good remedy. An old coffee or teapot is good to use for it, if there is no faucet to hold them under. About twice a day is sufficient.—A. E. D.

## Pigeons.

EDITORS PRESS:—I send this answer to "Polly" in the Young Folks' Club as to the "best way to care for pigeons." The best way as we think (and we judge from our own success somewhat) is the let-alone principle. Pigeons should always have their roosting and nesting places, as well as the entrances to the same, inside of a barn or shed. If the entrances are from the outside, they are apt to be troubled by hawks and owls, and will frequently leave such places on that account. They also like to roost like chickens on the ties to rafters high up on the roof (except when hatching), secure from cats or other enemies in the night time. The writer of this has had no trouble about having all the pigeons he wanted under the conditions mentioned above, while his neighbors' pigeons will often come to him to stay; in fact the first pigeons we had came of their own accord. No further care is necessary, except a little cleanliness. If there are any stubble fields near they will find their own feed in the summer, while in winter they want to be fed any kind of small grain. Green feed is necessary and beneficial, of which there is generally enough in any neighborhood any time of the year. Under the above conditions pigeons will increase so fast as to be almost a nuisance.—B., Riverside.

## Morro and Its Surroundings.

DEAR EDITOR:—Haying, heading and thrashing are in great progress. It seems as if everybody has got a header or thrasher. Potatoes are very plentiful and are very low in price, from 50 to 75 cents a sack. Onions are \$1 a sack, and wheat and barley are a dollar a sack. There is no price set on hay as yet, and fruits are different prices. Butter is 14 cents in Cayucas, so you see the dairymen are not making fortunes this year.

They had a grand picnic the Fourth of July up on Toro creek, but I was very sick and we could not go. Miss Kittie Congdon and Mrs. Deo, her sister, played on the organ and sang. I do not know who delivered the oration. The Toro creek teacher (a lady) read the Declaration of Independence. After that they had a barbecued beef.

I saw a letter in the PRESS from a girl in Muscle Slough, and as I came from Visalia, only 30 miles from there, it seems like a letter from home.

Our school begins in August. Our teacher's name is Mrs. Hamlin. I wish Miss Congdon could have got it. I will be glad when school begins. We will have four months of school, and then it will stop and commence again in March. We will get our share of schooling.—EDITH MEAD, Morro.

## From Wild Flower.

EDITORS PRESS:—I thought I would write a few lines from this section of the country. Harvesting is nearly over, and grain is turning out very well. Some few sheep are coming in to eat down the stubble. We have had some of the warmest weather I ever saw; it was very sultry. I enjoy the watermelons so much, and we have a good many. I am aware that I am

taking too much space in your valuable paper, of which I have been a reader for some years. The Young Folks' Column is always good; it is the first thing I look for in the paper. I will close for the present.—C., Wild Flower, Fresno County.

## GOOD HEALTH.

## Recovery From Illness.

I think that only those who have been on long beds of sickness, experiencing weeks of pain and weariness, coming slowly up through convalescence once more, can fully appreciate all that good health means.

In sickness your world is limited to the world of your chamber; your interests to obtaining ease and rest from pain. You are like a babe in your despondency, and a child in your temper and caprice. Strange thoughts come and go through the brain; all the future is dull and lurid, as seen through the morbidness of disease, and between it and you lies the valley of the shadow of death, perhaps. If you escape that valley, and feel life thrilling once more within your veins, how slow the creeping back to the old landmarks once more, and the awakening of the old interests. But one by one they come to you once again, the pulse beats ever stronger until you can cry jubilant, I am well.

And there is a compensation of one sort for sickness. The wheels of your machinery have been oiled and jointed afresh, and move with greater ease; the new fibers of flesh and muscle have something of the elasticity of youth about them, and your brain is cleared of many cobwebs. In the hand-to-hand conflict you have had with disease, all minor troubles have lessened or vanished entirely, and the blessings of life so nearly lost are appreciated at their worth.

Hope is in the ascendancy again, and you are thankful, loving, willing, glad to do your part once more in the work of life. All this comes with real healing from disease.—Herald of Health.

CAUSE OF PREMATURE OLD AGE.—The cause of much of the premature old age and decrepitude and nerve degeneracy and break-down is in the many inventions man has devised whereby he robs himself of timely rest. The morning newspaper, often read through before breakfast; the telephone in his house, to call him at any and all times aside from his repose; the electric light to keep his brain unduly stimulated through the retina; the railroad and the sleeping-coach, which may keep him continuously on the rail (if he chooses so to travel) for many weeks, without rest from the noisome and exhaustive cerebro-spinal concussions of this mode of travel, hasty meals and telegrams and business, and nightmare sleep, all commingled, wither and wreck lives innumerable, which, under wiser management, might end differently; and the needless noises of the city—the bells and whistles, howling hucksters, noisy street cars, yelling hoodlums, that make night hideous with their howls—hasten the premature ending of useful lives; and when, superadded to all this unphysiological strain, we have the assault of a pestilence that poisons, like cholera, how much exemption can such overwrought organisms expect? How much of resisting immunity can such overstrained and exhausted nerve-force oppose to the invading foe?—Sanitarian.

WHAT IS CATARRH?—Catarrh is a mucopurulent discharge, caused by the presence and development of the vegetable parasite amoeba in the internal lining membrane of the nose. This parasite is only developed under favorable circumstances, and these are: Morbid state of the blood as the blighted corpuscle of tubercle, the germ poison of syphilis, mercury, toxemia, from the retention of the effete matter of the skin, suppressed perspiration, badly-ventilated sleeping apartments, and other poisons that are germinated in the blood. These poisons keep the internal lining membrane of the nose in a constant state of irritation, ever ready for the deposit of the seeds of these germs, which spread up the nostrils and down the fauces or back of the throat, causing ulceration of the throat; up the eustachian tubes, causing deafness; burrowing in the vocal chords, causing hoarseness; usurping the proper structure of the bronchial tubes, ending in pulmonary consumption and death. Many attempts have been made to discover a cure for this distressing disease by the use of inhalants and other ingenious devices; but none of these treatments can do a particle of good until the amoeba are either destroyed or removed from the mucous tissue.

CHANGING THE VOICE.—As the result of an experimental inquiry, Dr. Sandras, a physician of Paris, claims to be able to change the nature, intensity, pitch and extent of the voice in a surprising degree by the use of different inhalations. A few inspirations of alcoholic vapor impart a decided hoarseness, some vapors weaken the voice, while others strengthen it to such an extent that it acquires new notes, high and low. If the same effects are produced upon people generally, this curious discovery must prove of great practical value to public speakers, singers, and all who use the voice considerably.

## DOMESTIC ECONOMY.

A DELICIOUS SALAD is made by cutting up peaches and bananas in thin pieces and sprinkling them with sugar and a little lemon juice.

COOKIES.—Beat two eggs in a cup, and two tablespoons of melted butter, two tablespoonfuls sour milk; fill the cup with sugar, half teaspoonful soda, flour to roll; bake quick; best if kept in a stone jar.

CREAM FOR PUFFS.—One quart of milk; let the milk come to a boil. Mix together four tablespoonfuls of cornstarch, five tablespoonfuls of sugar and four eggs, pour into the milk, stirring constantly. Cut the puffs in half and fill with the cream.

BREADED POTATOES.—Boil potatoes in their skins until done, but not too soft. Peel them, cut them in thick slices, dip them in beaten egg, roll them in fine bread or zwiebeck crumbs. Fry the slices in hot butter or drippings until they are a golden brown, and serve.

CREAM PUFFS.—One pint boiling water; while boiling stir in one cupful of butter, two heaping cups of flour and eight eggs, yolks and whites beaten separately. Stir until well mixed, then take off the fire. When cool, stir in one teaspoonful of soda. Now drop in gem pans and bake in hot oven.

TURNIP SOUP.—Slice five turnips and three onions with a piece of butter into a saucepan; cover close and let it stew for half an hour; then put in as much good stock as you require for the quantity of soup; add a few peppercorns, let it simmer for two hours, add a good slice of bread, rub it through a sieve, and add half a pint of milk before serving.

GREEN PEA PANCAKES.—A cup of boiled green peas, rubbed smooth with a teaspoonful of butter and seasoned with salt and pepper; should have been put aside after dinner yesterday for this purpose. Mix with it now a cupful of milk, two beaten eggs and three tablespoonfuls of prepared flour. Beat to a soft batter and bake as you would griddle cakes.

RASPBERRY JAM.—Warm the fruit, mash it well in an earthen jar, and boil 20 minutes. Then to every pound of fruit use three-fourths of a pound of sugar. After this is put in, let it boil till by taking some out on a plate to try it no juice gathers about it. Then it is ready to put away, as you would jelly, in glasses or stone jars. Seal with paper dipped in the white of an egg, when it is quite cool.

RASPBERRY PIE WITH CREAM.—Line a pie plate with a good paste and fill with ripe raspberries sweetened abundantly, says Marion Harland. Lay the upper crust on evenly, but do not fasten by pinching or printing the outer edges. When the pie is baked, set aside to cool. The crust should be cold and stiff when you lift it to cover the contents with a cup of whipped cream, sweetened with powdered sugar. Replace the upper crust, sift sugar over it and send to the table.

CHICKEN SALAD.—Two common-sized fowls, one teacup of good salad oil, half a jar of French sweet mustard, the hard-boiled yolks of ten eggs, half a pint of vinegar, one teaspoonful of cayenne pepper, eight heads of celery, one teaspoonful of salt or a little more if required. Cut and mix the chicken and celery, and set away in a cool place. Mash the eggs to a paste with the oil; then add the vinegar and other things; mix thoroughly, but do not pour it over the salad until about half an hour before serving, as the celery may become wilted.

WATERMELON RIND PICKLE.—Pare the outer rind off watermelons that are brought from the dinner table; cut them simply into strips, leaves or stars—any shape, in short, that you may fancy; take 10 pounds of this rind and boil it in clean water until tender; make a syrup of two pounds of sugar, one quart of vinegar, half an ounce of cloves and half an ounce of cinnamon; the syrup to be boiled and poured over the rinds boiling hot; drain the syrup off and let it come to a boil, and pour over the rinds three days in succession. It will keep for years.

FRENCH HASH.—The recipe is: Use cold, fresh beef, cut in small, thin slices. It does not make any difference whether you cut the meat with the grain or not, as the time of cooking is short. For a pound of beef use a teaspoonful of onion, chopped very fine; put the onion in a frying-pan with a heaping tablespoonful of butter, and put them on the fire until they begin to brown. Put in the beef and brown it very quickly. Then stir in a tablespoonful of flour, and as soon as brown add sufficient boiling water to cover the beef. Season with salt and pepper rather highly. Heat all the ingredients together very quickly and take the frying-pan off the fire. Stir in the yolk of an egg and a glass of wine and serve. Miss Corson added, that those who are unaccustomed to the stirring in of eggs had better take a teaspoonful of the gravy and stir it together with the egg in a cup before adding to the sauce or gravy. That will insure smoothness.





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Published by DEWEY &amp; CO.

Office, 252 Market St., N. E. cor. Front St., S. F.  
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Drafts for this paper in the name of the firm.

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A. T. DEWEY.

W. B. EWER.

G. H. STRONG

SAN FRANCISCO:

Saturday, Aug. 7, 1886.

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## The Week.

It is needless to state what is the prevailing topic this week. Every one within reach of the telegraph or in sight of passing trains on the overland railroads knows that patriotism is abroad and monopolizes the public mind. Not alone in the metropolis where the affair has culminated in a blaze of glory this week, but in the distant towns whence the delegations have come and the directions in which excursions are planned, there is little thought or talked of than the Grand Encampment. In the city, business has been laid aside and the time given to pageants and receptions of a character and grandeur never seen before on the Pacific Coast.

One can judge how great an attraction the demonstration has proved from the fact that the Legislature forgot the exciting water question, met at midnight to discharge its constitutional duty in voting for a U. S. Senator, and then left the capitol in a body to attend the Encampment demonstration in San Francisco. Certainly no subject has ever so deeply engrossed the public mind.

We have been gratified in all the demonstrations we have seen and all the words we have heard uttered that there has been no indication that the asperities of the conflict remain. There is general rejoicing over the maintenance of the integrity of the nation and most solemn pledges

for the future, not for the advantage of any section, but for the good of the whole people, and upon this broad platform we are brothers all.

## A New Senator.

As we go to press the telegraph brings the announcement of the election of A. P. Williams, of San Francisco, to succeed George Hearst, whose senatorial life was cut short by the calling of an extra session by Governor Stoneman. Mr. Williams has long been a prominent wholesale liquor merchant in S. F., and is well spoken of by his associates. He has also figured considerably as a Republican politician. Mr. Williams will only hold office until the election of a Senator by the Legislature in January next, and the conferring of the senatorial toga upon him is little more than complimentary. It is hardly probable that those who elected him would have nominated a man in his business to catch the popular vote.

We cannot squeeze out many tears over the retirement of Mr. Hearst. He did not succeed in making a record which would commend itself to our readers. He was arraigned for his favor of the bogus butter men and wrote a letter, which we published, stating that he could be trusted to vote in the public interest on all measures. We rather thought his letter was too diplomatic to carry conviction, and yet we charitably received it as assurance that Mr. Hearst really would not favor the fraud. So it was received by others, and he was absolved from the intention to insult and endanger the genuine dairy interest. In spite of this declaration, when the bill came up, Mr. Hearst voted against the oleomargarine bill, which his constituents called upon him to support. Such a man "will not be missed" from the national councils. Fortunately, Senator Hearst did no harm in this matter, for the bill passed triumphantly.

President Cleveland has placed his signature upon it, and expressed his views in a message which may be found upon another page. The dairy interest may now take courage. We have not yet received the full text of the bill as it went to the President, but will have it soon. It may be said, however, as indicating the service which it will do the genuine interest, that after November 1st all imitations of butter will come under the revenue department of the Government, must pay a special tax, and, best of all, must bear upon every package a revenue stamp which will declare its character. We have always claimed that the greatest service to the dairy interest would be to let every one know when he was eating tallow and lard products, and that will not be required by the vigilant revenue department of the Government. This has been secured in spite of the opposition of Mr. George Hearst.

Another matter in which Mr. Hearst figured to the detriment of the agricultural and commercial interests of California was in the attempt he made with such adroitness to kill the effort of the Government to aid the people of California in stopping debris destruction and repairing the damages already done to our water-courses. He did this by leading the Senate to strike out of the River and Harbor bill the clause instructing the Secretary of War to bring suit against hydraulic miners in California who are filling up the navigable rivers with debris, as it was stated that the Secretary of War would not use any portion of the appropriation for the improvement of the Sacramento and San Joaquin rivers until he was satisfied that hydraulic mining had closed.

Mr. Hearst's action in this matter was a temporary revulsion of all the earnest work which has been done for years to get the U. S. Government to do its duty in this matter, and naturally it was received with great indignation in California. It seems that the other representatives set at work at once to repair the damage Mr. Hearst had done, and the Washington telegrams this (Wednesday) morning indicate successful work in this direction:

When Hearst succeeded in eliminating from the River and Harbor bill the clause against hydraulic mining, McKenna went quietly to work to have it restored through Markham, who is on the committee and who was one of the conferees. McKenna had the clause restored in conference, and to-day it passed both houses, Senator Hearst not knowing anything about it. The River and Harbor bill now directs the Secretary of War to bring suit against

hydraulic miners and compel them to cease depositing mining debris in navigable streams.

It thus appears that California has little to thank Mr. Hearst for; and, considering his course, the general opinion will be that his term in the Senate, short as it was, was quite long enough for the good of California.

## Among the Rural Exhibits.

The special displays of products from Californian counties and other portions of the Pacific Coast are noteworthy features of Encampment week. One of our staff spent a few hours Wednesday in an excursion—tantalizingly rapid—among those he could find most readily.

Entering Platt's hall and turning to the left, he first came upon a little exhibit made under the auspices of Gen. John F. Miller Post, G. A. R., of Colusa, and embracing apples, pears, peaches, plums and grapes—Muscats, Rose of Peru, etc.—onions, both yellow and red, half a foot across, and handsome samples of mohair, from Julius Weyand's Angoras, both male and female.

The space beyond, assigned to Yolo county, was cared for by the Woodland and Winters Posts. A vine loaded with hops, which showed no signs of New York blight or vermin, adorned the corner pillar; while the table supported big watermelons, nectarines, pomegranates, beautiful peaches and other fruits, fine Muscat, Flame Tokay and Black Hamburg grapes, and glass dishes full of grain.

There was also a pile of little muslin sacks, each three and a half inches high, labeled "Sample of grain grown in Yolo Co., Cal. (Sacramento Valley), Exhibit National Encampment, G. A. R., S. F., Aug., 1886," for Eastern visitors to carry home with them.

The most striking thing, however, was an arch of converging palm-fronds, from the center of which hung a huge cluster of green dates, about the size and shape of small olives. This interesting contribution was from S. C. Wolf-skill, of Winters. The bunches of alfalfa, too, would attract the attention of farm-folk from beyond the Rockies.

Next came Tehama county, having on its boundary a little cabinet of mineral specimens. Here was an extensive and handsome show of fruits, grain and vegetables, set off by tall and shapely sheaves of wheat and stalks of corn, reaching from floor to gallery. There were many samples of Snow-flake and other wheat in open boxes; potatoes, Irish and sweet; an 82-pound squash; gourds, cucumbers and tomatoes; a 54-pound watermelon; apples, pears, quinces, grapes, nectarines and other stone-fruits too numerous to specify.

But the exhibit from Butte, occupying the southern half of the hall, outdid all others. "A Butte county sliver" of sugar pine, more than a yard in width and 16 feet long, stood sentry at one end.

There is an elegant show-case filled with ores, asbestos, petrified wood and other specimens most engaging to the mineralogist. Towering corn, grain and pulse in jars, fine fruit in great variety, including bearing branches not a few, all go to prove the rich productiveness of the region. Especially showy were the many plates of superb Butte county oranges. The lucid oil, expressed from Oroville olives, the long bunches of timothy grown 2500 feet above the sea, the 80 varieties of wheat neatly displayed in sheaf and jar, 14 varieties of corn, 10 or 12 of barley, 2 or 3 of sorghum, the ramie, the walnuts, black and English, almonds, can barely be mentioned; 45 varieties of wood grown in the county are shown in the shape of uniform tablets by L. F. Smith, of Chico. The case of dried fruits and nuts from Gen. Bidwell's—24 divisions under glass—is the same which was admired at the New Orleans Exposition. The Casaba melons were the handsomest we have ever seen; and there were lots of them. Our enjoyment while hastily reconnoitering this charming exhibit was heightened by the courtesy of Mr. Boynton, of the Oroville Register, who takes a lively interest in pointing out its varied features.

In front of the Lick house, the cross-section of a redwood, measuring about nine feet in diameter, and lettered "From the Big Bottom Mill, Sonoma Co.," is set up edgewise upon the sidewalk and serves as a guide-board to the Sonoma County Pomona Grange exhibit within. On one side of the deep room are arranged grain

and grasses, showing in many instances the whole plant—root, stalk and head. One of the courteous committee in charge informed us that there are 80 varieties of native grasses and forage plants, including clovers, in their collection, although they cannot all be displayed until they are put up later in the Mechanics' pavilion. There are oats here, both wild and cultivated, considerably over nine feet high, and specially interesting are the volunteer oats, second crop, from suckers.

Opposite, on a terraced slope of 10 or a dozen shelves, are marshaled in close array hundreds of small glass jars, filled with a great diversity of products, fruit, pulse, grains, seeds of many sorts, wool washed and unwashed, etc., with two rows of bottles of native wines at the top. Above all is broadly placarded, "No irrigation." Across the end of the allotted space is stretched a fac-simile of the Sonoma "bear flag" of '46, having horizontal stripes red, white and blue, with a single star in a parallelogram, in the upper inner corner, and a lively looking bear diagonally opposite.

Passing out, we note a little exhibit from Washington Territory, comprising wheat, Australian, Little Club, etc., in heads, a variety of wheat, oats and barley in jars, slabs of native woods, samples of wool, mohair (14 inches long) and cocoons and silk grown in Walla Walla.

What San Diego county can raise is well exemplified at Easton & Eldridge's. Dampfs' white figs from Otay valley and Cowles' El Cajon raisins, grown without irrigation and cured by solar heat, stand for dried products. Grain is not omitted—there are maize, wheat and oats; but the growing trees in boxes of earth overshadow lesser objects. The loquat, not being in bearing, has a picture of the plums framed above it. The boughs of the guava are thickly set with small green fruit, and the citrus branches are freighted with their own yellow treasures.

The largest lemon tree rises from the center of a low, rimmed table, some 12 feet square, which is covered with a display of splendid fruit, mostly citrus, where Navel oranges and Eureka lemons are interspersed with Muscat and purple grapes, russet pears, apricots and apples, green and ruddy. After that comes an olive tree in bearing, and then a table whereon are stacked frames of choicest comb-honey, beside which is fittingly shown a lofty bundle of the white sage so dear to Southern bees.

At the Oregon headquarters, in the new I. O. O. F. building, we are first struck with the singularly beautiful showing of native woods. The rare specimen of maple burl—a section of trunk 7 feet high, cut on one side and exposing polished surfaces—which stands nearest the door, is followed by a series of large, glossy slabs of maple, Alaska cedar, Oregon mountain oak, myrtle, ash, etc. In the middle of the room is a large pyramidal stand, elaborately and tastefully constructed by the Portland Furniture Manufacturing Company, in itself a handsome exhibit, on which are arranged in glass numerous samples of grain (rye, oats, barley and wheat), fruit and berries in great variety. To the rear a pair of tapering towers are built of grains and grasses, bound in slender sheaves and set upright around circular stands, two and three stories high. Among the wheats we noticed Black African, White Australian, Chili Club, Seven-headed Egyptian and English Purple Velvet, the last tagged as yielding 96 bushels per acre. The timothy was gigantic.

There were also dressed chunks of Polk county freestones, a big glass case of unwashed fleeces and a cabinet of minerals, which, to our non-expert eye, were fine-looking specimens.

All these resorts were thronged with visiting veterans and their lady companions, who appeared full, by turns, of lively, pleased curiosity and quiet satisfaction.

JAPANESE PLUMS.—Mr. Ass Cleveland, of Alameda, has handed us two branches covered with Japanese plums, of what he calls the low and the high "Tank-ei" varieties. The twig of the latter bore 17 yellow plums on a length of seven inches, while within the same space upon the forked cutting from the low variety, 40 purple fruit were crowded. The cions from which they grew were obtained of Mr. Chabot, East Oakland, and grafted upon apricot stock, Mr. Cleveland thinks, in January or February, 1884. The trees were transplanted a year ago last May.



### A Colusa Farmer's Home.

As our State is full of visitors, going about to see some new thing, we have thought we might entertain them as well as our old readers by giving a view and description of one of the most remarkable residence buildings in California. It is the home of L. F. Moulton, and is situated near Colusa. The general exterior aspect of the building, from one point of view, may be gained from the engraving on this page, which is made from a photograph. Perhaps the first feature which strikes the beholder is the height of the structure. A person standing upon the tower which crowns the residence has his eye about 75 feet from the ground, and this altitude gives a grand view of the Sacramento valley and river to the south, the Coast Range to the west, the Sierras to the east, and the eternal snows upon Mt. Lassen and Mt. Shasta to the north.

Mr. Moulton's residence contains many novel features, in fact, nearly everything about is novel and characteristic. Take first the portion that first strikes the observer by its bold elevation. The engraving shows that the central portion rises four full stories, and overtowers the other parts. This is, in fact, the tankhouse, for instead of erecting his tank house apart from his residence, as is commonly done, Mr. Moulton has made his tank-house a central idea in his house planning, but has made such good use of the space and so elegantly fitted it up that no one would discover any likeness to its progenitor the tank-house. The interior of the tower is used for an elevator and around it is the stairway. There is also space for an observatory where a telescope may be arranged.

At the very top of the tower is a lookout which forms the roof or deck over the main tank holding 1500 gallons, situated 65 feet above the ground. This tank has a supply pipe of galvanized iron two and a half inches in diameter, which pours into it from above, and another similar pipe from the bottom for distributing the water. Connected with this are three one-inch pipes which carry water for fire purposes to about 25 buildings situated within a radius of half a mile. From the tank there are also a 2½-inch and a 2-inch pipe leading to hydrants at all necessary places, for the purpose of extinguishing fires, watering stock, irrigation, etc. The water to supply the main tank is obtained in this way: There are two Garret pumps, one on each end of a 2½-inch iron shaft, 80 feet long. This shaft is supported on a frame and is run by steam or horse power as desired. It is so arranged that either or both pumps can be used at will.

Under each of the pumps are wells with pipes running directly into them, and pumps are also connected with four other bored wells, in different directions. In this way they draw upon a large area of water space below the surface, instead of one large well as is usual. Mr. Moulton finds that bored wells cost less and are not liable to get out of order.

Aside from the large tank surmounting the tower there is another of 500 gallons capacity, which receives the rain-water from the house-roof and is the head of the system of water supply for domestic use, in wash-bowls and bath-tubs, as there is hot and cold water throughout the different stories of the house. There is also a system for flooding the house-roof, etc., with water in case of fire and means for drawing off quickly any water thus set free,

which must be seen to be appreciated, as their plan is very ingenious and working effective.

Another notable feature of the residence is its chimney system, which is quite as remarkable in its way as the water system. The chimney is a large structure to the center of the

mantels. This chimney runs up through three grand rooms, one above the other, and each 22½ by 32 feet in size; other rooms, arranged to suit convenience, communicate with the main rooms. On the ground floor, as shown in the plan, the large room 22½ by 32 feet opens by

nomical observatories. The telescope support will have eight arches, supported by columns, through the center of which will run 15-inch pipes, and these will be slanted up and out of the way above, so as to reach open air and unobstructed draft.

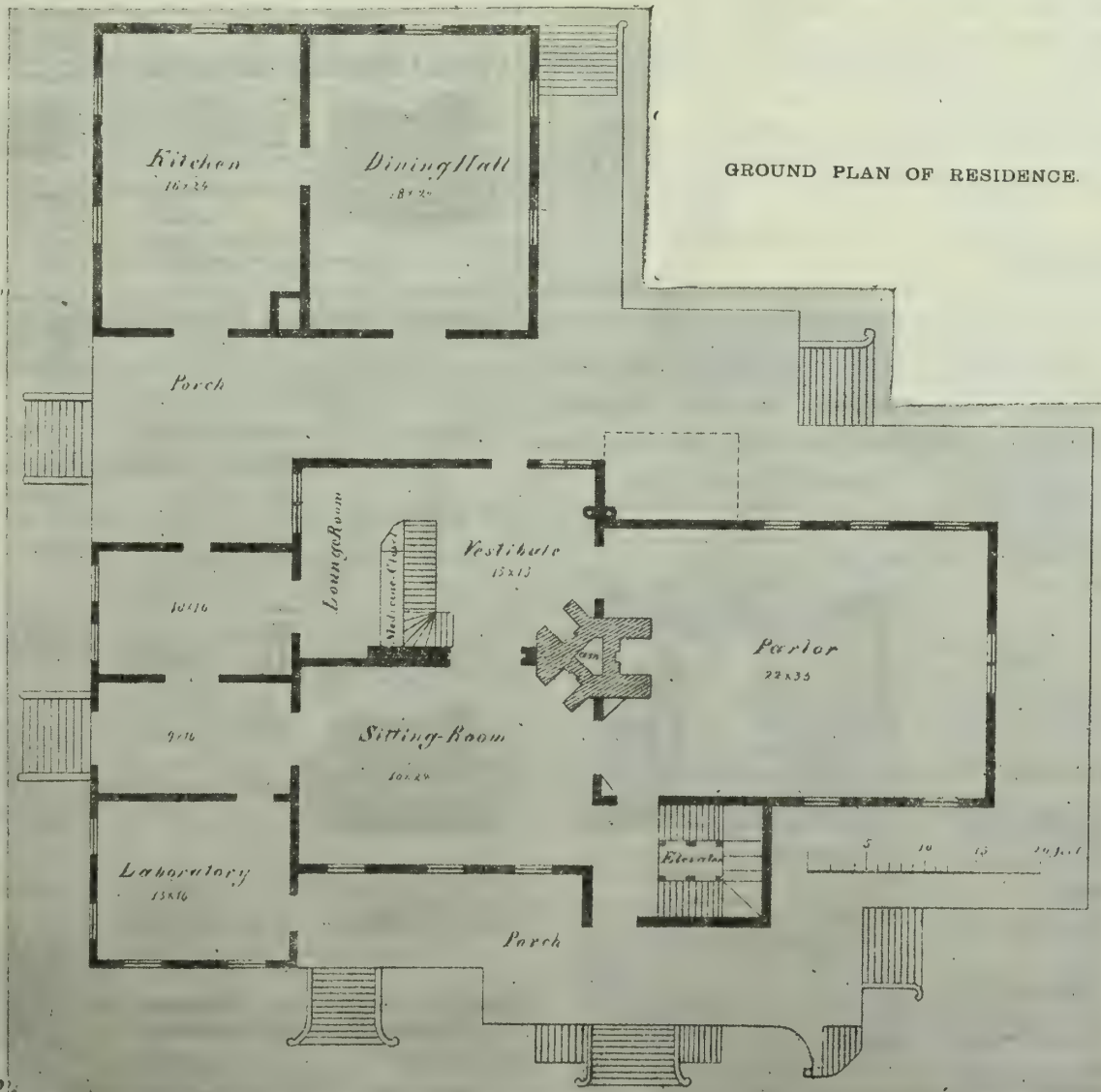
We have not space to comment at greater length upon Mr. Moulton's structure. A study of the engravings will show the reader many points not described. His house is located on a farm comprising 9000 acres of high grain land and 9000 acres more, which are partly subject to overflow; but the lowest is said to be good hay land, and also has fruit trees and vines that have lived through the worst overflow of many years. Mr. Moulton is now preparing to set out 100,000 young prune and pear trees, having a large lot of imported French stocks, which he will bud this summer, besides other hardy stocks now growing in the nursery. The farm has about 30 miles of fencing, inclosing all but the grain land.

We have heard that the ranch has produced as high as 120,000 bushels of wheat in one season, besides other products. There are now 200 acres of orchard and vineyard, just coming into bearing. An irrigation canal is projected from Chico creek to the land, which, it is thought, would supply water to irrigate the whole of it.

Colusa county, situated in the center of the great Sacramento valley, is now demonstrating its fitness for a great extension of its list of products, as it is found that its soil and climate are adapted to many fruits and other desirable growths, which will give the region wide fame and tend to the progress of the county in wealth and population.



RESIDENCE OF L. F. MOULTON, COLUSA, CAL.



house, as may be seen in the ground plan, and the top of it is located just back of the tower, in the prospective view. The chimney is 50

folding and over-head rolling doors into other rooms to the west, which, by double doors, open into rooms still farther west, and these by

WE take great pleasure in calling the attention of the many readers of the RURAL PRESS to the fact that the story of Mother Bickerdyke's heroic life and labors for the relief of our soldiers during the war is the work of "M. B. D.," one of its valued correspondents. It is her first appearance as an authoress and is regarded as a valuable contribution to the literature of that great struggle. It is a marvel how one so young could so accurately conceive and graphically portray the grand and stirring scenes of that mighty drama.

By the recent order of the Interior Department, saw mills in Alaska are not permitted to cut logs and manufacture the same into lumber, except for the personal use of the proprietors of said mills. The order is based on the fact that there are no land laws in that Territory, and no person can acquire ownership to real property. The only persons who have title to real estate are a few Russians who owned land in Sitka at the time of the transfer of the Territory to the United States.

DR. LINDLEY, of the Los Angeles Medical College, has been collecting statistics and reports concerning the disease known as "hay fever" or "hay asthma" in Southern California, and after wide research he enunciates three conclusions: 1. Hay fever never originates in Southern California. 2. All cases of hay fever that have come, seeking relief, to Southern California, have been benefited—almost all have been cured. 3. That a few miles inland, in the foothills, relieves such cases as are not benefited by a residence at the seaside.

THE Los Angeles and Ostrich Farm Railway has been incorporated.

feet high and 10 feet in diameter at the top; upon which are now placed the pipes from the several flues, as shown in the picture.

The chimney has a hollow center, into which each fireplace discharges its ashes, which may be removed at pleasure from below. The fireplaces are furnished with the choicest onyx

double doors again communicate with the surrounding lawns and gardens in which are rows of orange, citron, lemon, lime and other choice trees which flourish in our mild climate.

It is Mr. Moulton's design to surmount his great chimney with an observatory with revolving dome, of the construction usual in astro-



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L. L. DICKINSON, Lone Oak Farm, Sonoma, Tuolumne Co., Cal., breeder of thoroughbred Essex Hogs. Pigs now ready for sale. Prices reasonable.

WILLIAM NILES, Los Angeles, Cal. Thoroughbred Poland-China and Berkshire Pigs. Circulars free.

JOHN RIDER, Sacramento, Cal. Breeder of Thoroughbred Berkshire Swine. My stock of Hogs are all recorded in the American Berkshire Record.

### SHEEP AND GOATS.

JULIUS WEYAND, breeder of pure-blooded Angora Goats, Little Stony, Colusa Co., Cal.

KIRKPATRICK & WHITTAKER, Knight's Ferry, Cal., breeders of Merino Sheep. Rams for sale.

EASTON MILLS, Lakeville, Sonoma Co., thoroughbred Spanish Merino Sheep. Choice rams for sale.

J. B. HOYT, Bird's Landing, Cal., importer and breeder of Shropshire Sheep; also breeds cross-bred Merino and Shropshire Sheep. Rams for sale.

L. U. SHIPPEE, Stockton, Cal. Importer and breeder of Spanish Merino Sheep, Durham Cattle, Red Duroc and Berkshire Swine. High graded Rams for sale.

### BEEES.

J. D. ENAS, Napa, Cal., breeds pure Italian Queens. The best honey and wax extractor; manufactures comb foundation, sections & hive material; send for circulars.

## IMPORTANT!

That the public should know that for the past **Fourteen Years** our **Sole Business** has been, and now is importing **(Over 100 Carloads)** and breeding improved Live Stock—Horses, Jacks, Short Horns, Ayshires and Jerseys (or Alderneys) and their grades; also, all the varieties of breeding Sheep and Hogs. We can supply any and all good animals that may be wanted, and at very reasonable prices and on convenient terms. Write or call on us. **PETER SAXE and HOMER P. SAXE.** San Francisco, Cal., Oct. 22, 1884. **PETER SAXE & SON, Lick House, S. F.**



### HOLSTEIN & JERSEY CATTLE

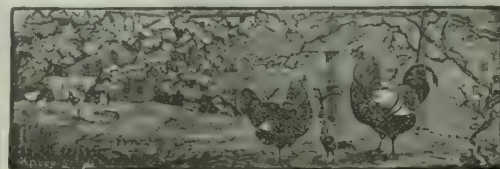
Heifers in Calf to such grand bulls as **Netherland Star**, **Clifden Prince** (Holstein) and **Ashantee's Sultan** (Jersey) for sale at reasonable prices. Also **POLAND-CHINA** and **BERKSHIRE PIGS.**

POULTRY—All Varieties.

WRITE TO

**WILLIAM NILES,**  
Los Angeles, Cal.

### MARTINEZ, } ALHAMBRA POULTRY YARDS { JASPER J. JONES, Proprietor.



### HIGH-CLASS POULTRY.

Clean sweep on Plymouth Rock Chick at Great California Poultry Show at San Francisco, Jan. 11th to 16th, 1886. The Best is the Cheapest. Illustrated Catalogue sent free on application; worth \$1 to any breeder of poultry. Send me your name on a Postal Card; 5000 copies of fine Illustrated Catalogue for free distribution.

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### HOLSTEIN-FRIESIAN CATTLE

FROM THE HERD OF

**HON. LELAND STANFORD,**

On his Ranch at Vina, Tehama County, Cal.  
For prices and catalogue address

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Room 69, C. P. R. R. Building,  
Cor. 4th and Townsend Sts.,  
San Francisco, Cal.

### FRENCH DRAFT STALLIONS,

Kentucky Jacks and Jennets,  
Work Horses and Mules

#### FOR SALE.

Some of the Stallions were imported from Europe, others from Illinois, and some young ones were bred in California from imported stock. The prices will be less than animals of equal value can be purchased elsewhere.

Call at or address Patterson's Ranch, Hueneme, Ventura County, or Patterson's Ranch, Grayson, Stanislaus County, or for further information call on or address **JAMES M. PATTERSON, No. 8 Davis St., San Francisco.**

**JOHN D. PATTERSON.**

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### Pure-Bred Southdowns,

From the Celebrated Sheep of Long John Wentworth, Chicago, Ill. Address

**R. H. CRANE, Petaluma, Cal.**

### BADEN FARM HERD

Of Short Horn Cattle and Dairy Cows.

Catalogues and Prices on application to

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Baden Station, - San Mateo Co., Cal.



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Do you want a sure, safe and reliable Cough Syrup? Are you troubled with a Cough, Cold, Bronchitis or Lung Complaint? Do your Babies Cough or wake all night with Hacking Coughs, Colds in the Head, etc. Do you want something reliable in the house to meet these emergencies? We answer to all: "Go to your Druggist and get a Bottle of the Arkansas Cough Syrup, and be troubled no more." Price, 50 cents per Bottle!

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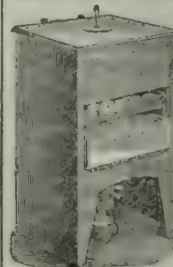
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ESTABLISHED IN 1858.

Aprioot, Plum, Prune and Peach on Myroblan Plum stocks. Bartlett, Winter Nollis, B. Clairgeau, B. Hardy and other varieties, 1 and 2 years. A full stock of 1 and 2-year-old Apple Trees, Peach on Peach, Nectarine, Quince, Fig, Grape, Currants, Gooseberries, Almonds, Walnuts, Chestnuts, etc. Prices reasonably low. No scale bug. Also Myroblan Plum and Pear Seedlings, home grown. Address **W. H. PEPPER** aluma, Cal.

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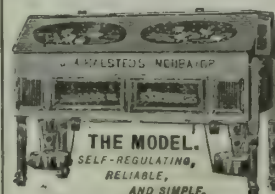
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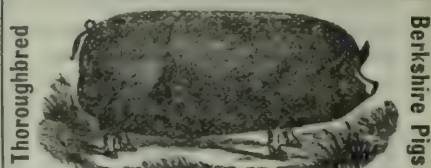
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The Haisted Incubator Co. 1011 Broadway, Oakland, - Cal. Price from \$20 up. Model Brooder from \$5 up. Thoroughbred Poultry and Eggs. Send for new Circulars containing much valuable information.

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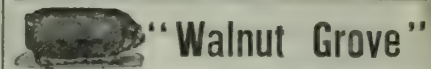
For Sale at our Farm at Mountain View.

From our Thoroughbred Berkshire Boar and Sow, which we imported from England in 1880. Pigs from Imported Boar and Sow, \$25 each; from Imported Boar and Thoroughbred Sow, \$10 to \$20. Our Imported Pigs are as nice Pigs as there are in the State. Address

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From imported stock direct from England, bred by Russell Swanwick, President Royal Agricultural College Farm, England, from the Celebrated **STUMPY** and **SALLIE F. MILLER.** Young stock always for sale at lowest possible rates. Address **ANDREW SMITH,** Redwood, or 218 California St., S. F.



Registered and **POLAND-CHINA HERD** Thoroughbred.

My herd consists of the best strains that can be found. Stock all recorded in A. P. C. R. I have a fine lot of spring, summer and fall pigs, also a few choice yearling sows, for sale. Prices to suit the times.

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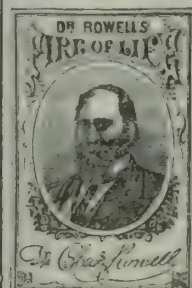
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12-foot Size. Strong, Simple, Durable, Self-Regulating, Beautiful in appearance, Noiseless, Central Motion, Solid Wheel.

No little rods, wood screws or spider legs to get out of order. Save agent's commission by applying to the manufacturer and inventor. Pamphlets free.

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Rheumatism, Neuralgia, Pneumonia, Paralysis, Asthma, Sciatica, Gout, Lumbago, and Deafness.

Everybody should have it.

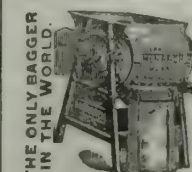
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Price, \$1.00. Sold by all Drug gists. Call and see

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### \$50 REWARD

will be paid for any Grain Fan of same size that can clean and bag as much grain or seed in one day as our Patent **MONARCH** Grain and Seed Separator and Wagoner or our Improved Warehouse Mill will do in one day. Price List mailed free.

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NO COMPOUND, but Nature's Remedy for Rheumatism, Neuralgia, Throat, Lung and Kidney troubles, a Specific for Gout. Every family should have it. Beware of imitation. The genuine article has the name of **WM. M. HICKMAN,** Druggist, Stockton, on the label.

### SHEEP AND SHEEPWASH.

### LITTLE'S CHEMICAL SHEEP DIP.



Price Reduced to  
**\$1.25**

PER GALLON.

Twenty gallons of fluid mixed with cold water will make 1,200 gallons of Dip.

It is superior to all Dips and Dressings for SORE in Sheep; is certain in effect; is easily mixed, and is applied in a cold state. Unlike sulphur or tobacco, or other poisonous Dips, it increases the growth of the wool, stimulates the fleece, and greatly adds to the yield. It destroys all vermin. It is efficacious for almost every disease (internal and external) sheep are subject to.

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TERMS REASONABLE.

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KILLS GOPHERS, INSECTS, ETC.

Makes a pure Soap at a cost of \$1 per 125 lbs. Send for directions to **T. W. JACKSON & CO.,** 304 California St., S. F.



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\$2 per Gallon.

After dipping the Sheep, is useful for preserving wet hides, destroying the vine pest, and for wheat dressings and disinfecting purposes, etc. **T. W. JACKSON, S. F.,** Sole Agent for Pacific Coast.

### THOROUGHbred SPANISH MERINO SHEEP.



Have taken the First Premiums at the State Fair for the last three years.

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Late Veterinary Inspector of Cattle for the State of Kentucky.

Operative Surgery and Treatment of Chronic Lameness Specialties.

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Are you using Wellington's Improved Egg Food for Poultry? If not, why not? Every Grocer, Druggist and Merchant Sells this Egg Food.

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## Educational.

### MILLS SEMINARY.

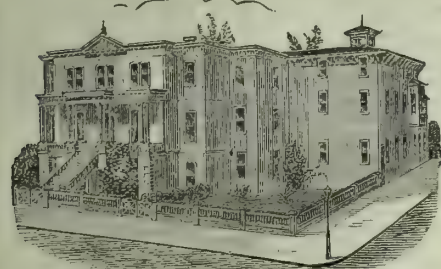
The next term of this well-known Institution will commence on

Wednesday.....August 4, 1886.

For Circulars giving particulars, address

MRS. C. T. MILLS,  
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A SELECT SCHOOL FOR YOUNG LADIES.—The next session will begin Monday, August 2, 1886. For catalogue or information address the Principal, REV. EDWARD B. CHURCH, A. M., 1036 Valencia St., San Francisco, Cal.

### VAN NESS SEMINARY

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### A BOARDING AND DAY SCHOOL

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Young Ladies and Children,  
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Thorough training in practical studies and accomplishments, and pleasant surroundings, are the principal advantages offered.

Fall Term Opens July 26, 1886.

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### Field Seminary for Young Ladies,

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Address MRS. R. G. KNOX, Proprietor, or MISS FRANCES A. DEAN, Principal.

THE FIFTEENTH YEAR WILL BEGIN

Wednesday.....July 28, 1886

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First-Class Boarding School for Boys.

Preparatory, Commercial, and Academic Classes.  
Preparatory Department, \$30 per school month. Commercial and Academic Department, \$35 per school month.  
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T. STEWART BOWENS, A. B., T. C. D., Principal.

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Open day and evening for

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A Preparatory School for Young Men and Boys.  
Next Term will commence on Monday, July 19, 1886.

Healthful location, pleasant home, and thorough School. Send for circular.

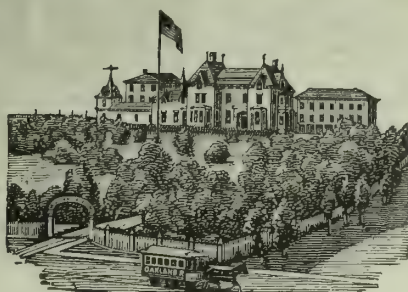
D. P. SACKETT, Principal.

### UNIVERSITY OF THE PACIFIC,

Between San Jose and Santa Clara.

(Founded in 1851.) Twenty-two Professors and Instructors. Courses of study embrace the regular college curriculum, four years Conservatory of Music course, Post-graduate course leading to degree of Ph. D., Business course, and complete Preparatory courses leading to and connecting with College Classes. All classes open to both sexes. \$250 per year includes ALL REGULAR EXPENSES. Fall Term begins Aug. 11th. Address, C. C. STRATTON, Pres., SAN JOSE, CAL.

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LIFE SCHOLARSHIPS.....\$75.

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CHRISTMAS TERM OPENS

Monday.....August 2, 1886

REV. E. B. SPALDING, Rector.



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40,000 ACRES

Of good land in Fresno, near the County Seat. Some of this land is already irrigated, and all can be easily irrigated. It is adapted not only to grain, but also to Alfalfa, Fruit and Vines.

1000 ACRES

Of the above land for sale at the low price of \$20 per acre. Apply to

E. B. PERRIN,  
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### \$125 PER ACRE

IN TRACTS TO SUIT; adjoining the site of the great Stanford University at Menlo Park; one hour from San Francisco, in Upper Santa Clara Valley; one mile from station; fine climate; beautiful scenery; excellent roads; title perfect; easy terms; first-class location for a home or investment.

Maps and particulars of

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### CHEAP LANDS FOR SALE.

5680 Acres of rolling adobe hills, situated in Tehama County. Well watered by numerous springs, etc. Several thousand acres suitable for cultivation. Good two-story House, Barn and other out-buildings. Seven miles of fine wire fence.

FIRST-CLASS CATTLE OR SHEEP RANGE. The Cheapest tract of land in Tehama County. Price, \$6.00 per acre. Fair time and interest. Apply to

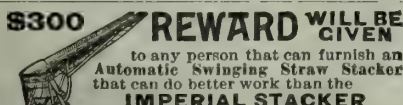
R. E. ARMSTRONG, Cottonwood, Shasta Co., Cal.  
Or J. E. CROOKS, Benicia, Cal.

N. B.—Upon proper notice, Mr. Armstrong will take intending purchasers from Cottonwood to the ranch and return, free.

### \$500 to \$50,000.

BARGAINS in ORCHARDS and VINEYARDS, STOCK and Grain Ranches in every County in the State. Send Stamp for Catalogue. We can find quick sale for your farm, large or small, if it is cheap and you will send us full description. If you want to buy, tell us what you want, and we can suit you.

GAMAN & CO.,  
339 Kearny St., San Francisco.



that we are building. Send for circular and price list which will be mailed free. All are warranted to do good work or no sale.

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Fruit Engravings, The finest, best and cheapest Photographs and Engravings of Fruits, Vegetables, Houses, Farms, Landscapes, etc., made by S. F. PHOTOGRAPHING CO., 659 Clay St., S. F.

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### CALIFORNIA FERTILIZERS,

Ammoniated Bone Super-Phosphate, Pure Bone Meal and Special Fertilizers for all Crops.

Our Fertilizers lessen cost of irrigation, increase the yield, improve the quality of crop, and are cheaper than barn-yard manure.

Circulars containing prices and full information mailed free to any address.

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## Nevada Warehouse and Dock Comp'y

WAREHOUSES AND DOCKS, PORT COSTA, CAL.

Storage Capacity, 100,000 Tons. Regular Warehouse for S. F. Produce Exchange Call Board.

These Warehouses are the largest on the Pacific Coast, and are furnished with the latest improvements for the rapid handling and storing of Grain. A mill attached, supplied with the best and newest machinery for cleaning fowl and smutty wheat.

Money advanced at lowest rates of interest on Grain stored in Warehouses, Insurance effected at lowest rates in first-class companies, or Grain sold, if desired, at current rates.

STORAGE, 25 cents per ton per month. Total Storage for Season ending June 1, 1887, \$1 per ton.

Grading Wheat, 50 cents per ton. Cleaning Wheat, 75 cents per ton. Cleaning and Smutting, \$1.50 per ton.

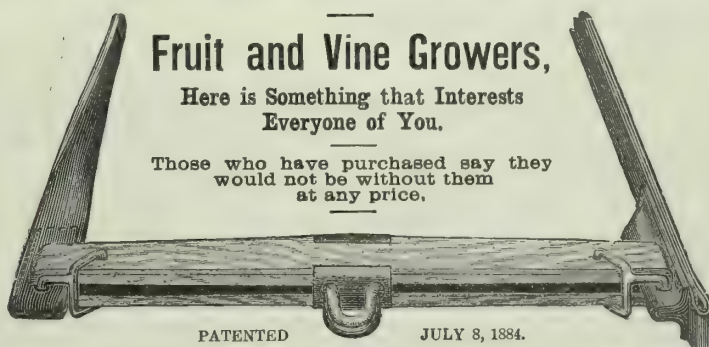
Information regarding Storage or other business can be obtained at the office of the Company,

412 PINE STREET, SAN FRANCISCO, CAL.

GEO. L. BRANDER, President.

W. R. PRICE, Secretary.

## WICKSON'S ORCHARD AND VINEYARD SINGLETREE.



Fruit and Vine Growers,

Here is Something that Interests  
Everyone of You.

Those who have purchased say they  
would not be without them  
at any price.

PATENTED

JULY 8, 1884.

IS A SURE PREVENTION AGAINST DAMAGING TREES OR VINES, and will save its cost every day it is in use. Used with any trace without change, or by adding a little supplementary trace we furnish. Price of Singletree only \$1; set Doubletrees, \$4; Leathers, 50 cents per pair.

G. G. WICKSON & CO.,

38 California St., San Francisco.

## San Diego County! El Cajon Rancho!

16,500 acres, known as the Jarvis Tract, situated 13 miles from San Diego, surrounded by high hills, protected from winds and fogs—the most equable climate in the world—rich soil and lovely surroundings. Will be offered as a whole or in subdivisions, from 10 acres upward, at prices according to desirability, from \$10 to \$75 per acre, part cash, balance on time. The wonderful Raisins and Olives grown in this valley command the admiration of every one. Water from 6 to 12 feet. No irrigation, and Fruit and Raisins cured by solar heat. All the Semi-Tropical Fruits raised to perfection.

Also 1000 acres, the Smith Tract, adjoining, now in grain.

G. W. FRINK, General Manager Pacific Coast Land Bureau,

618 Market St. opp. Palace Hotel, and 15 & 17 Post St., San Francisco.

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R. J. PENNELL,  
San Diego, California.

1886. 1887.

### Mission Rock Grain Dock and Warehouses,

SAN FRANCISCO.

Regular Warehouse for S. F. Produce Exchange Call Board.

Storage Capacity for 75,000 Tons of Grain.

THE CALIFORNIA DRY DOCK CO., Proprietors.

OLIVER ELDRIDGE, Pres.

CHAS. H. SINCLAIR, Supt.

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Freight paid, fire insurance and loans effected, and proceeds forwarded free of commissions. Money advanced at lowest rates on grain in warehouse, interest payable at end of loan. Storage season, ending June 1, 1887, at reduced rates. On all wheat shipped to Mission Rock by barges, freight rates guaranteed the same as to Port Costa. All applications for storage or other business addressed to CHAS. H. SINCLAIR, Superintendent.

OFFICE, 318 California St., Room 8.



## S. H. MARKET REPORT

NOTE: Our quotations are for Wednesday, not Saturday. See date which the paper bears.

## Weekly Market Review.

## DOMESTIC PRODUCE, ETC.

SAN FRANCISCO, August 4, 1886.

The week's trade has been seriously broken in upon by the holiday feeling and the many distractions incident to the Encampment. Our prices below show that the cereals have taken rather an easier condition.

The latest by cable is as follows:

LIVERPOOL, August 4.—WHEAT—Rather easier. California spot lots, 6s 5d to 6s 8d; off coast, 33s; just shipped, 33s 6d; nearly due, 33s; cargoes off coast, quiet but on passage, steady; quantity of wheat on passage to continent, 740,000 qrs.; wheat and flour on passage to U. K., 1,975,000 qrs.; Mark Lane wheat, quiet; Maize steady; weather in England, unsettled.

## New York Hop Market.

NEW YORK, Aug. 1.—During the past week there was very little demand here for State hops of any growth. Dealers seem to be quietly awaiting developments, and brewers are holding back in the absence of any urgency of their wants. Offerings are comparatively light, and are restricted wholly to returned from London goods that are not in an attractive condition, and on common grades. Holders who have a first-class article guard them very jealously, and prices are nominal to a great extent for the same, there being about 30¢ margin between asked prices and the best bids. Offers were made of 32¢ to 34¢, f. o. b., there, as to condition, for 1886, Pacific, but previous sellers here would not offer at any price. It was stated on very good authority that a Western brewer is an anxious buyer of Pacifics, and that three-quarters of what remained unsold of the growing crop could be placed west of Chicago at prices above those named. A cable from London reports the condition of the crop very good. The weather there appears to be all that is desired for favorable growth. Reports of mold thence several days since are not now mentioned. It is presumed any damage that way is insignificant in character. Offerings in London are light. State, best, quoted at 28¢ to 30¢; good and prime, 24¢ to 26¢; common, 19¢ to 22¢; old crop, 14¢ to 20¢; California, 22¢ to 27¢.

## New York Wheat Market.

NEW YORK, Aug. 1.—Wheat has been very unsettled, and at the opening of the week was quite depressed. Active speculation on Tuesday caused a sharp advance, but it seemed to have no other basis than "sympathy with corn," which is decidedly dearer on reports of damage to the growing crop by drought. Wednesday the advance was lost. There has been a moderate export demand, though somewhat retarded by the firmer views of holders. Receipts of new wheat from the fall-sown crop continue liberal, and less complaint of the prospects of the spring-sown crop is heard. Spot closed firm at 1/4¢ to 1/2¢ advance for the week; futures closed weak, but 1/2¢ to 1 1/4¢ higher for the week.

## Eastern Wool Markets.

NEW YORK, Aug. 1.—Wool—Demand for domestic fleece has slackened, owing to the extreme figures demanded; but the confidence of holders remains unshaken, and no concessions are made anywhere, while supplies are offered sparingly. Foreign advances continue to favor sellers. Sales for the week included 15,000 pounds scoured California at 58¢, 10,000 pounds Territory at 17¢ to 18¢; California tail, fine, quoted at 16¢ to 18¢; low, 13¢ to 15¢; do spring, fine, 22¢ to 24¢; medium, 18¢ to 20¢; low, 12¢ to 17¢.

CANAJOHARIE, N. Y., August 3.—The utterly ruined condition of the hop crop throughout New York State by lice has caused a sudden advance. Growers in this vicinity have repeatedly refused 35¢ for those picked in 1885, and yesterday a grower in Minden sold last year's crop at 40¢, which is the highest price paid in three years.

NEW YORK, August 3.—Wool is quiet and firm. Domestic fleeces, 27¢ to 30¢; pulled, 14¢ to 35¢; Texas, 9¢ to 25¢.

## The Eastern Hop Crop.

CANAJOHARIE (N. Y.), Aug. 3.—The utterly ruined condition of the hop crop throughout New York State by lice has created a sudden advance. Growers in this vicinity have repeatedly refused 35¢ for those picked in 1885, and yesterday a grower of Minden sold last year's crop at 40¢, which is the highest price paid in three years.

## Local Markets.

BAGS.—The latest notes are given below.

BARLEY.—There has been considerable reduction in rates since our last report, and a strong effort is apparently being made to break down values. Call sales to-day were as follows: Seller season—200 tons, 82¢. Seller 1886—100 tons, 81 1/2¢; 200, 81 1/2¢; 100, 81 1/2¢; 400, 82¢; 300, 82 1/2¢; 1000, 82 1/2¢. No. 1 brewing, buyer season after September 1st—100 tons, 81 1/2¢; 200, 82 1/2¢. Seller 1885—300 tons, 82 1/2¢.

BEANS.—Beans are somewhat changed this week, as shown in our price list.

CORN.—Corn is quiet and unchanged.

DAIRY PRODUCE.—Butter is advancing, as described below.

OATS.—Oats are selling fairly, with especially good samples in request.

PROVISIONS.—Hams have dropped back a little this week.

WHEAT.—There is little doing. The drop in values does not please holders and they are reticent about offering. Call sales to-day were as follows: Buyer season—1600 tons, 1.32 1/2¢. Buyer 1886—800 tons, 1.28. Seller 1886—1300 tons, 1.22; 1300, 1.21 1/2¢; 1000, 1.20. Buyer season, 1700 tons, 1.32 1/2¢. Buyer 1886—1600 tons, 1.28; 100, 1.28 1/2¢. Seller 1886—1300 tons, 1.21 1/2¢; 100, 1.21 1/2¢.

[COMMUNICATED.]

## Market Information.

## Bags.

Standard grain bags which closed strong last week are again off, with 7 cts the asking price for Calcuttas. The demand has improved, but then there are more sellers, owing to heavy deliveries of bags on July contract. The market is difficult to give correctly, owing to the many influences at work to break and advance prices.

## Cereals.

The low price (\$1.10 to \$1.15) ruling for brewing barley caused continued steady buying, chiefly from brewers in this State. There are orders still on the market from the East, notwithstanding the recent advance in overland freights.

Feed barley which advanced quite sharply the last fortnight in July, under a strong buying to fill July contracts, is again weak. It is claimed that when short dealers come to filling August contracts, prices will again appreciate. The consumptive demand is very large, all of double last year's in this month.

It is given out that the Produce Exchange estimates the barley crop of this State at 700,000 tons, which is considerably above what harvesters returns indicate. Perhaps the members who give out the estimate want to buy on speculation at low prices.

The exports of barley by sea last month, from this port, aggregated 2207 tons, and the consumption, 8447. Where there is one animal fed in San Francisco and neighboring bay cities, there are five fed in the country.

Last month's consumption of oats, in San Francisco, aggregated 1197 tons. Prices have weakened off under freer receipts and a lessened call.

The July shipments of wheat (flour reduced to wheat) hence aggregated 53,271 tons, of which 42,785 tons went to Europe and the remainder to China, Australia, South America, etc.

Wheat buying for the Australian market continues. The last steamer took out 350 tons, and the next to leave takes out several hundred tons more.

The last steamer that sailed for Australia took out 4765 bbls of flour, which reduced to wheat makes 715 tons. On August 1st the stock of wheat on hand at Port Costa was 40,930 tons, and in this city 9236. Total, 50,266 tons.

Trading in wheat the past week has been interfered with by the G. A. R. festivities. The sales made by samples are said to have been at full prices, except where a few parcels were forced on the market so as to weaken prices. To-day buyers only bid \$1.25 for No. 1 shipping, as the top, but three sales more made it \$1.26 1/2. There are not many sellers, consequently the bears have some difficulty in making prices for actual delivery. Semi-public English cables received to-day give a weak market for cargoes in Liverpool, with 33s 6d quoted for prompt shipment. Private cables report the market somewhat unsettled by reason of the low, demoralized market for silver, and also unsettled course of the new ministry; but the damp unfavorable weather was in favor of wheat.

Rye is firmer and a shade higher. Corn is very firm, with an advance obtainable. The crop in this State will not equal more than last year's, owing to the north winds.

## Fruits.

Heavy receipts yesterday and again this morning broke prices and caused more or less of a demoralized feeling in all fruits except apricots. It is difficult to-day to get \$1.00 a box for choice Rose of Peru grapes and 85¢ for Muscats. Several consignments of grapes are more or less mildewed or moldy, causing them to be hard to sell. Some poor and bad conditions were closed out at 25¢ a box to peddlers. Wine grapes are steady and in good demand. Peaches under liberal receipts have been weakening until \$1 is the top for choice in good shipping order, and for city trade 80¢ to 90¢. Several consignments of over-ripe were sold from 25¢ to 35¢ a basket to peddlers.

Pears, under heavy receipts and canners bidding lower, have weakened off until it is difficult to get \$1.50 for choice B. R. lemons. Canners only bid 20¢ per pound. Fair pears are slow and quite low. Canners only bid from 1/4 to 1/2 cts per pound for greengages. The trade buys sparingly, consequently the stock is large, and to sell, canners' views, must, it is thought, be acceded to.

Plums and prunes are slow at lower quotations. It takes very choice plums to fetch two cts a pound. Apples are coming in more freely, with the trade confining itself chiefly to the more choice varieties. The stock of off-qualities is very large and accumulating.

Currents continue to come to hand, but do not fetch over \$3 a chest. Berries ruled fairly steady with a slight advance on Saturday, but on Monday they were easier, and yesterday it was hard to sell strawberries and blackberries, with even raspberries slow at a decline.

## Hops.

The market is quiet, as buyers are disposed to await further developments, particularly with overland freights higher and prospect of another advance soon. The New York crop is now conceded to be 60,000 bales against 130,000 last year. European crops are below an average, which, taken in connection with the very light stocks that will be carried over, cause operators to look for still higher prices abroad. On this coast it is claimed that the crop will be 40,000 bales, of which one-third has been sold for future delivery.

## Live-stock.

Beef continues to rule in sellers' favor at our quotations, with now and then some placed at a slight advance. Sheep are barely steady, but lambs are very firm, as are calves. Sales are reported at an advance on quotations; but they were on time, not cash; cash sales cannot be made over quotations. Grain-fed and dairy-fed hogs are in better request, but there is reported a strong holding, under the belief that when cooler weather sets in prices will be higher. In the horse market there is nothing new to report, as trading has been interfered with by the G. A. R. festivities.

The following are to-day's meat prices: Beef—Stall-fed 7 1/4¢ to 7 1/2¢; grass-fed, extra, 6 1/4¢ to 7¢; first quality, 6 1/4¢ to 6 1/2¢; second, 5 1/4¢ to 6¢; third, 4 1/4¢ to 5 1/4¢. Calves, small, 8¢ to 9¢; larger, 6 1/4¢ to 7 1/4¢. Mutton—Ewes, 4 1/4¢; wethers, 5¢.

Lamb—Spring, 6¢ to 6 1/2¢; Pork—Live hogs on foot, 3 1/4¢ to 4¢ for grain and dairy fed; 2 1/2¢ to 3 1/2¢ for soft; dressed, 6¢ to 7¢ for hard, and 4¢ to 5¢ for soft. Grass-fed stock sell on foot, gross weight, at one-half the price they fetch dressed; stall-fed, on foot, fetch one-third less than they sell at dressed.

The Grocer and Country Merchant of July 30 contains the following sales of live-stock for the week as follows: San Francisco Stock Yards.—815 cattle (large; fat), \$45.00; 643 cattle (medium; fat), \$37.00; 212 cattle (rather thin lot), \$29.00; 863 calves, \$3.75, \$6.00, \$9.00, \$10.00, \$15.50, 6186 sheep, \$2.75, \$2.90, \$3.00, \$3.25, \$3.40; 2998 lambs, \$1.50, \$1.80, \$2.00, \$2.25, \$2.50; 3475 hogs, 3 1/4¢, 3 1/2¢, 3 3/4¢. Oakland Stock Yards.—167 cattle (fat; large; smooth), \$46.00; 213 cattle (fat; medium; good), \$35.00; 265 calves, \$2.75, \$3.50, \$5.00, \$9.00, \$13.50; 988 sheep, \$2.75, \$3.00, \$3.25; 675 lambs, \$1.75, \$2.00, \$2.50; 763 hogs, 3¢, 3 1/2¢, 3 3/4¢, 4¢.

## Vegetables.

Choice, well-matured Early Rose potatoes have been quite scarce, causing as high as \$1.10 to be paid on the wharf; but poor to good have been in free supply, with sales of inferior as low as 45 cts per cental. Garnet Chilis and Peerless have moved off at steady prices, with well-matured for shipping taken at an advance on daily press quotations.

Under very heavy receipts, tomatoes have been dropping until sales were made at from 10 to 35 cts a box. Canners are buying very little, giving as a reason that river tomatoes are too watery, and that they will buy only Santa Clara and Alameda.

Green corn advanced slightly up to Monday, but under heavy receipts and an offish demand the market weakened to-day.

Onions have been in heavy supply. Considerable reds were dumped, but at the close to-day there is a steadier tone. Silverskins have been steady at the low prices quoted.

Green okra, green pepper, summer squash and cucumbers ruled steady up to Monday, but to-day they are weak with considerable selling pressure, owing to a large carry-over stock from yesterday. Cabbages, cauliflowers and root vegetables are fairly steady, although at times concessions were made to clean up consignments.

## Dairy Product.

Gilt-edged butter continues in fair request with sales still reported at 25 cts; but the large supply of good to choice, pressing the market at from 18 to 20 cts, lessens the demand. The consumption, locally, is very heavy.

Strictly choice eggs have been in good demand throughout the week, with no difficulty reported in getting 27 1/2 cts a dozen for shippers of this quality only. Good eggs have ruled weak, with buyers naming prices; but it is claimed that a steadier feeling is manifesting itself owing to lighter receipts, and the stock greatly reduced. Eastern eggs, it is thought, will soon be out of the market, owing to higher prices in the West and also higher freights overland.

Cheese is firmly held, with only a moderate trade call reported.

## Miscellaneous.

The tonnage movement compares with last year at this date as follows:

	1886.	1885.
On the way.....	310,393	233,281
In port, disengaged.....	58,824	102,774
In port, engaged.....	54,244	14,572

Totals.....423,461 350,627

The above gives a carrying capacity as follows: 1886, 983,537 short tons; 1885, 561,003 short tons; increase over last year, 122,534.

Honey is steady, with a firm tone, owing to holders not pressing the market. Buyers, to have their wants met, have at times to pay an advance, but they hold off as long as possible before buying.

Charters are very weak for both ships in port and to arrive.

Beans continue firm but no higher.

Hams and bacon are very firm, owing to a good demand and higher overland freights.

Choice hay continues scarce, but off grades are in liberal supply.

Poultry has been demoralized under very heavy receipts, and dealers being overstocked. Hens that sold two weeks ago at \$8.00 a dozen only fetched \$6.00 on Saturday and Monday last. All other fowls were proportionately lower. It is claimed that this week receipts will fall off and values appreciate.

San Francisco, August 4, 1886.

## Fruits and Vegetables.

FRUIT MARKET.		WEDNESDAY, August 4, 1886.	
Apples, box.....	1 00 @ 1 50	do quartered.....	1 1/2 @ 1 50
do red.....	1 50 @ 2 00	do evaporated.....	9 @ 10
do white.....	1 25 @ 1 50	do blackberries.....	9 @ 10
do yellow.....	1 25 @ 1 50	do currants.....	28 @ 30
Bananas, bunch.....	1 25 @ 1 50	do dates.....	9 @ 10
Blackberries, ch.....	1 25 @ 1 50	do figs, pressed.....	6 @ 7
Cant. loupes, cr.....	35 @ 35	do nectarines.....	4 @ 5
Cherries, hls.....	— @ —	do peaches.....	6 @ 7
do white.....	— @ —	do pears.....	16 @ 18
do Royal Ann.....	— @ —	do pears, sliced.....	5 @ 6
Cherry plums.....	40 @ 40	do pears, qtd.....	2 @ 2 1/2
Crabapples.....	25 @ 25	do plums.....	8 @ 10
Cranberries.....	7 00 @ 10 00	do plums, pitted.....	5 @ 5 1/2
Currants chest.....	3 00 @ 3 50	do prunes.....	10 @ 10
Fig.....	40 @ 1 00	do French.....	— @ —
Grapes.....	50 @ 75	do Raisins, Cal. bx.....	1 87 @ 2 00
do Rose Peru.....	1 00 @ 1 00	do Zante Currants.....	8 @ 9
do Muscat.....	75 @ 1 00	VEGETABLES.	
Limes, Mex.....	9 50 @ 10 00	Artichokes, doz.....	10 @ 15
do Cal. box.....	— @ —	Asparagus box.....	— @ —
Lemons, Cal. bx.....	1 50 @ 2 00	Beta, sk.....	1 00 @ 1 00
do Sicily, box.....	8 50 @ 9 00	Cabbage, 100 lbs.....	60 @ 75
do Australian.....	— @ —	do carrots.....	50 @ 75
Nectarines, box.....	75 @ 1 00	do cauliflower, doz.....	50 @ 60
Oranges, Cal. bx.....	1 50 @ 1 75	do celery, doz.....	50 @ 60
do Tahiti, M.....	— @ —	Cucumbers box.....	25 @ 30
do Mexican, M.....	— @ —	Eggplant, ..bx.....	1 50 @ 2 00
do Panama.....	— @ —	Garlic, lb new.....	2 1/2 @ 3
Peaches, bx.....	35 @ 40	Green Corn, sk.....	25 @ 50
do basket.....	35 @ 40	do bay, box.....	75 @ 1 00
Crawforda, bx.....	75 @ 80	Green Peas, sk.....	1 00 @ 1 50
do basket.....	85 @ 90	Lettuce, doz.....	10 @ 10
Pears, bx.....	25 @ 40	do Mushrooms, bx.....	— @ —
do basket.....	25 @ 40	do cultivated.....	— @ —
do Bartlett, bx.....	1 25 @ 1 75	do Ostr. dry, lb.....	15 @ 17
do do.....	— @ —	do green box.....	75 @ 1 00
Peas, ..bx.....	— @ —	do Parsnips, sk.....	1 50 @ 2 00
Pineapples, doz.....	4 00 @ 5 50	Peppers, dry lb.....	10 @ 10
Pomegranates, doz.....	1 @ 3	do green, bx.....	25 @ 50
Prunes, bx.....	— @ —	Rhubarb box.....	40 @ 60
Quinces, bx.....	— @ —	Squash, Marrow.....	15 00 @ 20 00
Raspberries, ch.....	6 00 @ 7 00	do Summer box.....	25 @ 25
Strawberries, ch.....	2 00 @ 4 00	do Tomatoes box.....	25 @ 35
Watermelons, 100 lb.....	8 00 @ 12 00	do String beans.....	11 @ 12
DRIED FRUIT.		TURNSIPS.	
Apples, sliced, lb.....	1 1/2 @ 2	do.....	75 @ 1 00
do evaporated.....	6 @ 8		

## Domestic Produce.

BEANS AND PEAS.		WEDNESDAY, August 4, 1886.	
Bayo, chl.....	1 35 @ 1 50	Peanuts.....	3 @ 4
Butter.....	1 35 @ 1 60	Filberts.....	13 @ 14
Castor.....	— @ —	POTATOES.	
Pea.....	1 75 @ 2 00	New chl.....	— @ —
Red.....	1 15 @ 1 25	Burbank.....	— @ —
Pink.....	1 15 @ 1 17 1/2	Early Rose.....	50 @ 1 00
Large White.....	3 00 @ 3 00	Curley Cove.....	— @ —
Small White.....	1 75 @ 1 90	Jersey Blues.....	— @ —
Lima.....	2 00 @ 2 25	Petaluma.....	— @ —
Fid Peas, blk eye.....	1 25 @ 1 40	Tomatoes.....	— @ —
do green.....	1 00 @ 1 25	River reds.....	— @ —
do Niles.....	1 25 @ —	Humboldt.....	— @ —
BROOM CORN.		do Kidney.....	— @ —
Southern.....	3 @ 3 1/2	Chile.....	70 @ 70
Northern.....	4 @ 6	do Oregon.....	65 @ 80
CHICORY.		Peerless.....	65 @ 80
California.....	4 @ 4 1/2	Salt Lake.....	— @ —
German.....	6 1/2 @ 7	Sweet.....	2 @ 3
DAIRY PRODUCE, ETC.		POULTRY AND GAME.	
Cal. fresh roll, lb.....	21 @ 25	Hens, doz.....	5 00 @ 7 00
do Fancy brands.....	27 1/2 @ 28	Broilers.....	3 00 @ 4 00
Pickle roll.....	20 @ 21	Ducks, tame.....	3 00 @ 4 00
Firkin, new.....	16 @ 18	do Mallard.....	— @ —
Eastern.....	8 @ 11	do Sprig.....	— @ —
Cheese, Cal. lb.....	7 @ 8 1/2	Geese, pair.....	1 25 @ 1 75
Eastern style.....	10 @ 12 1/2	do Coolings.....	— @ —
EGGS.		do Wild Gray.....	— @ —
Cal. ranch, doz.....	25 @ 25	do White.....	— @ —
do store.....	20 @ 24	Turkeys, B.....	15 @ 20
Ducks.....	— @ —	do Dressed.....	— @ —
Oregon.....	— @ —	Turkey Feathers.....	10 @ 30
Eastern, by ex.....	15 @ 16	Sal and wing.....	7 @ 9
Pickled hens.....	— @ —	do Smoked Beef.....	— @ —
Utah.....	20 @ 21	do Common.....	— @ —
FEED.		do Quail.....	— @ —
Brass, ton.....	15 00 @ 15 50	Rabbits.....	1 00 @ 1 25
Commeal.....	5 00 @ 5 25	Hares.....	2 @ 2 50
Hay.....	5 00 @ 12 50	do Vaseline.....	12 @ 14
Middlings.....	16 00 @ 17 00	PROVISIONS.	
Oil Cake Meal.....	26 50 @ 28 50	Cal. Bacon.....	8 @ 8 1/2
Straw, bale.....	35 @ 45	Heavy, D.....	8 @ 8 1/2
FLOUR.		Medium.....	8 @ 8 1/2
Extra, City Mills.....	3 75 @ 4 20	Light.....	10 @ 11
do City Mills.....	3 50 @ 4 00	Extra Light.....	12 @ 13 1/2
Superfine.....	2 75 @ 3 25	do.....	12 @ 13 1/2
GRAIN, ETC.		do.....	11 1/2 @ 12 1/2
Barley, feed, chl.....	82 1/2 @ 85	Hams, Cal.....	10 @ 12 1/2
do Brewing.....	1 50 @ 1 65	do Eastern.....	13 1/2 @ 15
do new.....	1 50 @ 1 65	SEEDS.	
Chevalier.....	1 40 @ 1 42 1/2	Alfalfa.....	11 @ 11 1/2
do Coast.....	— @ —	Canary.....	3 1/2 @ 4
Buckwheat.....	1 05 @ 1 10	Clover red.....	4 @ 5
Corn, White.....	— @ —	do White.....	45 @ 50
Yellow.....	1 15 @ 1 25	do.....	— @ —
Small Round.....	1 25 @ 1 30	Cotton.....	20 @ 20
Nebraska.....	1 05 @ 1 10	Flaxseed.....	5 @ 6 1/2
Oats.....	30 @ 33 1/2	Hemp.....	25 @ 25
do No. 1.....	— @ —	Italian Eye Grass.....	50 @ 50
do No. 2.....	— @ —	Perennial.....	25 @ 25
do black.....	1 15 @ 1 20	Millet, German.....	10 @ 13
do Oregon.....	1 15 @ 1 20	do Common.....	7 @ 10
Rye.....	1 25 @ 1 27 1/2	Mustard, white.....	2 00 @ 2 50
Wheat, No. 1.....	1 25 @ 1 27 1/2	do Brown.....	— @ —
do No. 2.....	1 20 @ 1 22	Rape.....	11 @ 12
Choice milling.....	1 30 @ —	do quality.....	20 @ 25
HIDES.		Sweet V. Grass.....	75 @ 80
Dry.....	15 @ 16	Orchard.....	20 @ 25
Wet salted.....	8 @ 14	Red Top.....	15 @ 20
HAY, ETC.		Hungarian.....	8 @ 10
Beeswax, lb.....	20 @ 24	Lawn.....	10 @ 12
Honey in comb.....	7 1/2 @ 8	do.....	10 @ 12
Extracted, light.....	3 1/2 @ 3 1/2	Timothy.....	5 1/2 @ 6
do dark.....	3 @ 3	TAILLOW.	
HOPS.		Crude, D.....	11 @ 12
Oregon.....	— @ —	Refined.....	6 @ 6 1/2
California old.....	15 @ 17 1/2	WOOL, ETC.	
do new.....	25 @ 28	1886.....	— @ —
ONIONS.		Humboldt.....	22 @ 25
Red.....	15 @ 20	Mendocino.....	17 @ 20
Silver skin.....	50 @ 65	Sac'to valley.....	17 @ 20
NUTS—JOBBING.		Free Mountain.....	17 @ 20
Walnuts, doz.....	9 @ 9	N'reen defective.....	— @ —
do Chile.....	7 @ 7	do long short.....	14 @ 18
Almonds, dahl.....	6 @ 6	do.....	— @ —
Soft shell.....	10 @ 12	Cava's & Fy'll.....	— @ —
Brazil.....	11 @ 12	Oregon Eastern.....	17 @ 22
Pecans.....	10 @ 12 1/2	do valley.....	24 @ 27
		Southern Coast.....	13 @ 17
Complimentary Samples.			



List of U. S. Patents for Pacific Coast Inventors.

Reported by Dewey & Co., Pioneer Patent Solicitors for Pacific States.

From the official report of U. S. Patents in Dewey & Co.'s Patent Office Library, 252 Market St., S. F.

FOR WEEK ENDING JULY 27, 1886.

- 346,350.—HORSESHOE—J. E. Bingham, Walla Walla, W. T.
- 346,351.—HORSESHOE—J. E. Bingham, Walla Walla, W. T.
- 346,150.—WATER-PROOF COMPOSITION FOR FELT SHOES, ETC.—Feldmann & Dunbar, Portland, Or.
- 346,287.—PIE-PLATE LIFTER—G. H. Hollidge, Tacoma, W. T.
- 346,105.—BURGLAR ALARM—J. E. Hunt, S. F.
- 346,304.—WATER FILTER—McLean & Cumming, S. F.
- 346,212.—PRESSURE-REGULATING VALVE—P. F. Morey, Portland, Or.
- 346,226.—HORSE COLLAR—R. M. Sears, S. F.
- 346,333.—BRAKE BEAM CONNECTION—Walsh & Smith, Taylorsville, Cal.

NOTE.—Copies of U. S. and Foreign patents furnished by Dewey & Co., in the shortest time possible (by mail or telegraphic order). American and Foreign patents obtained, and general patent business for Pacific Coast inventors transacted with perfect security, at reasonable rates, and in the shortest possible time.

Fairs to Come.

- Bay District Association, San Francisco, Aug. 7th to 14th.
- Sonoma County Agricultural Association, Santa Rosa, Aug. 16th to 21st.
- Third District—Butte, Tehama and Colusa counties—Chico, Aug. 17th to 23d.
- Fourth District—Sonoma, Marin, Solano and Napa counties—Petaluma, Aug. 23d to 28th.
- Seventeenth District—Nevada and Placer counties—Glenbrook Park and Pavilion, Nevada City, Aug. 24th to 28th.
- Mechanics' Institute Fair, San Francisco, Aug. 24th to Sept. 25th.
- Golden Gate Fair, Oakland, Aug. 30th to Sept. 4th.
- Thirteenth District—Sacramento, Yolo, Yuba and Sutter counties—Marysville, August 31st to September 4th.
- Eighth District—El Dorado, Amador, Alpine and Mono counties—Placerville, August 31st to September 4th.
- Contra Costa Agricultural Society, Concord, Sept. 6th to 10th.
- State Agricultural Society, Sacramento, September 6th to 18th.
- Oregon State Agricultural Society, Salem, September 13th to 18th.
- Eleventh District—Plumas, Lassen, Sierra and Modoc counties—Greenville, September 20th to 24th.
- Second District—San Joaquin, Calaveras, Tuolumne, Stanislaus, Merced, Mariposa, Fresno, Tulare and Kern counties—Stockton, Sept. 21st to 25th.
- Ninth District—Del Norte and Humboldt counties—Rohnerville, Sept. 21st to 24th.
- Fifth District—San Mateo and Santa Clara counties—San Jose, Sept. 27th to Oct. 2d.
- Seventh District—Monterey, Santa Cruz, San Benito and San Luis Obispo counties—Salinas City, Sept. 28th to Oct. 2d.
- Tenth District—Siskiyou, Trinity and Shasta counties—Yreka, Sept. 29th to Oct. 2d.
- Nevada State Fair, Reno, Oct. 4th to 9th.
- Santa Barbara Agricultural, October 5th to 8th.
- San Diego Horticultural Society, Oct. 6th to 8th.
- Sixth District—Los Angeles, Santa Barbara, Ventura, San Diego, San Bernardino and Inyo counties—Los Angeles, Oct. 11th to 16th.

Our Agents.

OUR FRIENDS can do much in aid of our paper and the cause of practical knowledge and science, by assisting Agents in their labors of canvassing, by lending their influence and encouraging favors. We intend to send none but worthy men.

- JARED C. HOAG—California.
- G. W. INGALLS—Arizona.
- E. L. RICHARDS—San Diego Co.
- R. G. HUSTON—Idaho and Montana.
- GEO. McDOWELL—San Luis Obispo and Santa Clara Co's
- FRANK W. SMITH—Idaho and Montana.

LUMBER RESOURCES OF LOUISIANA.—The New Orleans Times-Democrat says that the State of Louisiana possesses the largest area of merchantable timber of any State of the Union, and the greatest variety of woods.

Cheap Money to Loan on Grain.

FARMERS, don't pay 10 per cent. S. D. Hovey, 330 Pine St., San Francisco, has \$500,000 to loan on grain in warehouse, at 6 per cent per annum. He loans \$18 a ton on wheat. Write him.

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CALIFORNIA STATE FAIR—1886.

At Sacramento, Sept. 6th to 18th. TWO WEEKS.

The Attention of the Farming Community of this State is particularly called to the Liberal Awards, and advantages offered for

COUNTY EXHIBITS.

The importance of an exhibit made by separate counties, showing the productive qualities of the various sections of our State, has become more apparent each year since the system was inaugurated by this Board. Recognizing the interest made manifest in the past by both the public and the exhibitors, through whose energy and enterprise valuable agricultural lands have been brought to the notice of the world, and counties with small populations have increased in a manifold degree, by reason of the producer having come forward with his products that were of such quality as to enable him to meet all competitors, the Board have deemed it proper to increase the premiums in this Department, and to that end have appropriated \$2000 to be distributed among the various counties making displays under the following provisions: To those who may have charge of the exhibits, we would call their attention to the fact that these awards will be made for the most extensive, perfect, and varied exhibit of Farm Products (exclusive of live stock) exhibited as a County Production. Thus it will be seen that it is to be wholly devoted to the products of the farms located in the county where the exhibit is made from, and does not include manufactured goods of any kind or character except those grown and raised in the county from whence the display comes.

For the best display, as per explanation above, First premium of \$500, cash. The remaining exhibits shall receive premiums in proportion to their excellence, as compared with that receiving the First Premium. Competition to be between counties only. That is to say, that the entire exhibit made by one county must compete against the entire exhibit of another county. The premium awarded to each county exhibit will be paid to the committee in charge of said exhibit.

The State Board of Agriculture earnestly desires the hearty co-operation of the various subordinate Granges throughout the State, in making this exhibition of California's products a success, whereby the varied products of different localities may be fully shown. We would ask the appointment of a committee from the Grange in each county to call upon and urge the patrons to make a display representing their respective counties.

Address the Secretary at Sacramento for Premium Lists and other information.

JESSE D. CARR, President. EDWIN F. SMITH, Sacramento.

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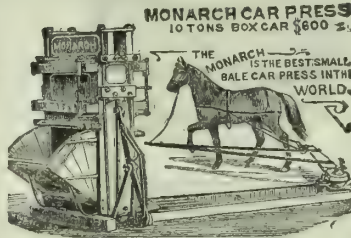
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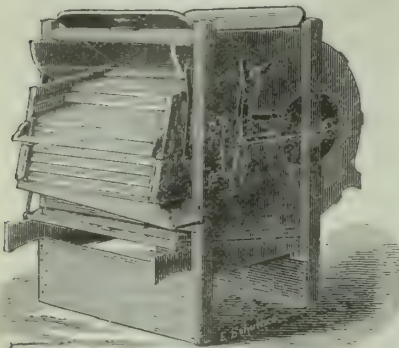
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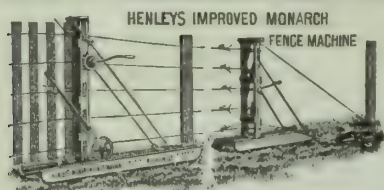


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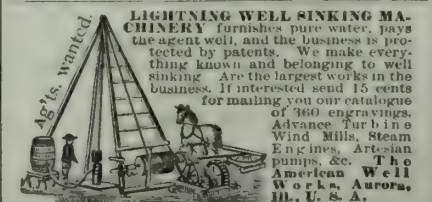
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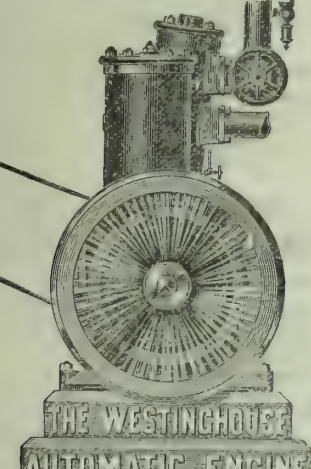
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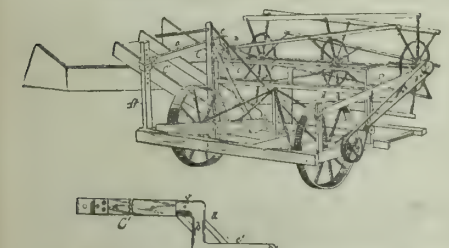


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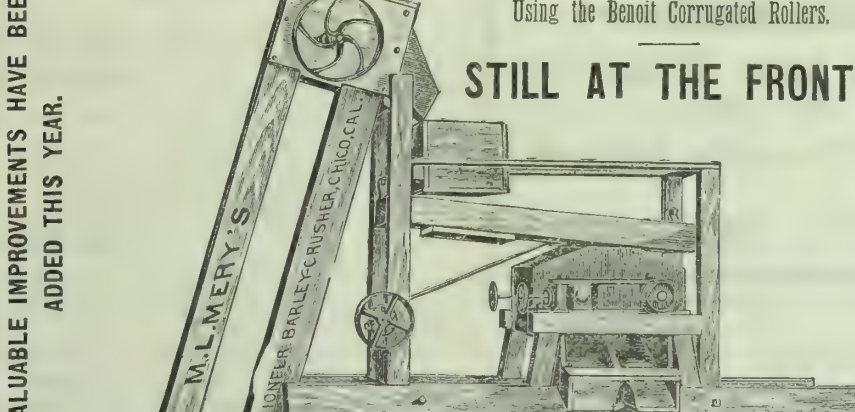
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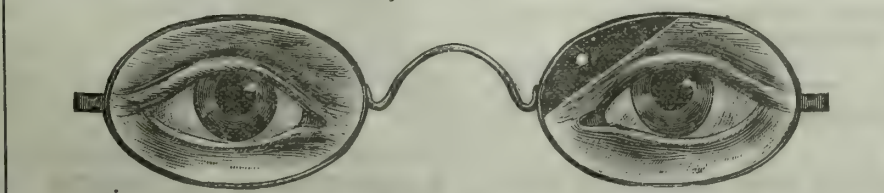
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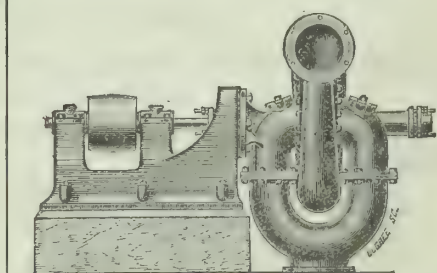
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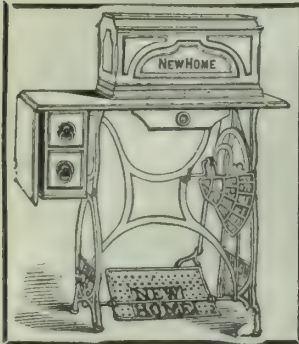
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THE BEST FOR FORCING OR BEDDING PURPOSES.

We highly recommend them. We sell the cheapest, according to what we give. Lowest cash prices for the Trade.

100 Hybrid Perpetuals in the best variety, our selection	\$ 2 00
1000 Hybrid Perpetuals in the best variety, our selection	25 00
100 Hybrid Perpetuals, purchaser's selection	10 00
1000 Hybrid Perpetuals, purchaser's selection	25 00
100 Teas and Monthly, our selection of variety	12 00
500 Teas and Monthly, our selection of variety	58 00
100 Teas and Monthly, purchaser's selection	14 00
100 Moss Roses, best variety, our selection	9 00
100 Moss Roses, purchaser's selection	10 00

This is not including the new Roses of '85 and '86.

100 Grapevines, best imported variety, our selection	\$10 00
100 Standard Tree Roses, our selection	40 00
100 Half Standards, our selection	30 00

One hundred roses packed weigh about 50 pounds, 1000 about 400 pounds. Parties wanting the Roses sent by freight must add \$3.00 for prepayment of freight for every 100 pounds they order.

We start shipping after 1st of October. Catalogue on application. Plants are sent by Express or Freight. They are too large to be sent by mail. Order early to get the best. Cash must accompany every order. For reference see the editor.

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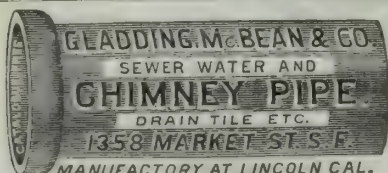
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**CUTS FOR SALE.** Duplicates of most of the Engravings appearing in this journal will be sold, after thirty days from date used, at very reasonable prices.

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JOHN L. HOWARD, President.  
ISAAC GOLDTREE, Vice Pres't.  
R. E. JACK, Treasurer.  
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Secretary and Manager.

### THE PASO ROBLES, SANTA YSABEL, and EUREKA RANCHES,

Recently purchased by the West Coast Land Company, are now offered for sale in subdivisions.

This immense body of land, including 12,000 acres unsold of the Huer Huero ranch, belonging to C. H. Phillips, comprises 61,000 acres of rich, virgin soil. It lies in a compact body, in the center of San Luis Obispo county, and is within from 9 to 20 miles of the sea coast. It is covered with white and live oak timber, is one of the most picturesque bodies of land in the State, and requires

### NO IRRIGATION.

It has an abundance of living water, and where not sufficient for domestic use, good water can be had at a depth of from 10 to 40 feet. It has an average annual rainfall of 21 inches, exceeding by 6 inches that of Santa Clara county, one of the most prosperous counties in the State.

The extension of the Southern Pacific Railway from Soledad southward traverses these lands for 15 miles, throughout their entire length, placing the property within eight hours of San Francisco.

These lands are offered at from \$10 to \$30 an acre, and are all susceptible of the highest cultivation. In salubrity of climate, productiveness of soil and location as to market, they are equal to lands in Los Angeles and other counties, which readily bring from \$100 to \$200 and upward; and as to price and terms offer the best inducements to those seeking homes on any part of the Pacific Coast.

The field work of the subdivision of the famous

### PASO ROBLES RANCH

Has been completed. The maps and catalogues are now being prepared, and will be sent free on application.

This ranch, containing 20,400 acres, has been subdivided into 230 lots. It is 12 miles from the sea coast, and is 20 miles north and west from San Luis Obispo city.

This ranch was one of the earliest granted by the Mexican Government and having been held by the same party for 30 years, has never before been offered for sale. It consists exclusively of land of the choicest character, and is second to none in the State for the production of wheat, wine, fruits, raisins and olives.

### TERMS OF SALE.

One-third cash; balance in 4 equal payments at 2, 3, 4 and 5 years; interest, 6 per cent per annum. The mortgage tax paid by the mortgagee makes the interest about 4 per cent net to the purchaser. A deposit of \$25 will be required in all cases to cover expenses of sale.

**C. H. PHILLIPS, Manager,**

West Coast Land Co., San Luis Obispo, Cal.

Send for Catalogue and Map.

## CALIFORNIA CHIEF GRAIN CLEANER

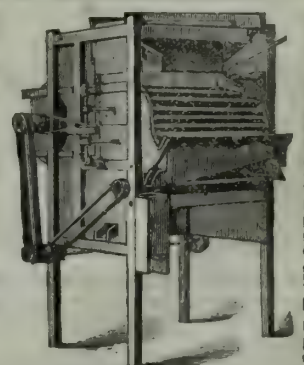
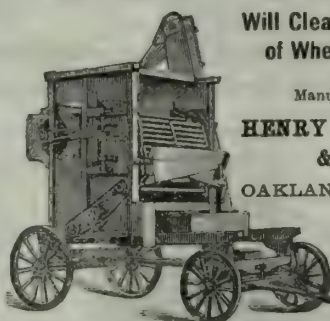
Will Clean 1600 Bags of Wheat in a day.

Manufactured by

**HENRY N. DALTON & SONS,**

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Little Chief Grain Cleaner  
For Combined Harvesters.  
WILL CLEAN 600 BAGS IN A DAY.

### \$1000 REWARD

For any machine built and cleaning fit for market as much Clover Seed in ONE DAY as the

**VICTOR DOUBLE MULLER.**

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### THE VICTOR

has made \$1000 often in ONE DAY.

Illustrated circular mailed free.

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### THE GOAT-BREEDERS' ANNUAL MEETING

Will take place on Thursday, September 16, 1886, at Pioneer Hall, SACRAMENTO, at 8 o'clock P. M. of said day.

All Goat-breeders invited to attend at that meeting, and also requested to exhibit specimens of their flocks at the State Fair.  
C. W. SCHLEIFFER, Chairman.  
July 23, 1886.



# PACIFIC RURAL PRESS

TWENTY-PAGE EDITION.

Vol. XXXII.—No. 7.

SAN FRANCISCO, SATURDAY, AUGUST 14, 1886.

\$3 a Year, in Advance  
SINGLE COPIES, 10 CTS.

## Judge Joel Russell.

We propose to give life-like portraits of the several candidates who shall be nominated for governor during the present campaign, together with such facts about them as our time and space will permit. It is always more pleasant to speak of the good qualities of one whom we have known personally than to print the views of strangers. We have known for years the gentleman whose portrait appears upon this page, and we present him to our readers as the candidate of the Prohibition party for the governorship of California, without discussion of his candidacy or views, but as a practical farmer and a man whose life has secured for him esteem and an honorable reputation.

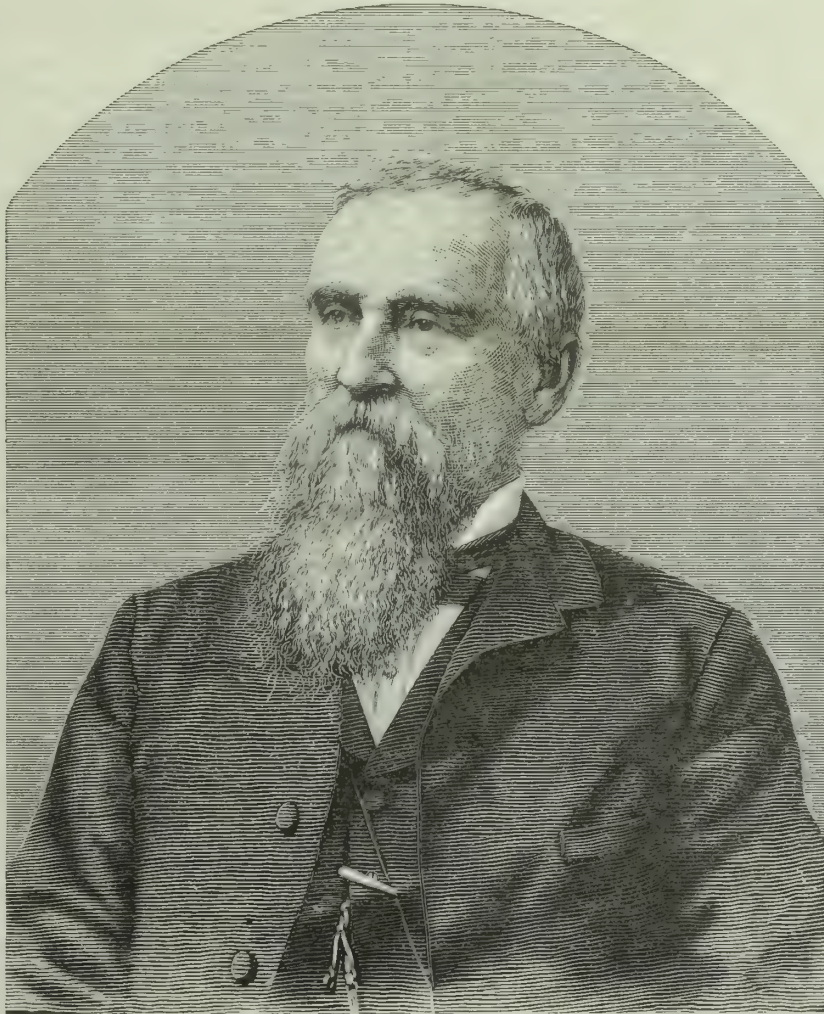
Joel Russell was born in Waterford, Oxford county, Maine, where he resided until he attained the age of 17 years. Mr. Russell then began the battle of life. Going to Medford, Massachusetts, he alternated his time between his service as a clerk in the drug store of Luther Angier, in that place, and the pursuit of his studies at Bethel academy, in his native county, where he finally graduated with a diploma as a teacher. On October 30, 1849, in company with a few intimate friends, among whom was his especial friend and shipmate, W. H. Stearns, now one of the successful and long-established business men of San Francisco, he sailed in the ship *Henry Ware*, Captain Noah Nason, from Boston via Cape Horn, arriving at San Francisco Mar. 13, 1850. Soon thereafter he proceeded to Stockton, where, for a short time, he engaged in contracting and building. There he met Captain Charles Weber, whose acquaintance he favorably made, which resulted in his receiving a deed for 160 acres of land near Stockton, upon which, during the winter of 1850-51, he built a house and made the necessary preparations to cultivate the land, but owing to a failure of early rains, he abandoned the farming project, sold out and went to the northern mines, where he spent a year, the history of which would be filled with startling encounters with Indians, and other events incident to the early life of a miner. Having traversed the mountain ranges of Humboldt bay to the Columbia river, he returned to San Francisco in February, 1852. Finding himself in that "flat-broke" condition then so common among miners, he turned his thoughts toward the generous soil as he looked eastward across the bay, and he finally embarked on board a small sloop, from which he landed the next morning at what has since been known as Mayhew's landing, his last cent of money having been expended in the payment of his fare. Near Centerville, in what is now Alameda county, by dint of perseverance and personal application to hard work, he managed to procure sufficient means to enable him to rent land and embark in farming. In January, 1853, he settled as a squatter on what proved to be a portion of the Soto rancho.

In 1856 the title of this rancho having been confirmed to the claimants, he bought the title of one of the heirs, it being one-seventh of the ranch, which he divided with his fellow-squatters, reserving sufficient to protect his own possessions, since which time Mr. Russell has been considered among the smaller land-owners of Alameda county.

During the year 1854, Mr. Russell was elected a justice of the peace for Eden township, and served one term on the bench as an

associate in the Court of Sessions with Judge Crane, then County Judge. His attention having been called somewhat to the law, he afterward made application, was examined and admitted to the practice of law. Politically, Mr. Russell was an enthusiastic Republican at the formation of the Republican party, having cast his first vote for president for the liberal party candidate in 1852, at Centerville precinct. Adhering to his principles, he nominated his own electors and cast the one vote of his county for John P.

THE PROMOTERS OF THE NEW LAW.—A dispatch from New York on Tuesday of this week states that the Board of Directors of the American Agricultural and Dairy Association met on that day, to wind up the recent campaign against oleomargarine, which culminated in the passage of what is known as the oleomargarine bill. President J. H. Reall reported the expenses of the campaign as \$7000, and the receipts as \$5600. Resolutions were passed commending the supporters in Congress of the oleomargarine bill as wise, patriotic men. Special



JUDGE JOEL RUSSELL, OF ALAMEDA COUNTY.

Hale, of New Hampshire, the freesoil candidate for the presidency. He remained a Republican until the overthrow of slavery through the rebellion. More recently he has placed his political influence in opposition to what he deems a greater national evil—intemperance and the liquor traffic—and is therefore a pronounced prohibitionist. Mr. Russell is a man distinguished for personal qualities of a high order, commanding the highest respect of those who know him best.

Mr. R. became a charter member of Eden Grange at the introduction of the order into the State, and has ever since been an active member of the P. of H. He is also an active member of the State Horticultural Society, and of other organizations, including the Sons of Temperance, the Good Templars, and has ably filled important and honorable positions in the several organizations to which he has joined himself.

mention was made of the father of the bill, Hon. W. L. Scott, of Pennsylvania, also Hon. W. H. Hatch, of Missouri. The time and place of the National Convention was fixed for September 14th and 15th, 1886, at Philadelphia.

AN ISSUE WITH MEXICO.—There is a small speck of war in the horizon, though there is hardly any likelihood that it will be enlarged. The Mexicans insist that they have a right to try in their courts a citizen of the United States, for something done on our side of the line. Such a claim as that cannot be admitted and the United States Government has demanded the release of the man condemned by their courts. If Mexico should refuse to accede to the demand there might be trouble, but there seems little chance that our sister Republic will persist in such a course.

## Volcanoes as Soil-makers.

The industrial idea seems to be wide awake the world over. In New Zealand they had, in June last, a volcanic disturbance which buried several small hamlets, killed a large number of people and quite changed the landscape in one part of the island. One would think such an occurrence would have filled the region with brooding desolation for a decade, but not so. A scientific expert visited the scene and reported that the volcano "was a purely hydrothermal phenomenon on a gigantic scale, that it is quite local and not of deep origin, and that all danger is past for the present."

With this assurance the industrial idea cropped out, and there seems to be a chance that the great torture of the earth's crust may prove a blessing after all. We read in a local exchange that the large quantity of volcanic ashes which was thrown out in the first terrible outbreak, and which has spread over some 200,000 acres, are now found to be not hurtful to vegetation. In places where the depth has not been great the grass and other vegetation are springing up quite freely, and many believe the ashes will yet prove a benefit to the district, and several people have tested the fertility of the debris thrown out by sowing various kinds of seeds therein and watering with distilled water. In each case the seed has grown and the plants have thriven wonderfully in their new situation. So satisfactory indeed have these trials been that the Government has granted a sum of money to have several portions of the district (which are covered with too great a depth of volcanic ashes for the covered vegetation to break through) sown down with grasses and clovers as experiments on a large scale. If these are satisfactory, as it is believed they will be, the greater part, if not the whole, of the covered district will be sown with artificial grasses in the spring, before the warm weather sets in.

This turning of the debris of a terrible convulsion into profitable pastures within a few months certainly should entitle New Zealand to rank among progressive countries.

NEBRASKA STATE FAIR.—The most gorgeous State Fair entrance ticket we have ever seen is that just received from Hon. R. W. Furnas, Secretary of the Nebraska State Board of Agriculture. In the center of the card is an ear of corn embossed and gilded, the husk, partly torn away, being different shades of green. We take it the work is done by hand, and is an excellent piece of decorative art work. The emblem is to signify that corn is king in Nebraska—a fact which has been painfully impressed upon the attention of California corn-growers since overland freight rates have been so low. The Nebraska State Fair will be held at the city of Lincoln, the capital of the State, September 10th to 17th inclusive.

CRANBERRIES.—The *Sonoma Democrat* says: The prospects for a large crop of cranberries this season are very flattering. The berries around Occidental are ripening very rapidly, and the bushes are heavily laden. We should be glad to hear about this fruit from our readers in that locality. It will be something new and interesting to have the feasibility of cranberry culture demonstrated in this State. Some were shown in the city a few years ago from Bouldin Island, but we have not heard of them since.



## CORRESPONDENCE.

Correspondents are alone responsible for their opinions.

## Santa Cruz Mountain Farming.

EDITORS PRESS:—C. C. Miller, residing five miles north of Santa Cruz, in the foothills of the Santa Cruz mountains, in a high ridge, two and one-half miles long and about 1400 feet above sea level, during the rainy season, saves up water for summer use in the following manner:

He uses the high hillside above his cultivated tract for a watershed. The water of the rains of winter and spring is conducted, by means of a ditch, into a reservoir excavated in the side of the hill in the chalk formation abounding in this region, where it is allowed to remain until well settled. A few steps below this, a circular cistern is cut out of the same formation, seven feet in diameter and ten feet deep. The water is drawn from the reservoir into the cistern by means of a siphon, which is considered much better than a straight pipe, as by the siphon the purest and best water can be drawn off without disturbing the sedimentary matter contained in the reservoir after settling of the water.

Mr. M. has three such cisterns on the place, and sufficient water is thus saved and stored for domestic purposes, including the use by such live-stock, fowls, etc., as he may have. The cost is but slight. He sent to San Francisco for cement and to Santa Cruz for sand, and over and above his own labor, the cost was only about \$6 per cistern. Such ditches, reservoirs and cisterns might be constructed on almost any high ridge where water cannot otherwise be obtained. The surface material of the earth might of course materially change estimates of cost of construction, but before undertaking that could usually be determined with sufficient accuracy.

## New Blackberries.

Mr. M. is fond of experimenting, and has selected from the forests several plants of the wild blackberry producing berries of fair size and good flavor, and planted them in the rich chalky formation thrown out in the excavation of his cistern. They are growing thriftily, and bearing better than most varieties, having commenced bearing in the first of February, and continued during the spring months, blooming at the same time for additional crops. The ripe berry is very sweet, and belongs to a class of blackberries that, because of their excellent flavor, are much sought after by persons from the city and elsewhere at a distance on their visiting these foothills.

The main feature of Mr. M.'s domestication is in keeping the vines pinched back during all the growing season. This prevents their running to mere bramble and makes the plants prolific.

## Mulching.

Mr. M. is trying the principle of mulching in preference to cultivation of vines. He has several hundred wine grapes planted on a steep hillside. About four years ago, after pruning and cultivating thoroughly, he mulched 100 vines to the depth of 5 or 6 inches, using for the purpose damaged hay, corn-husks, stalks, leaves and other litter convenient. With these, the first season, the crop was light, but free from mildew, and otherwise healthy. The ones not so treated were well cultivated, but had to be sulphured several times, because of mildew. He has continued each year to add to the 100 vines some mulching material, and to prune the same as he has the ones not mulched, but lets the vines lie down. The result has been these 100 vines remain free from mildew ever since they were mulched. He has been obliged to sulphur the balance of his vineyard three or four times each season. The mulched have grown vigorously and borne heavily each year, while the unmulched have also grown vigorously and borne well—but not so well, because of the injuries sustained from mildew. The crop of the mulched is some two weeks earlier than that of the unmulched.

Aside from the consideration of mildew in the growing of grapes on hillsides, where cultivation is difficult, Mr. M. thinks the mulching process advantageous for many reasons, among which he states the following: Prunings from the vineyard are good material for mulching, and when decayed make a good fertilizer. After once mulched the labor necessary to keep the vineyard in good condition is much less. No weeds grow and no cultivation to do. The carrying of prunings from the vineyard is avoided. The mulching retains the leaves dropped from the vines. The vines may be pruned low and spreading. Here, the clusters nearest the ground are found the sweetest and best, those lying on the mulch ripening perfectly, and yet not affected by early rains. The soil under the mulch is kept mellow and moist, and at an equable temperature, thereby causing the feeding roots to reach toward the surface, where the best properties of the soil are found, and which are being continuously supplied by decomposing mulch, insuring the vines health, vigor and long life. Steep hillsides, in this region, are considered the best localities for vineyards, and mulching prevents washing.

Mr. Miller is well informed, an interesting

conversationalist, and enters into the spirit of his experiments and their results with keen enjoyment. He is trying for his grapevines the copper-line preparation recommended by Prof. Hilgard for experiment in checking mildew, and promises to report results to the RURAL PRESS.

Santa Cruz Co.

## ENTOMOLOGICAL.

## Experiments with Cottony Cushion Scale.

We stated some weeks ago that Professor C. V. Riley, U. S. Entomologist, had detailed Mr. D. W. Coquillett to conduct some experiments in killing the cottony cushion scale (*Icerya purchasi*) in Los Angeles. We are glad to have an early report of the progress of this work. Mr. Coquillett sends us a copy of a statement which he prepared for the Los Angeles Times, as follows:

Nearly all of the remedies experimented with were fatal to the young insects, but the adults—especially the females with egg-masses—were not so easily affected, while the eggs were still more difficult to destroy, on account of their being massed together in such large numbers and protected by the cottony matter secreted by the female. In order to ascertain what effect the different remedies had upon the eggs, several egg-masses that had been thoroughly sprayed by the different solutions were taken and inclosed in small pasteboard boxes; in this manner the percentage of the eggs that hatched out could be ascertained beyond a doubt.

It has been my aim in making these experiments to discover a remedy that will kill not only the insects in their different stages of development, but also the eggs, since it is evident that any solution which merely destroys the insects, without affecting their eggs, is not a desirable remedy, as the eggs will in due time hatch out, and thus the tree will again become as thickly infested with the insects as before. The full force of this remark will be better understood when we remember that each of the larger egg masses contains from 700 to 900 eggs, each of which will in due time produce a living insect.

Of course a wash that merely kills the insects without affecting the eggs could be used with quite good results by making two applications of it at an interval of from four to six weeks, so as to give the eggs upon the tree sufficient time to hatch out before the second application is made; but if it is desired to make two applications within a short time of each other, it will pay to use a wash that kills both the insects and their eggs, even if the cost of such a wash is somewhat greater than that of one which merely kills the insects. The cost of a wash, however, could be much reduced by using some contrivance for catching as much of it as ordinarily falls upon the ground after having been sprayed upon the tree, and using it over again; it is believed that by such a method fully two-thirds of the wash could be saved.

The remedies experimented with thus far include potash, caustic soda, hard and soft soap, kerosene, tobacco water, sheep dip (said to be a pure extract of tobacco), vinegar, and Paris green. The crude potash was used in three different strengths—one pound, one-half pound and one-fourth of a pound to each gallon of water. The strongest solution killed about one-half of the leaves upon the tree and one-tenth of the smaller branches, but did not kill all of the female insects with egg-masses, while the eggs were scarcely affected by it. The solution of one-fourth pound to one gallon of water killed above five per cent of the leaves, while only about one-fourth of the nearly grown insects were killed, the females with egg-masses being scarcely affected by it.

The crude caustic soda was used in the proportions of one-half, one-fourth, and one-sixth of a pound to each gallon of water. In each of these solutions the effect upon the tree was more severe than in the potash solutions of the same proportions. The strongest solution killed the tree, while it destroyed only about nine-tenths of the nearly grown insects and a smaller number of the females with egg-masses, the eggs being but slightly affected by it. The weakest solution killed about one-third of the leaves, four-fifths of the nearly grown insects and a smaller number of females with egg-masses.

The hard soap was used in the proportions of one-half and one-third of a pound to each gallon of water. The stronger solution killed nearly all of the insects and formed a hard coating around the egg masses, through which the young insects, after hatching, were unable to penetrate, and were thus imprisoned alive. The weaker solution killed the insects with the exception of about five per cent of the females with eggs, and a slightly larger percentage of the nearly grown ones; it also formed a hard coating around the egg masses, which prevented the escape of the young insects. Both solutions left a whitish coating upon the leaves and branches.

The soft soap was made by dissolving one pound of refined potash and one of concentrated lye in seven gallons of water, then adding one-half gallon of fish oil; the whole was then boiled about an hour. It was used in two

different strengths—one pint and two pints of the soap to each gallon of water. The strongest solution killed the insects with the exception of about one-tenth of the females with eggs, but the eggs were but slightly affected by it; the weaker solution killed about two-thirds of the insects.

The kerosene was used in various proportions, from one gallon in five to one in twenty-eight of water. The strongest solution produced no visible effect upon the tree; those containing from one gallon in five to one in seven of the wash killed all of the insects and their eggs, but when the solution contained only about one gallon of kerosene in ten of the wash, some of the adult females with egg-masses and a small number of eggs escaped injury. The kerosene was first emulsified in soapsuds or in milk. An emulsion made with milk does not appear to be so effectual as one made with soapsuds. The latter is made by dissolving half a pound of soap in a gallon of water and adding it hot to two gallons of the best grade of kerosene and forcing it through a force-pump back again into the vessel containing the solution; in from 20 to 30 minutes a stable emulsion will be formed, resembling a thick cream, and when a piece of glass or a knife-blade is thrust into this emulsion, the latter will adhere to it, forming an even coating, but if it collects in drops the emulsion is not perfect. It is almost impossible to form a stable emulsion with cold soapsuds. Great care must be taken in properly emulsifying the kerosene, as its success as an insecticide depends largely upon its ability to be properly diluted with water; also, none but the best grade of kerosene should be used.

The tobacco water was prepared by boiling tobacco leaves and stems in water, and was used in the proportions of one-half, one-fourth, one-sixth and one-eighth of a pound of the tobacco to each gallon of water. The strongest solution killed all of the insects and nearly all of the eggs, while the tree was not perceptibly affected by it; the weakest solution killed all of the insects with the exception of about 2 per cent of the nearly grown ones and 10 per cent of the females with egg-masses.

The sheep-dip was of the "Gold Leaf" brand, manufactured at Louisville, Ky., and costs about \$2 per gallon. It was used in proportions of 1 part of the dip to 30 of water, 1 to 60 and 1 to 90, but even the strongest solution killed only about four-fifths of the nearly grown insects and one-fourth of the females with egg-masses, while it had no appreciable effect upon the eggs.

From this it will be seen that only three of the remedies experimented with gave anything like favorable results. These were: Tobacco water in the proportion of one-half pound of the tobacco to one gallon of water; hard soap, one-half pound to each gallon of water; and the kerosene emulsion, in the proportion of one gallon of kerosene to from five to seven of water.

## THE APIARY.

## Bee-keeper's Reference-book.

EDITORS PRESS:—Bee-keeping has now reached such an advanced state, and honey is now so low in price—lower than it has ever been before—that only he who keeps abreast of the latest improvements can produce it at a profit. Although new books on the subject are occasionally published, the progress is so rapid that any book soon falls behind the times; and in order to keep fully posted it becomes necessary to carefully read the weekly and monthly periodicals appertaining to this business. There are now several excellent bee-papers, of which the *American Bee Journal*, *Gleanings in Bee Culture* and the *Canadian Bee Journal* stand at the head in this country.

In reading these papers the veteran bee-keeper will, however, find much which, although interesting and useful to the novice, is of no particular value to him. Much of the space is taken up by articles on "wintering," which are of little interest and of no use to the California bee-keeper. Only occasionally will he find some article which it may be desirable to read over again. As the papers accumulate from year to year, they form a vast amount of reading matter, and even by the aid of the indexes it may often be difficult to find some particular article.

To facilitate such research, bee-keepers should have a reference-book in which they can note down, in its appropriate place, any article which they think may be of future value. This should be done at the time of first reading the article, and before the subject is forgotten.

Mr. G. M. Doolittle once gave his method of keeping a reference-book, which consisted in dividing the book into months, and noting each article at the month during which the subject treated upon would need his immediate attention. This method has its advantages, no doubt, but a better method, I think, and the one I have used for several years, is to divide the book under appropriate heads, into the principal subjects of interest or use to the bee-keeper. One or two pages should be devoted to each subject, and the pages divided into columns with sub-heads, viz.: Subject and writer, name of paper, year, page. Thus I find on page

eight of my reference-book the heading, "foul brood." Below appears as follows:

Subject and writer.	Paper.	Year.	Page.
"How to Cure," D. A. Jones	A. B. J.	1882	761
"Method to Cure," De Layens	A. B. J.	1884	22
"Starvation Plan," Osburn	A. B. J.	1884	360
"Nature of, Etc.," Cheshire	A. B. J.	1884	644
Continuation of above	A. B. J.	1884	740
"Phenol for F. B."	Gls.	1885	100
"Thyme for F. B."	A. B. J.	1885	200

At the beginning of the book is a complete index of the main headings, which, at a glance, will refer me to any subject I wish to look up; thus, Queen-cages, page 3; Adulteration, page 4; Foul Brood, page 8; Comb Foundation, page 18; Apparatus, page 12; Statistics, page 22, etc.

Any one who will try this method will find that it will not only be very useful to keep a reference-book, but that it will save him much time and spare him much useless reading afterward. When reading a bee-paper he should always have the reference-book at hand, and while noting the matter under consideration it may be well, and will save still further time, to draw a line in the margin of the paper, indicating the exact part of the article which is supposed to need reading again.

I believe such a reference-book would be of great advantage in any business which has a literature of its own.

WM. MUTH-RASMUSSEN.

Independence, Cal.

## HORTICULTURE.

## Dried Fruit Review and Prospects.

EDITORS PRESS:—The fruit-drying industry of this State makes increased demands each year upon the garden and orchard product. Last year it required, at the lowest calculation, 110,000,000 pounds of green fruit to give the large amount of dried fruits thrown on the market. So that the importance of this industry can be better understood, it is safe to say that 110,000,000 pounds of green fruit was valued at \$3,500,000, and to have marketed it would have taken 5500 cars carrying 10 tons each. The following comparative summary of the dried-fruit product shows the increase the past three years:

	1885.	1884.	1883.
lbs.	lbs.	lbs.	lbs.
Raisins	9,400,000	3,500,000	2,500,000
French prunes	1,400,000	1,524,000	250,000
German do.	150,000	350,000	.....
Apples, sun-dried	1,073,000	1,200,000	800,000
Peaches, do.	1,500,000	500,000	500,000
Plums, do.	1,020,000	700,000	100,000
Pears, do.	100,000	75,000	75,000
Grapes, do.	175,000	150,000	125,000
Apricots, do.	300,000	100,000	300,000
Nectarines, do.	30,000	10,000	20,000
Figs, do.	100,000	50,000	60,000
Apples, evaporated	750,000	400,000	250,000
Apricots, do.	350,000	100,000	90,000
Peaches, evaporated	150,000	50,000	.....
Peach's, evaporated	250,000	80,000	.....
Plums, evaporated	118,000	75,000	.....
Nectarines, do.	50,000	10,000	.....

Totals.....16,766,000 8,874,000 5,070,000

Notwithstanding the heavy production, we enter the new season this year with no stock of old on hand. One cause of the market being cleaned up was the cut in overland freights last spring, allowing the shipping of good, bad and indifferent, either on actual sales or else on ventures. The prices realized were much better than had been thought could possibly be obtained, particularly for the "trash" that was worked off. The East not only absorbed all the dried fruit shipped, but could have taken all of twice as much more without affecting prices in the least. This has demonstrated the fact that the East stands ready to take all the fruits that can be dried in this State, and at fairly profitable prices, provided care be taken in packing for the market.

Last year's large increased production of dried fruits was due chiefly to the heavy crop of green fruit and the low prices that ruled for most of the kinds. This year there is no doubt but the production will be light, particularly of apricots. This opinion I base on the fact that heavy Eastern shipments of green fruits have taken very large quantities that would have been cured, and as the canning and the home trade bid up for choice fruits, prices advanced to such figures as almost made it impossible to resist the temptation to market the green fruit and not dry. It is safe to say that there will not be 200,000 pounds of sun-dried and evaporated apricots this season against 650,000 last year, and as the California consumers look for this fruit, prices will, without doubt, rule high later on.

The quantity of peaches that will be dried, it is claimed by well-informed parties, will not be more than 750,000 pounds, against 1,900,000 pounds last year. The crop was short this year, while heavy shipments to the East, together with increased canning, made heavy inroads into the supply. The production of dried plums and prunes will be fully as large, if not larger, than last year; and as the quality of fruit is good, with reasonable care in preparing them for market, a fair profit ought to be realized. It is said that more nectarines will be cured, as the market for the green fruit is dull and heavy. Dried nectarines are as yet a nov-



elty and must require pushing to make a market. There will not be any increase in the quantity of dried figs; but the quality will, taken as a whole, show an improvement over last year's, as experience has demonstrated the fact that figs well cured and properly packed command good prices. It is most too early to speak with certainty regarding the production of dried apples; but from all that can be ascertained, there will not be more than last year. This opinion is grounded on the general reports that the apple crop of the State is not up to last year's, while a larger quantity has gone into consumption, thus lessening the supply for curing.

The raisin crop promises to be fully up to, if not in excess of, that of 1885, as last year's heavy pack, which was all marketed at the East at good prices, has demonstrated the fact that even twice as many raisins will be taken, and at prices that have ruled so far this year. The incoming crop of raisins will come in on a bare market, for all sent here has been cleaned up. In this connection it is well to state that the trade found gratifying improvement in the packing and grading throughout the districts, especially where the work was done by the growers themselves; and the incoming season, it is confidently claimed, will show renewed efforts to still greater improvements, which, if realized, will place California raisins where they rightly belong—ahead of the very best imported.

J. R. F.

San Francisco, August 5, 1886.

### New Seedling Blackberries.

EDITORS PRESS:—Judge J. H. Logan, of Santa Cruz, an amateur orchardist and gardener, is paying considerable attention to the propagation of new varieties of the blackberry, and especially seedlings from crossings of the wild with other varieties. He has now growing and in bearing quite a number of very promising seedlings from the Augbinbough, a chance California seedling of the wild berry of Alameda county, crossed with an evergreen berry from Texas, known as Crandall's Early. We had the satisfaction of sampling a few berries from some of these seedlings that happened to be ripe at the time of our visit, and found them large, well-shaped and of excellent flavor. The berries from each individual plant have a distinct flavor, and some of them very different from others, both in appearance and flavor. Most are black, while some few are red. One deserving very special mention ripens in May, is large and red, and has a flavor resembling the raspberry, and, to be judged from flavor, would seem to be a cross between the blackberry and raspberry.

These are interesting experiments and may result in the introduction to the world of some important new varieties. We would be glad to hear from Judge Logan with reference to these seedlings further on.

McD.

Santa Cruz Co.

## POULTRY YARD.

### Eggs and Hatching.

Prof. Long writes for the *Mark Lane Express* as follows: Since, as a very young amateur, I possessed my first hens, I have known persons who have insisted that they can select eggs which, if they hatch at all, will produce cockerel or pullet chickens as the case may be; but, in a long experience among poultry amateurs, I have never come across the individual able to successfully accomplish the feat, and yet to-day there is as much ignorance upon this one point as upon anything in connection with poultry breeding. As a general rule it is quite sufficient to put one question to those who claim to be able to do what is impossible, and this may be put with effect by any person who knows but little about poultry or the conduct of a poultry yard. This question is, "Is it possible to distinguish the cockerels from the pullets in a batch of, say, Brahma or Cochins chickens which are under a week old?" As this cannot be done, it is scarcely possible that the new-laid egg will afford any clue to what is impossible of discovery in the live bird.

The generality of people do not understand the construction of an egg, to say nothing of the mystery of its vitality or that fertilizing agent which distinguishes a good egg from a bad one after it has been set upon by a hen. It is imagined by some that hens will not lay unless a male bird is in their company. This, of course, is a fallacy. Others object to eggs laid by hens in the company of a male bird because they contain a small bunch of mucilaginous substance, which they believe to be the fertilizing agent, being ignorant of the fact that this is present in all eggs, of which it forms part. Its office is to properly suspend one portion within the other. The agent referred to has never yet been discovered in the egg, and although the germ is known to exist within the center of the yolk, science has failed to show when it is fertile and when it is not. This fact bears most distinctly against the common assertion of country people that they can distinguish the egg which will produce a chicken from that which will not. If scientific examination of the very germ fails to do this, it is very difficult to understand how

any individual, no matter how clever he may be, can perform so extraordinary a feat. All the doubt arising upon a point of this kind should be at an end, for both physiology and common sense absolutely disprove any such possibility. The egg is fertilized while the yolk still hangs upon the ovary. The ovary is, to speak plainly, a bunch of yolks from the size of a small pea upward. These grow until they are normal in size and ripe for emission into the world. When ripe they fall off the bunch into the oviduct, when they are gradually enveloped in a glary albuminous fluid, which we know as the white of the egg when it is cooked. As it rolls down the duct covered by layer after layer of the white, it is finally enveloped in the shell, and the work is completed by laying. The fertility of the egg is decided before the yolk leaves the ovary, hence it is impossible to understand how the subsequent shell-covering can in any degree whatever be connected either with the fertility or the sex.

Sometimes it happens when something abnormal occurs with the hen that a yolk is ripe for laying before a sufficient quantity of the albumen has been formed—before, indeed, there is a single layer in the oviduct. In this case, the yolk, in its passage through, is either enveloped with a very small quantity or is not covered at all until it is inclosed by the shell, which is appropriate in size to the diminutive dimensions of the egg. Again, sometimes nature supplies a large quantity of albumen, i. e., the white of the egg, before the yolk is ripe. In this case the albumen is thrown off and similarly enveloped by a small shell. There are few persons who keep hens who have not at some time in their experience found an egg no larger than that of a bantam, or even of a pigeon, in one of the nests. Such eggs invariably contain the yolk or the white instead of the ordinary quantity of the two. This fact is one more physiological proof that the shell adapts itself to the requirements of the yolk and the white, and that it can, therefore, have no possible part in indicating either the sex of the chicken or the fertility of the egg. As a matter of fact, it will be found that long or pointed eggs are commonly laid either by pullets, whose eggs are always of one shape, or by old fat hens, whose condition is the cause of such a formation. Change the condition of the latter by reducing the fat—and this may be done by an alteration in the diet—and the eggs will quickly resume their rounded shape. Of course, no one who at all understands the subject will be disposed to argue that a pullet which always lays long or pointed eggs will produce nothing but cockerel or pullet chickens, as the case may be, and yet there are scores of farmers who declare that a pointed egg will produce a cockerel.

I am inclined to believe that the question of sex in poultry is one in common with that understood by breeders of the larger kinds of farm stock. It is with some a disputed point as to whether cockerels are more largely produced by the mating of young, vigorous cockerels with old hens or vigorous old cocks with pullets. I am personally of the opinion that a very large proportion of male birds come from the mating of strong pullets with old cocks, but this will not be borne out in ordinary practice, because pullets are generally late hatched, and either diminutive or lacking in vigor, while old cocks are of two kinds. If they are exhibition birds, they are seldom of value for breeding after their second year, and if they are farmyard birds, they are commonly as vigorous as young cockerels; hence the conditions of success for a trial of this kind are in a general way usually wanting.

There is another point respecting the shape of the egg which should not be forgotten, more especially at the present moment, when so many persons are using their eggs for hatching purposes. Where a number of hens are kept, some of the eggs will frequently be found with a coruscation or raised, uneven bend of the shell running round the center. I have certainly hatched chickens from eggs of this description with success, but the defect or blemish is a very undesirable one, a large proportion of such eggs being infertile. Hens which lay them are invariably out of condition and suffering from congestion or contraction of the oviduct. This has an effect upon the shape of the duct, and consequently upon that of the shell formed within it. As hens which are not healthy—and they are simply animals in this respect—seldom breed, it is not a very surprising fact that chickens in so many instances are not produced from their eggs.

There is one more feature worthy of remark. I refer to the size and position of the air space at the end of an egg, from which it is commonly supposed by some that the fertility of the egg can be ascertained. This is another mistaken idea, and one which should not for a moment be entertained. The air-space in question, however, is most important to the breeder who conducts his work rather upon modern than upon the old lines, for it enables him to tell very rapidly and very decisively at the end of a certain number of days whether the eggs he is using for hatching are fertile or not. The majority of poultry-keepers are most unwilling to touch the eggs upon which a hen is sitting until the end of the three weeks of incubation, although it often happens, especially in the early part of the breeding season, that all, or, at any rate, invariably a large proportion, are "clear," i. e., do not contain a chicken. Now, at the end of six days the most perfect tyro can, by examining an egg which he

shades by his hand in holding it before a candle or lamp, detect whether it is fertile or not. A dark line will appear at the base of the air space. Below this the egg will be dull and opaque, while, above it, it will be bright and light. Day by day the dullness increases until it becomes quite black, and the line at the base of the space referred to sharper and clearer.

## PUBLIC AFFAIRS.

### The "Health Amendment."

Question as to how and when the proposed amendment to the State Constitution passed by the last Legislature, and commonly known as the "Health Amendment," would come before the people for their suffrages, is now settled by the Governor's proclamation which we publish below. This is the amendment which proposes to tax railways 2½ per cent upon their gross earnings, and which has a clause providing that fruit trees and vines shall be assessed as part of the realty:

#### Proclamation.

STATE OF CALIFORNIA, EXECUTIVE DEPT.,  
SACRAMENTO, July 31, 1886.

Whereas, the Legislature of the State of California, at its twenty-sixth session, beginning on the fifth day of January, A. D. eighteen hundred and eighty-five, two-thirds of all the members elected to each of the two houses of said Legislature voting in favor thereof, proposed the following amendment to Sections 1, 8, 10 and 11 of Article 13, of the Constitution of the State of California:

#### Amendment Number One.

Section 1. All property in the State, except railroads, not exempt under the laws of the United States, shall be taxed in proportion to its value, to be ascertained as provided by law. The word property, as used in this article and section, is hereby declared to include moneys, credits, bonds, stocks, dues, franchises and all other matters and things, real, personal and mixed, capable of private ownership; provided, that growing crops, property used exclusively for public schools, and such as may belong to the United States, this State, or any county or municipal corporation within this State, shall be exempt from taxation. Growing vines and fruit trees shall be deemed to be and shall be assessed and taxed as a part of realty; and provided further, that railroads shall be taxed as provided in Sec. 10 of this article; and provided further, that the Legislature may provide for the exemption from taxation of ships and vessels owned and registered or enrolled in this State, or may tax such ships and vessels on their gross and net earnings, in lieu of an ad valorem tax. The Legislature may also provide, except in case of credit secured by mortgage or trust deed, for a deduction from credits of debts due to bona fide residents of this State. Double taxation in any form is prohibited.

Sec. 8. The Legislature shall, by law, require each taxpayer in this State to make and deliver to the county assessor, annually, a statement under oath, setting forth specifically all property, real and personal, except railroad property, as defined in Sec. 10 of this article, owned by such taxpayer, or in his possession or under his control, at 12 o'clock meridian on the first Monday in March.

Sec. 10. All property, except railroad property, as hereinafter provided, shall be assessed in the county, city, city and county, town, township, or district in which it is situated, in the manner provided by law. Every corporation and person owning or operating a railroad, or any portion thereof, in this State, shall on or before the first day of July of each year pay to the State Treasurer an annual tax of two and a half per cent upon the gross earnings, earned within this State, of such railroad, for the year ending upon the 31st day of December next preceding, which tax shall be in lieu of all other State and county taxes upon the franchise, business, right of way, roadway, roadbed, rails, rolling stock, fences, stations and their appurtenances, and upon ferryboats, when operated as a part of such railroad, and upon the shares of the capital stock and upon the mortgages, deeds of trust, contracts or other obligation by which a debt is secured upon such property. All other property belonging to such corporation or person shall be assessed and taxed as other property is assessed and taxed. The gross annual earnings earned during the year ending on the 31st day of December last preceding, of all railroads, shall be, annually, before the first day of May thereafter, ascertained and declared by the State Board of Equalization, under such rules and regulations as may be prescribed by said board; provided, however, that the Legislature may at any time pass laws prescribing said rules and regulations. In all cases where railroads are situated partly within this State and partly without this State, the gross annual earnings thereof shall be ascertained and determined by taking,

First—The gross earnings which, during the year last preceding, have been earned wholly within this State.

Second—The gross earnings which, during the same year, have been earned partly within this State and partly without this State, which shall be ascertained by apportioning such earnings between this State and other States or

Territories, in the proportion which the number of miles of such railroad situated in this State and used in making such earnings bears to the whole number of miles thereof, by the use of which such earnings have been made. The proportion of interstate earnings thus ascertained shall be added to the earnings made wholly within the State, and the total thus obtained shall be taken and deemed to be the gross earnings of such railroads for all purposes of assessment and taxation. For every purpose of this section, except for the purpose of ascertaining the proportion of interstate earnings to be added to the earnings made wholly within this State, all railroads operated as one system shall be treated as one road. One-third of the tax paid by corporations or persons owning or operating railroads under the provisions of this section shall become part of the General Fund of this State, and two-thirds thereof shall be paid to the county or counties in which said railroad is situated in proportion to the length of the railroad operated in the several counties. For the purposes of this section a consolidated city and county shall be treated as a county. Any corporation, association, partnership, person or persons, unlawfully failing or refusing to pay the tax herein provided, when the same shall become due or within 30 days thereafter, shall be deemed to have waived their right to operate their railroads within this State. The taxes herein provided for, together with such penalties as the Legislature may impose for the non-payment thereof, shall be a lien upon the property hereinbefore in this section designated, and may be enforced in such manner as the Legislature may by law prescribe. All railroads, so far as the same are situated within the boundaries of any common-school district, shall be subject to an ad valorem tax for school purposes voted by the electors of the district at a special election held for that purpose, the same as other property situated within the district, anything in this article to the contrary notwithstanding. And all railroads, so far as they are situated within the boundaries of any incorporated city or town, shall be subject to an ad valorem tax for municipal purposes, the same as other property situated therein, anything in this article to the contrary notwithstanding.

Sec. 11. Income taxes may be assessed and collected from persons, corporations, joint stock associations or companies, resident or doing business in this State, or any one or more of them, in such cases and amounts and in such manner as shall be prescribed by law. No court within the State shall have power, by injunction or otherwise, to interfere with, hinder or delay the collection of any tax laid under the form of law, except upon a showing that the same property has been taxed more than once for the same purpose in the same year, and then only upon payment to the tax collector or into court of a sum equal to the amount of one of the taxes so laid upon the property in question; provided that in all cases actions may be maintained against the tax collector to recover illegal taxes paid under protest. All such actions must be commenced within 30 days after such illegal taxes have been paid. It shall be the duty of the courts in which such actions may be brought to try them, upon the request of either party, in advance of all other civil actions, and such taxes so paid under protest shall be retained by the tax collector, or such other officer as the Legislature may designate, until such actions shall have been finally decided.

#### Schedule.

Nothing in this amendment shall affect any assessment or tax heretofore made or levied, or interest thereon, or any penalty heretofore incurred, or any action or right of action on account of any such assessment, tax, interest or penalty; and all laws in force at the adoption of this amendment, not inconsistent therewith, shall remain in full force and effect until altered or repealed by the Legislature. The first levy and payment of taxes against railroad property hereunder shall be made in the year eighteen hundred and eighty-six, and shall be upon the gross earnings, to be ascertained as herein provided, for the entire year of eighteen hundred and eighty-five. Taxation for the fiscal year ending June 30, 1885, is not affected by this amendment.

Now, therefore, pursuant to the provisions of the Constitution and an act of the Legislature entitled "An Act to Provide for the Submission of Proposed Amendments to the Constitution of the State of California to the Qualified Electors for their Approval, approved March 7, A. D. 1883," the said amendment is submitted to be voted upon, by ballot, by the qualified electors of the State, on

Tuesday, November 2, 1886.

The amendment is designated "Amendment Number One," and the BALLOTS used at such election must contain the words, "FOR THE AMENDMENT Number One," and the words "AGAINST THE AMENDMENT Number One," written or printed thereon.

And I do hereby offer a reward of one hundred dollars for the arrest and conviction of any and every person violating any of the provisions of Title IV, Part 1 of the Penal Code; such rewards to be paid until the total amount expended hereafter for the purpose reaches the sum of ten thousand dollars.

Witness my hand and the Great Seal of the State, the day and year first written.

[SEAL.]

GEORGE STONEMAN,  
Governor.

Attest: T. L. THOMPSON, Secretary of State,



## PATRONS OF HUSBANDRY.

Correspondence on Grange principles and work and reports of transactions of subordinate Granges are respectfully solicited for this department.

## National Grange Work.

EDITORS PRESS:—While on a short visit to our capital city, which, no doubt, deserves its reputation of being "the most beautiful city in the Union, if not in the world," let me send my old friend, the RURAL—of many pleasant memories—a few words of hearty greeting.

The daily press keeps the people posted on what Congress has been doing—and not doing; it has told you perhaps enough of the truly grand Washington monument, its beautiful symmetry, its high proportions. Again and again have the praises been spoken of the vast and instructive collections of the Smithsonian and the National museum, the Congressional library and other depositories of valuable information—all of which those inclined to books and science fully enjoy, when so fortunate as to spend a few weeks in Washington.

So this brief letter will be limited to a subject to which our daily journals now allude rarely and perhaps never, except incidentally during the sessions of the National Grange, which still come around as regularly each year as they have done for 19 years past, since the organization of this best of many agricultural associations, Dec. 4, 1867.

Many of your readers will like to hear something about the headquarters of the National Grange, which have been relocated here since the short stay of two or three years at Louisville, Ky. Some pleasant hours have been spent, by your old correspondent, at our Grange headquarters, chatting with the present most efficient secretary, Bro. John Trimble, who is one of the seven original members classed officially as the "Founders of the Grange."

The office and storage-rooms, for considerable room is still required for the National Grange headquarters, are well located in a handsome building on F street, midway between the high patent office and pension building.

It is a pleasure to learn authoritatively, from Secretary Trimble, that all but three of the original State Granges are still actively and efficiently at work in the interests of this truly great organization, and that the Order generally throughout the Union is in a more flourishing condition than it has been at any time during the past five years.

Among the many subordinate or local Granges in each State, 90 new Granges were organized and 150 dormant ones were revived during the last fiscal year, showing a very healthy increase of 240 subordinate Granges over the preceding year.

The sessions of the National Grange and its annual attendance is a fair test of the healthy condition of the Order throughout the United States. At the session in Boston last November—which, by the way, gave a new impulse to the very useful work of the Order—30 States were represented by their regular delegates, the Master of each State Grange and his wife—when he is lucky enough to have one. The Sixth degree, or next to the highest in the Order, was there conferred on 1566 members, who were in good standing in the preceding degrees.

The finances of the National Grange, well known to be the back-bone of all such institutions, are in a very sound condition, all the per diem and mileage of the accredited delegates for each session being paid out of its funds. Some idea can be formed of the necessary expenses of a session like that at Boston from the official facts that the total number of miles traveled by the members, to attend that session, so far from the center of our country, was 114,120, and the total number of days consumed by the various members in going and returning was 294, while the session continued nine days.

Bro. Trimble informs me that he will go early this month with the Executive Committee to Philadelphia, to prepare for the 20th session of the National Grange, which convenes there November 10th. The class that received the Sixth degree at Boston last year was the largest ever known (1566), but the prospect now is that at least 2000 members will receive that degree at the Philadelphia session.

There could be no more efficient secretary than Bro. Trimble, and the membership generally are to be congratulated on the general efficiency of the work of the National Grange and of the Order throughout all the States where it still exists. Because our daily and weekly papers do not make so much mention of the Grange work as in its earlier years, and because its live membership is not so large as it was formerly, many wrongly infer that the Grange cause has died out. But this is a great mistake. It lives not only in many subordinate Granges and numerous active members, but will ever live in the hearts of many members now unaffiliated. Many objects the Grange had in view have been accomplished. Our farming classes feel less oppressed than they did 15 years ago. But whenever certain evils, against which they found it necessary to combine, became rampant again, it is safe to predict that the Grange work will be revived in each State to gain that redress and that "easing-up" of a farmer's burdens, for which it has been clearly proved to be the most effective remedy of all

the agricultural associations ever invented; that is, where it has been kept true to its legitimate purposes and sphere.

That the Grange may continue to have a healthy life and growth, and that its motto, *Esto Perpetua*, may be fully realized, is the never-changing wish of one of its earliest workers among you. J. W. A. WRIGHT.

Washington City, Aug. 2d.

## A Word to Politicians.

You may make arrangements and compromises; you may adopt "plans" and schemes; you may pull the wires and "harmonize the contending factions" until you die of old age; but until you can get the people, the rank and file of your parties, the whole people, to take an active interest in their own political affairs, and to turn out and do their own work and rule their own organizations, you will always have bosses, corruption and discontent. But you don't want the people to do that! We know you don't; and that is just where the trouble comes in. You wish the people to take an interest in the elections and in the clubs and conventions and things. To take an interest, that is! Interest enough, but not too much interest, as it were. You wish the masses to be enthusiastic about forming clubs, contributing a little money, possibly, now and then, parading, cheering, and voting on election day; but you don't wish them to keep on being enthusiastic, to the extent, for instance, of inquiring into what is done with the taxes, and who and what manner of men and women live upon the spoils of the victories won by the enthusiasm of the aforesaid masses! Oh, no! There the duties of the good, quiet, law-and-order-loving citizen ought, as you think, to get the better of his partisan enthusiasm, and he ought to go home to his family, and to his work, content that he has helped to win a great victory for the party, and is utterly and nobly free from any paltry radical curiosity to pry into what is done with the loaves and fishes, the appointed offices and patronage, by the leaders and managers! Ah, yes! But, as we said before, there is where the trouble comes in. The masses are losing that old-time generosity and truthfulness which used to induce them to go home and go to work cheerfully, only too thankful to think that they had faithfully served the party and the country and the leaders by voting as they were told to do. Now they are beginning to look back and to wonder and to question. The day is coming when you will have to pacify them, gentlemen, and with something more than sentiment and phrases and appeals to their partisan devotion. If you had good sense and if you were honest you might yet save yourselves; but you will never become wise enough to realize that nothing short of equal and exact justice will, in the end, pacify the people. They may, they must, forgive the past; but they will have justice for the time to come.—*Hayes Valley Advertiser*.

## A Grange Memorial.

Senator Cox presented the following memorial, which was read and ordered referred to the Senate Committee on Irrigation:

To the Honorable, the Senate and Assembly of the State of California, convened in Extra Session.—Your memorialists, citizens of California, assembled in Pomona Grange council in the city of Sacramento, this 31st day of July, 1886, being profoundly impressed with the gravity of the crisis, deem it a sacred duty to express to you the deep concern and profound alarm with which we regard the object, as defined in the proclamation of his Excellency, the Governor, calling you in extra session. That object, as defined in the proclamation of his Excellency, is, first, to nullify a decision of our highest judicial tribunal, and by retroactive constitutional amendments extinguish, by the repeal of a law, property rights acquired under and by virtue of that law while in force. We submit that this would emasculate the judicial branch of government, take property from under the protection of law and subject it to the uncertain hazard of the ballot. The second proposition of this extraordinary call is supplementary to the first, viz.: That the court be reconstructed because its decision is not satisfactory to one of the litigants.

Your memorialists, mindful of their duty to themselves and to posterity, do earnestly protest against the adoption of a policy that would assassinate the independence of our judges and strike a fatal blow at the stability and integrity of property—a policy essentially lawless, revolutionary and communistic; a policy that seems to be an open declaration of war against the basis and fundamental principles upon which our Government is founded.

[Signed] C. A. HULL, W. M.,  
Sacramento County Pomona Grange.  
J. E. BEACH, Secretary.

PASO ROBLES GRANGE elected and installed the following officers July 31: D. F. Stockdale, M.; G. Kingery, O.; H. W. Rhyne, L.; John Botts, S.; M. H. Brooks, A. S.; P. T. Waggoner, C.; Levi Exline, T.; Kittie Middleton, Sec.; Byron L. Forteny, G. K.; Lena Waggoner, Pomona; Ella Waggoner, Flora; Effie Forteny, Ceres; Sarah Rhyne, L. A. S.

DEATH OF SISTER R. T. POWELL.—We have just received a letter from Bro. S. C. Carr, W. M. of the Wisconsin State Grange, concerning the sad intelligence of the death of his sister, Mrs. R. T. Powell. Sister Powell died in Chicago, July 28th, after a brief illness of a week. She has been a prominent member of the Grange ever since its organization. She spent the winter of 1884-5 in California, visiting her three brothers, Prof. E. S. Carr, of Pasadena, E. M. Carr, of Adelaida, and Nelson Carr, of Santa Rosa. During her stay in California, Sister Powell made many friends who will hear of her death with deep regret. Our fullest sympathy is extended to the bereaved relatives.

PLACERVILLE GRANGE ON IRRIGATION.—At a meeting of Placerville Grange the following resolution was adopted: *Resolved*, That the waters of the State belong to the State for the use of the people, and that we demand a general system of irrigation by the State for their distribution for the use of the people.

## Stockton Notes.

[Written for the RURAL PRESS by Mrs. W. D. A.]

Everybody that could, went to the National Encampment at San Francisco—2500 went by boat and train. The *Mary Garratt* and *T. O. Walker* made the trip in daytime, gaily decked. The *Walker* carried 1500 persons for two bits apiece; the *Mary Garratt*—tickets \$1—took the soldiers and "Woman's Relief Corps," which served home lunch on board. Conspicuous was the beautiful sign of Rawlins Post, lettered, "Headquarters of Rawlins Post, No. 23, G. A. R., Stockton," with the army badge and a picture of a sailor and soldier, representing the army and navy, with national colors and union-jack. Batchelder photographed the gay scene.

Two severe fires—one July 30th, the other August 5th—showed the skill and courage of Stockton's firemen to confine the flames and save property. Loss by the first fire, \$35,000; insurance, \$12,000. The last burned a large lumber yard (insured), a planing mill (\$4000 insurance), and a row of dwellings. The first fire started in a furniture factory; the second in the planing mill, and destroyed \$170,000 worth of property. Fires have destroyed fields of grain on Roberts and Union island. Eight hundred and eighty acres burned from a burning barn, where tramps had been. This irresponsible class are unlikely to diminish, either from home or foreign supply. The *New York Tribune* says 2500 emigrants landed in New York, July 25th, many of them paupers from Greece, Turkey and Arabia, with trinkets to peddle.

So we are to rise with the dawn to make real against bogus butter, taxed only two cents a pound! Our hearts are surcharged with wrath against the law-makers and Cleveland, who has lost another chance to endeavor himself to farmers and their wives. He does not believe in widows' pensions or helping dairymen, whose outlay to make real butter—the most nutritious of all articles of diet except cheese—is more than three times the cost of a beef-butter cellar. (It would, of course, have been better to have had a tax of five cents per pound, but two cents is a great deal better than nothing. The fact from which most is expected is that now bogus butter must be stamped, and it will be harder to sell it for the genuine article. It is hoped and believed that people will not care to buy and eat it when they know what it is.—*Eds. Press*.)

Interest is unabated in irrigation plans, but the extra session is very unpopular. Many days the thermometer has been at 90°, but breezes blow every day.

Two-thirds of the crop is out. A field of winter-sown wheat yielded 40 bushels to the acre. A Houser cut and sacked 750 bushels one day, in standing grain, and 30 acres a day for a week or more.

DEATH OF COL. HOLLISTER.—One of the prominent figures in the advancement of Southern California has passed away. Col. W. W. Hollister, of Santa Barbara, died August 8th and was buried on August 10th. He was one of the largest landholders in Santa Barbara county, and also the owner of much valuable city property, including the Arlington and Elwood hotels. He owned Glen Annie, one of the finest country places in Southern California, and has for years dispensed there hospitality to all comers. He was a pioneer in the introduction of many useful fruits and vines, and expended large sums in experiments regarding their culture.

RAILROAD MATTERS.—It looks very much as though the managers of the several overland railways were to have another serious falling out. Their association has not worked well because competition is so sharp that rules could not prevent cutting under, and so the arrangement fell to pieces. It is now possible that rate-cutting may prevail again, and the voice of the "out-rate tourist" may again be heard in the land. There seems, at any rate, to be a promise of music in the air, and those intending to visit the East should have an eye on the main chance.

## AGRICULTURAL NOTES.

## CALIFORNIA.

## Alameda.

A HOME CANNERY.—*Reporter*, Aug. 7: Mr. H. C. Gregory had put up over 3000 cans of apricots at his house during the season, and intended to continue the good work. The apparatus used, we should judge, would not cost over \$100. It is located under a wide-spreading tree. Its capacity is on an average 1000 cans per day, though a long day's work will run it to 1500 cans. The cost for labor in putting up 1000 cans is \$6, or two-thirds of a cent per can.

## Colusa.

THE WAGER PEACH.—*Sun*: We were presented, by J. R. Totman, with a number of Wager peaches from some trees he has just come into bearing this year. This is a freestone peach, but harder and firmer, while still ripe, than any other freestone peach, and hence it is invaluable for shipping and canning. In 1883, Mr. Totman wrote to his brother in New York to send him some of the pits of the Wager peach, but he could not get them, and sent him some twigs, which were used as grafts. This is also the only known peach that will come true all the time from the pit, and the pits in New York in 1883 were worth \$20 a bushel. Peter Wager brought them to Bloomfield, New York, from Ohio 20 years ago. A nurseryman at San Jose has them advertised, and sets them down as ripening August 25th, but they ripen the first of August here. Every time we take a step in fruit around Colusa the superiority of the soil and climate is demonstrated.

## Contra Costa.

PEAR GROWING.—*Concord Sun*: There is no county in California where the pear flourishes to better advantage than in Contra Costa. Quite an acreage last year was set out in the best and earliest varieties. Among the fruit shipped East is to be found a fair proportion from this county. And it will not be many years before those of our grain-growers who fail to succeed in making advantageous crops will diversify their farming and raise a few acres in fruit.

## Humboldt.

ROHNERTVILLE NOTES.—*Editors Press*:—The crops in this county are rather light, not being over one-half the usual average—especially oats. Barley is a shade better. Large quantities of oats have been cut for hay on account of it being such fine straw, and would produce but little grain. We have only begun to harvest barley and oats. It is mostly done by self-binders. Our pea crop will only be a medium yield. Potatoes are scarce at present, at a cent a pound for home use. Fruit is abundant, especially apples. There is considerable improvement in this part of Eel river valley. The Pacific Lumber Company are building a large sawmill up Eel river, near Eagle Prairie, at the present terminus of their railroad; but I am told that they will extend their railroad up the river, on the north side, into the redwood forest, as timber is needed. It is said the mill will cut 80,000 to 100,000 feet per day when finished. They are working a large lot of men, pay good wages, and drive business in a business way. It is rumored that Mr. Heald, of Sonoma county, will be on Eel river in a few days to look for a mill-site near the banks of the river to build a sawmill on, and perhaps he will build some railroad. He has a large tract of redwood in this valley, about two miles below Eagle Prairie, on the south side of Eel river. Mr. Bowen is also putting up a sawmill near Eagle Prairie, on the south side of Eel river; so you can see that Eagle Prairie is having a boom in the way of sawmill building. The weather is very fine. Our hottest day was 87°, according to my thermometer. The thunderstorm did not reach this valley, but the thunder was in the mountains east of us. Up Eel river some rain was reported in the mountains.—J. H., *Rohnerville*.

## Los Angeles.

POMONA.—*Times-Courier*, August 7: Mr. C. L. Street left at this office, yesterday, some interesting samples of natural growth (without irrigation), consisting of a bunch of alfalfa and some peaches, we think, of the Crawford variety. The alfalfa stands about 35 inches in height, and is of the fourth crop. The peaches, which are large, luscious specimens, are from trees four years old from the bud. Growing alfalfa without irrigation, so successfully as is shown here, is something not laid down in the books.

ALFALFA AS GREEN MANURE.—*Anaheim Gazette*: For a number of years Mr. Bittner has had a couple of acres fronting on Center street in alfalfa. He plowed the alfalfa under this season and planted vine-cuttings, and the growth has been phenomenal. The vines are fully as large as the average two-year-old vines, and there are very few missing. The claim has heretofore been made that alfalfa is a rich fertilizer, and this instance seems to prove it.

HERDIO TREATMENT FOR SCALE.—*Telegram*, Aug. 10: Los Angeles County Fruit-pest Commissioners are finding all the lots of pears arriving here from up the country orchards badly infected with San Jose scale. It was determined to-day to quarantine all lots hereafter arriving. The commissioners say they will insist on the destruction of all infected fruit, and



further state that all arriving are more or less affected. This is a hardship to the population of this county, as the pear and apple crop is very light here this year. The citizens, however, prefer to do without fruit than run the risk of having their orchards infected with San Jose scale.

**THE OSTRICHES.**—It is almost a settled fact that the ostriches will soon be removed to North Anaheim. The spot chosen is a tract of 25 acres adjoining on the north what is known as the Fithian tract. These 25 acres are under the ditch and can be irrigated, and the hill land above the ditch will be used for corrals for the birds.

LAKE.

**EDITORS PRESS:**—Everything looks fine up here. The trees are loaded with fruit and the vines seem to be willing to give a fair crop. I saw a blackberry patch a few days ago still full, although having been picked over and over again. We are living up in the hills, and succeeded, without irrigation, in having quite a little vegetable garden this year, which has indeed been a good help to us. The peas and beans bore abundantly. The railroad is the principal thought of everybody, and we have good hopes for its coming through this time.—M. R., Lakeport.

**IMPROVEMENTS.**—Lower Lake Press, August 7: The improvements now being carried out within six miles of Lower Lake, in the vicinity of the old Calistoga road, are considerable and significant. We refer to the operations of Mr. I. Steinhart on his property of 1500 acres, which includes the magnificent summer pasture known as Dry Lake. It is no mere temporary output that is being lavished on this ranch, but a series of permanent, deliberate and radical improvements, such as evince a happy confidence in the future of Lake county. The erection of 11 miles of wire and board fencing, the building of a handsome barn, a dairy that is unique in its internal arrangements and fittings and other convenient farm buildings, experimental vineyards and orchards, extensive breaking up of new land, with prospective clearing "in extenso."

SACRAMENTO.

**LATE CRAWFORDS.**—Record-Union, August 10: One of the finest orchards of the late Crawford variety of peaches to be seen near Sacramento is that of M. Pike, at Saulsbury Station, on the American river. He has this year about 2000 boxes of this fruit, and many of the specimens measure nearly a foot in circumference.

**HOP-GROWERS' MEETING.**—Pursuant to call, the hop-growers held a meeting at Grangers' hall yesterday, to discuss the price to be paid for picking this season, and other matters of general interest. The meeting was attended by growers from the vicinity of Sacramento, the American river, the Cosumnes, Galt, Wheatland and Nicolaus, representing the counties of Sacramento, Yolo, Sutter and Yuba. E. J. Croly was elected chairman, and T. B. Lovdal, secretary. The meeting decided upon 70 cents per 100 pounds for picking, and that the contractor packing hops furnish his own foreman at his own cost and expense. A committee was appointed to draft a constitution and by-laws, and formulate a plan for a permanent organization of the hop-growers of this section, the committee consisting of Dr. Durst, of Yuba; Daniel Flint, Sacramento; T. B. Lovdal, Yolo; and E. J. Croly, American river. After a general discussion of the above and other matters of interest, the meeting adjourned, subject to the call of the committee mentioned.

SAN BERNARDINO.

**PREFERENCE FOR THE PRUNE.**—The Los Angeles Herald says: The extent to which deciduous fruit trees have been set out in the Southern counties during the past year may be appreciated from the fact that a single nursery in the young colony of Ontario, San Bernardino county, has sold this season over 55,000 prune, peach, pear, apple, apricot and cherry trees, prunes taking the lead by a very large majority.

SAN JOAQUIN.

**HARVESTER TRIAL.**—The contest between the different trials of combined harvesters that to have taken place in the vicinity of Stockton on Thursday and Friday, and which a committee from the State Agricultural Society was appointed to attend, has been postponed until Tuesday, the 17th, in order that it may not interfere with the reception to members of the G. A. R. on "Sacramento day."

SAN LUIS OBISPO.

**DARNEL NOT POISONOUS.**—Tribune: A few months since Prof. J. G. Lemmon contributed to the Tribune an article on a species of grass growing quite plentifully in this region called "poison darnel," or scientifically, "loium temulentum." Some specimens of this grass, with the article, Mrs. R. W. Summers, herself a learned botanist, sent to Prof. Geo. Vasey, botanist to the Department of Agriculture, at Washington, for his examination and opinion, to which the following reply is received: "With regard to your inquiry about loium temulentum, I would state that although it has the reputation of being poisonous, it is considered very doubtful if it really has that property. I think its reputation comes down to us from olden times, and probably was caused by a large mixture of its seeds with wheat used in making flour, and that the noxious qualities were from the ergotized

condition of the grains. At present we have no account of its hurtful effects, at least not as a pasture grass."

Santa Barbara.

**ANGORA CHEESE.**—Santa Maria Times: Mr. Newsom made \$150 worth of Swiss cheese from 20 goats during the season just closed. He has about 450 Angora goats, all told, which he raises mostly for the meat and pelts. He makes a very superior quality of Swiss and Mexican cheese, the former the product of his goats and the latter the product of his cows.

Sutter.

**THE CANNERY.**—Appeal: At last the Sutter Canning Co. have concluded that they will not start their machinery at all this year. Early in the season they began to make cans, and before they quit had on hand 150,000. They also had box material cut up for shipping the canned goods. When other canners began to bid for the larger crops and the great winds did their damage, it became a matter of doubt as to whether any work would be done at all, and a buyer for the material was looked for. General Bidwell, of Chico, has spoken for the most of it, and it is now being shipped to him.

Tulare.

**FINE STOCK.**—Tulare Register: Mr. H. C. Moore, 10 miles east of Visalia, is the owner of the finest herd of cattle in this section. The

given in, it would make in round numbers 8000 hives, which, averaging 150 pounds each, would give to the county 1,200,000 pounds, or 600 tons of honey. The quality of honey in this county was never better than the present crop. Near the coast the quality is not so good, and the amount only half as much as that produced 20 miles or more back from the ocean, where it was warmer and less foggy.

NEVADA.

**THE WOOL-GROWERS' MEETING.**—The Silver State has the following: Last evening a large number of wool-growers from this county and Elko met in the courthouse pursuant to call. E. C. Hardy, of Toano, called the meeting to order and stated its objects. G. F. Turritin was elected temporary chairman and Robert O'Neal, of Paradise, temporary secretary. On motion a committee on permanent organization was appointed, consisting of Messrs. Hardy, O'Neal, Nelson, Coleman and Wilcox. Thomas Nelson, D. M. Coleman, A. D. Wilcox, and others addressed the meeting on the subject of organizing. There was some discussion as to the status of the Wool-growers' Association organized two years ago, and the opinion prevailed that it had ceased to exist or at any rate failed to accomplish the purpose for which it was created, as no meeting had been held for some time. A motion that the organization be known as "The Nevada, Eastern Oregon and

## A Great Day in San Jose.

Never before were so many people gathered together in the Garden City of California as on Tuesday last. The Grand Army and its friends fairly crowded the fair city. The enthusiasm of both visitors and citizens ran high. Long processions of carriages carried gratuitously load after load of visitors from the railroad stations through the streets of the beautiful city.

Comrade C. W. Breyfogle, mayor, welcomed the immense concourse in front of the courthouse. Responses and speeches were made by Commander-in-Chief Fairchild, Past-Commander Burdett, Gov. Robie (Master of State Grange), of Maine, and Gen. Logan. After this the comrades and the Woman's Relief Corps and a multitude of citizens and friends partook of a fine lunch, prepared by a large committee of San Jose ladies. It proved rather a feast than a lunch. The tables were set, seemingly by the acre, in St. James' square, near the center of the city. They were well loaded and fully surrounded. It is estimated that 6000 visitors entered San Jose by rail, besides the great numbers coming in conveyances from all parts of the surrounding country.

A campfire was held in the evening, largely attended by the Grand Army and Woman's Relief Corps. Speeches by Comrade Paul Van Der Voort and Mrs. Kate B. Sherwood were much applauded.

## The Horticultural Exhibition.

The new horticultural hall just completed by a joint stock company of Grangers and horticulturists was completely filled with fine specimens of fruits, flowers, vegetables and cereals, the freshest and handsomest that it has yet been our lot to view. Gathered together suddenly and so early in the season, the display was fairly surprising.

Although San Jose fairs have merited high praise for their past decorations, the present is far more noticeable in its special decorative features than any former efforts.

Between 2000 and 3000 people were present on Tuesday night, when the literary and musical entertainment gave much satisfaction. Further mention of the fair will be made hereafter.

The whole city seemed to turn out to entertain the visiting strangers generously and joyfully, and the praises bestowed upon the comrades and people of San Jose were the highest that words could express and without stint. The day will long be remembered by both guests and entertainers. We shall say something further concerning "San Jose Day" in a future article.

## The Drummer Boy of the Rappahannock.

In the RURAL of July 31st we gave a sketch of the history of the Drummer Boy of the Rappahannock—Major R. H. Hendershot, of whom a crayon drawing appears on this page. He attended the Encampment in this city, as promised, and gave several exhibitions of his skill. At San Jose, during the visit of the Grand Army on Tuesday of this week, Major Hendershot appeared, and his drumming was one of the features of the entertainment given by the Daughters of the Veterans, in the Horticultural pavilion, on Tuesday evening. He was presented by A. C. Bane, who recited some of the points of his record as given in the RURAL, and then introduced him to the assemblage. His performance upon the drum was thrilling. Major Hendershot is attended by his son, who is now of the age at which his father gained his sobriquet, "The Drummer Boy of the Rappahannock."

**AGRICULTURE AT THE MECHANICS' FAIR.**—The Mechanics' Fair will open in the grand pavilion in this city on August 24th. We understand that notwithstanding the many distractions of this season the outlook is for a grand industrial display; and it is the more fortunate, for, no doubt, there will be more visitors from outside of the State than usual, and we desire to give them all a good idea of the various departments of California industry. The directors of the institute are in receipt of advices which indicate that very many counties throughout the State will send exhibits to the Mechanics' Fair. Butte county has been heard from, and Fresno promises a splendid display. Tulare and San Bernardino, as well as San Luis Obispo, will send large exhibits. Ventura county promises a better display than last year, and Shasta will send a collection of grains, grasses, vegetables, table fruits, numerous woods and the like. Sonoma will make a fine exhibit, and so will Placer.

LABOR strikes in Boston have delayed the building of the dredging machines to be used in the Carson river. Dr. Rice has a working model, however, with which he will soon begin to prospect the river bed.

FISHING boats fairly swarm on Monterey bay, trolling for sea bass. Barracuda are expected to be plentiful shortly.



THE DRUMMER-BOY OF THE RAPPAHANNOCK.

herd consists of 40 head of pure Durhams. They are certainly beauties. He has recently shipped a carload of the same stock for himself and other parties from Galesburg, Ill. Mr. Moore took the premium at Sacramento last year for the best yearling heifer, and will no doubt take a number of premiums this fall. He has also a herd of good grade cattle, and those wishing fine stock can do no better than to apply to Mr. Moore for them. This gentleman has also been experimenting in the different kinds of grasses. He has alfalfa, orchard grass, Australian rye grass, red top and the Johnson grass. Next to alfalfa, he prefers the orchard grass, which is better feed and stands the drouth better than any of the grasses excepting alfalfa; but they all seem to do well on his land.

Ventura.

**CORN.**—Signal, August 7: The corn in the vicinity of New Jerusalem beats all previous seasons, and the yield will be immense.

**BARLEY AT HUENEME.**—Between four and five thousand sacks of grain are now coming in daily. Barley all over the valley is turning out very well, in many instances much better than was expected.

**THE HONEY CROP.**—R. Wilkin in Free Press, August 7: As there have been conflicting reports published in reference to the yield of honey in Ventura county this season, I have obtained personal reports from about 30 of the leading bee-keepers. These reports give the number of hives of bees on hand before swarming; also the amount of honey each bee-keeper produced—most all extracted honey. The average yield per hive was 150 pounds. I then obtained from the county assessor the number of hives assessed before swarming, which was 7871. Supposing there were 129 hives not

Idaho Wool-growers' Association," was unanimously adopted. The following officers were elected: President, Thomas Nelson; first vice-president, E. C. Hardy; second vice-president, Charles McConnell; secretary, G. F. Turritin; treasurer, A. D. Wilcox. Executive committee, Thomas Nelson, E. C. Hardy, Charles McConnell, D. M. Coleman, I. Smelser, B. W. Stewart, Frank Martin, F. Silva, A. Pasqualle, James Curtis, Robert Welch, Robert O'Neal.

OREGON.

**NEW CHERRIES.**—Portland News: Mr. Lewellyn, of the Milwaukee orchard and nursery, brought to the News office two boxes of cherries of his own invention—the Lewellyn and the Oregon seedling—the former a deep, rich cherry color, large, firm and finely flavored; the latter black as jet, large and luscious. Measurement was made of one of the Oregon seedlings, giving a circumference of 3½ inches. This seedling surpasses anything ever seen in Oregon, and is even a surprise to Mr. Lewellyn, who is the originator of the famous Black Republican and the Abe Lincoln cherries, known all over the United States.

**SONOMA COUNTY FAIR.**—According to program, the county fair at Santa Rosa will open next Monday, August 16th, and continue during the week. The fairs at Santa Rosa have been pronounced successes since the new pavilion was constructed. The country tributary to Santa Rosa is one of the best pieces of land in California and is populated by energetic and successful people. We expect that this year's fair will bring out the best products of the region, and that its industrial and social features will be alike satisfactory to all who can attend.





### The Angelus.

[Written for the RURAL PRESS.]

Hark! 'tis the Angelus ringing its notes  
Out on the scent-laden air;  
In at my casement the sweet music floats,  
 wooing my spirit to prayer.

Year after year has this old mission bell  
Rung forth its soul-stirring chime;  
And many a story has it to tell—  
Its voice grown mellow with time.

I think, as I list to its silvery tones,  
Of those it has called to pray—  
The poor, the rich, the heart-weary ones,  
Young and old, the grave, the gay.

It has lifted all who have answered its call  
Into communion with God,  
Binding the senses in holy thrall  
Till the inner vision, broad,

Seemed e'en to behold the city of gold,  
With its glories all unfurled,  
That gleams with splendor that cannot be told,  
Beyond ev'ry starry world.

O Angelus bell! thou dost strangely thrill  
The depths of my quick'ning heart,  
Inclining my soul unto Heaven's will,  
Whose messenger true thou art.

And thou seem'st to bring a tender word  
From friends that are away—  
Friends whom I know would be also stirred  
By thy sweet, soulful lay.

Long, long, will thy melody float on the air,  
Holy, exalting and calm;  
And ever thy message, consoling and rare,  
Will be to my spirit balm.

San Gabriel.

### The Grand Army.

A Memory.

[Written for the RURAL PRESS by I. H.]

"Come and see the Grand Army," write dear friends in the city, and how gladly would one accept the kind invitation, but for the urgent claim of duties that cannot be laid aside. For it is good to feel the thrill and glow of patriotism that such occasions arouse; to have our hearts stirred by the sound of martial music and the sight of waving flags and glittering uniforms; to realize that we are a part of the nation whose debt of gratitude to her citizen-soldiers can never be estimated or expressed.

Very regretfully are we obliged to answer no. But, after all, we shall not wholly lose the inspiration of the time. Have we not already seen the Grand Army, and may not memory bring back the thrilling sight? The intervening years vanish at her magic touch. Can it be that they number 21? Again it is the 23d of May, 1865, the day appointed for the Grand Review of the victorious armies gathered in and around Washington, waiting to be disbanded, and to melt away into the ranks of peaceful and peace-loving citizens.

The very air is quivering with excitement. No familiarity with martial sights and sounds—alas, how common through those sad four years—has any power to check the eager anticipation of every loyal heart. It is a lovely spring morning. Nature is propitious. A heavy shower the preceding day has laid the dust and purified the air. Gloriously the sun shines out, and a fresh, cool breeze is fluttering the flags along the line of march.

Dense crowds on the sidewalks the whole length of the broad avenue, each window framing a cluster of eager faces; everywhere the hum and buzz of expectation. And now with a burst of exultant music they come, they come. Ah, who shall describe it? What words can do justice to the grand and thrilling scene?

"Who shall look on the like again  
Or see such hosts of the brave?  
A mighty river of marching men  
Rolls the Capital through,  
Rank on rank, and wave on wave  
Of bayonet crested blue."

Does any one weary as hour after hour passes and "still through the livelong summer day, regiment, regiment comes?"

Ah, no. It is the Grand Army, the Army of the Potomac, all that is left of it after the terrible struggle which has won for us peace. Eagerly one scans the faces of the heroes as they are pointed out—the men whose names are to go down upon the page of history; and then, with scarcely less interest, turns to the rank and file, to those who, with no such expectation, have borne the burden and the heat of the day in the simple fulfillment of a present duty.

There are wreaths of flowers on the necks of the officers' horses; there are garlands twined around the silent guns; there are whole regiments where every man has a rosebud in his cap or on his bayonet, the gift of the school-children assembled on the broad steps and por-

ticos of the capitol. But when at last they have all passed by and silence falls on the deserted streets, this is not all; it is only the beginning. Another day dawns to renew the scene. But now it is the "Western Army." It is "Sherman's boys" who are marching by; and, if possible, the enthusiasm rises still higher. There is something of wild romance attaching to the exploits of these men, to their wonderful march to the sea, and this is their first appearance in Washington. Some of us recall the early days of the war; we remember the trim and dainty appearance of the volunteers who first responded to the President's call; the bright new uniforms, the glitter and the gloss.

What a contrast! In no holiday attire do these war-worn legions come. It is whispered that their great commander has given stringent orders on that point. There shall be no brushing up for show, but just as they marched through Georgia; just as they came from the terrible battle-fields, the fatal trenches, the deadly swamps, so shall they present themselves for inspection to-day.

"Grandest of mortal sights  
The sun-browned ranks to view,  
The colors ragged in a hundred fights  
And the dusty frocks of blue!"

How the cheers ring out as some torn and tattered flag, blackened and begrimed with smoke, is held triumphantly aloft, eloquent witness to the work that has been done, and to the manner of the doing of it.

And now there is a burst of laughter echoed along the street, for strange and grotesque pets were picked up by the men on their weary march; and here is an ancient darkey on a dilapidated mule, and there is a goat keeping its place in the ranks, and heedless of noise or strange surroundings.

And yet behind the laughter and the echoing shouts, the waving handkerchiefs and scattered flowers, how close at hand are the unshed tears—what an aching pang is in every heart! For where is he who more than us all would have rejoiced in this day's delight? No need of the badge of mourning worn upon every arm, fluttering from every flag-staff, to remind the nation that its father and its head is gone. And alas for the countless multitude who helped to bring about this grand result, but who are not here to share its triumph, who will never return to their desolated and darkened homes.

"For every stripe of stainless hue,  
And every star in the field of blue,  
Ten thousand of the brave and true  
Have laid them down and died."

A cloud comes between us and the summer sun, the music falls into a minor key. War, war, this is thy fearful work!

For 21 years has peace brooded over the land, old wounds are healed, broken ties cemented, and to-day San Francisco welcomes the Grand Army. But even now, as then, there is a sense of pain and loss. The "Great Lieutenant" who looked on the first review, himself the central figure, the observed of all observers, he, too, is gone, and there is none who can fill his place. The ranks are thinning year by year, as that other silent army is gathering in its forces.

Perhaps it is better for some of us not to see the Grand Army now. Let the younger generation, who are not oppressed by sorrowful memories, stand forward with words of welcome. Let the flags flutter and the martial music roll and only smiling faces greet the soldiers of a day gone by. Scatter flowers in their pathway, gladden their hearts with words of love and praise, while we, who would scarcely trust ourselves to look on them once again, listen from afar to the echoes that reach us, and softly, amid our gathering tears, whisper, "God bless them."

Walnut Creek, August 3d.

### Life's Disappointments.

EDITORS PRESS:—The above subject is rarely touched upon by writers for the PRESS, for varied reasons. The writers capable of touching the true chord are those who have gone through the sorrows of disappointed ambition, whose hearts have been keenly lacerated by false friends, or whose affections have been blighted. But they are the very ones to brood in secret, stifling the heart's emotions, for fear the world should catch a glimpse of the skeleton within. This condition of mind is not reserved to any one class. It is found among millionaires and paupers alike. The merchant and mechanic feel its baneful influence, bend to its power and yield to its venom at last. The cause and cure may be different with different individuals; but the general reason is misplaced affection. The hearts of man and woman are capable of loving with a lasting love, and so sure as the truth dawns upon the mind that another has supplanted you, and torn from your heart the one you cherished, so sure does the dark cloud roll in upon the soul, to obscure life's brightest noonday, never to be fully raised until mortality is laid aside. And still, this disappointed heart must appear before the world as if the bark of life were sailing upon smooth waters.

Daily we read of broken household altars, and lives separated by law's mandates; but hardly a word concerning the bruised and broken hearts, the years of grief and repentance yet to come, the anguish of the sensitive spirits in thus coming before an unsympathizing

public. It is a fearful future to many who sacrifice honor, home and all the finer ties which that word implies, merely to gratify passion or some other fancy which fickleness may assume. Thousands carry around the specter of disappointment who deserve a better fate. Friends often betray, many are misnamed, and thus is planted the seed of present and future misery. Can you conceive of a condition worse than one unloved and yet compelled to appear in society as if heaven upon earth was your portion? Many may read these lines and thank God that they do not sail in that shattered boat. So you may be thankful your heart sings a joyous refrain; no pain there for fallen hopes and misplaced affection.

There is no fairer scene this side of Paradise than a loving household, in which affection and confidence abide; there is no sadder sight this side of Tophet than the breaking up of family ties and hearts weighted down by a silent despair. If men and women would only consider consequences, the smooth, winning voice of the charmer would go unheeded, and home would remain the pure temple which God designed it should be.

JOHN TAYLOR.

### An Essay on Babies.

EDITORS PRESS:—Many a day has passed by since I sent you my first "Household Notes." I have followed with great interest the different articles in the RURAL, but having been pretty busy I have in vain tried to find a quiet hour in which to have my little say. All seem to claim a space in your columns, from the little ones up to the old folks. Suppose, now, I ask leave to introduce the babies to you? They, too, certainly have something to tell us, though I expect if nobody takes the trouble of helping them along with the writing, their story would never be told.

If a newborn baby, that is, a sensible one, could speak, it would say to the young mother: "Do not spoil me, do not let me have it all my own way. If you give me a finger I shall take the whole hand by and by."

This kind of a tale it was that my first baby whispered to me when she was a few days old, and I took the hint. A patient baby she was pronounced by all. Now, to be quite honest, I think that it was more the following words, written by one of the great doctors of medicine in Germany, that put it into my head, than the little tiny thing lying by my side:

"A young mother must remember that she can just as easily raise a good baby as a little tyrant. Not all its cries are cries of pain; do not forget that this is its only means of airing its lungs."

"Do not take the baby up every time it thinks fit to cry; look first and see if everything is all right, and you will soon learn to distinguish between its cries, and tell which is which. Nothing is better than to time your baby's nourishment. It gives you more freedom to do the housework, and is so much healthier for the infant."

As I think it might be of some use for a young mother, I will give a tried receipt for raising a baby:

Before getting up in the morning, I used to nurse the baby and put her back in her own little bed until after breakfast, when she had her bath and was dressed, fed and put to bed again, where she enjoyed a long nap. Just before the dinner was ready to set on the table, I nursed the baby once more, and if the weather allowed it, two armchairs out on the porch were fixed for a bed. Here it would remain quietly till three o'clock, when it was again nursed. It was put to bed at six, nursing once more before going to bed, and only once during the night, which you can leave off after four or five months.

My baby used to wake up just at the right time—never any screaming or fussing. She and I had agreed upon the time, so there was nothing more to be said on that point.

At three months old they are put in short dresses. It is so much less work; besides, the baby enjoys having the feet at liberty to kick around on the pillow and on the floor, and you can use your time for sewing, reading or other purposes.

It certainly is not necessary to rock a baby to sleep. I never did; and it steals more time than anybody would think. I have found that it quiets your nerves wonderfully to pick up a book or a paper while nursing the baby, especially if you have a good lot of work on hand which you feel as though you wanted to get through in the shortest time possible.

Try to get along without any lamp at night, as the light is apt to make the baby too lively and conversational. A healthy baby ought always to be a good baby, except where there are quite small children in the house to disturb its sleep by crying or noisy playing.

I have always had to be pretty economical with my time, so I have tried to find the quickest ways of doing up my work, in order to utilize the leisure time in some other way. This summer I am busy with different kinds of studies, and with my two little babies—one three years old and the other 19 months. I find a good deal of time both for English and other languages.

In this hot weather we take a cold lunch, and I leave the dishwashing till night. In former years I have been engaged in different kinds of fancy work, or some other work more or less profitable. Now I feel proud of our corn-field. I have sowed every bit of 10 acres, including

beans and potatoes, while my husband did the harrowing. We took the babies along (bringing some blankets for them to sleep on), also the coffee-pot and our lunch. I did not feel much worse after it, I think, than an old horse having trotted along all day.

Highland Springs.

YOUNG MOTHER.

### Personal Superiority and Novel-reading.

EDITORS PRESS:—Philosophers tell us that like causes produce like effects. A sojourn at Pacific Grove has inspired "L" to pen some thoughts on personal superiority that have lately been much present to my mind—also a Pacific Grove sojourner. We are all so apt to consider it as due to some inherent virtue that we were not born Chinese. But the idea is so much better expressed by my favorite poet, Lowell, that I give you his words:

"Looking within myself, I note how thin  
A plank of station, chance, or prosperous fate,  
Doth fence me from the clutching waves of sin:  
In my own heart I find the worst man's mate,  
And see, not dimly, the smooth-hinged gate  
That opens to those abysses  
Where ye grope darkly—ye who never knew  
On your young hearts love's consecrating dew,  
Or felt a mother's kisses,  
Or home's restraining tendrils round you curled,  
Ah, side by side with heart's-ease in this world  
The fatal nightshade grows and bitter rue."

Then after enjoying the happy birthright of American childhood, and the home environments and school training of American youth, what a clapping of wings and crowing is indulged in over the attainment of full-blown American citizenship! What a tendency to despise instead of pitying others whose brains are less developed and whose political opinions are less advanced than our own! What a glorying in our profundity of knowledge and the elevation of our ideas! Our self-complacency attributes all to our individual personal merit. As we advance in life our experience is that of the matured poet:

"I sometimes think, the furdur on I go,  
Thet it gits harder to feel sure I know;  
An' when I've settled my ideas, I find  
'Twarn't I sheered most in making up my mind;  
'Twuz this an' thet an' t'other thing thet done it,  
Sunthin' in th' air, I could'n seek nor shun it."

Even supposing we are blest with brains beyond our fellows, are we thus favored and endowed that we may use our capacities as the shark does, to prey on those whose powers and capabilities are less? Is there no higher aim or purpose in life than self-aggrandizement? As Christians we profess admiration for Him whose highest powers were devoted to ministering to humanity. Apart from our Christian character do we not hugely admire and fervently follow those whose lives have just been one continuous ministry to, and exaltation of, their own mother's precious baby?

For this reason I cannot quite concur in "F. A. s." dictum regarding novels. A novel may and should contain a lesson to the reader full as valuable as any real biography, autobiography, or volume of history. The main characters on history's pages are not to be commended as models. Selfishness and personal ambition, thinly disguised as patriotism, are the ruling motives of most historical characters.

One does not rise from the perusal of such lives as Julius Caesar's in any special way ennobled or inspired. The immense cost to humanity of that great commander's military reputation, the sacrifice of 3,000,000 human lives and the destruction of 800 towns and villages, is in itself a valuable lesson; but it is as well conveyed in that trite statement as in the many books of Caesar the historian. His decision of character and dignity of deportment can be gathered as well from Shakespeare's drama, which is really a romance, as from history's pages.

Then, however useful facts may be, they are not elevating. One may be a walking encyclopedia and yet have no charity. It is fully as important to cultivate sentiment as to store the mind with fact. And the culture of all the finer feelings is the legitimate business of the poet and novelist. Novels, moreover, bring refining society to the cabin of the rudest ranchman. The recorded experiences of the book become almost as much part of his life as though he had been a living actor in the scenes depicted. The characters of the book people his solitude and relieve his life's monotony. A work on agricultural chemistry has no such magician's spell. Ranch-leisure is tired leisure; the novel is relaxation; the study of chemistry is work. Then place for the poet, place for the novelist, on the farm.

EDWARD BERWICK.

MEDICAL ADVICE BY TELEPHONE.—Husband (telephoning):—"My wife has a severe pain in the back of her neck and complains of a sort of sourness in the stomach." Physician:—"She has malarial colic." Husband:—"What shall I do for her?" [The girl at the "Central" switches off to a machinist talking to a saw-mill man.] Machinist to husband:—"I think she is covered with scales inside about an inch thick. Let her cool down during the night, and before she fires up in the morning take a hammer and pound her thoroughly all over, and then take a hose and hitch it to the fire plug and wash her out." Husband has no further need of this doctor.—Medical Journal.



## The Floating City—The Monarch of the Sea.

[Translated from the German of Hans Christian Andersen by Professor GRANVILLE F. FOSTER.]

I have described to you Pompeii, that corpse of a city, exhumed at last from its grave and set out, a relic of the past, amid the living cities of the world; but I know another and stranger one—'tis not a corpse, but a *phantom city*. Whenever or wherever I hear the sparkling waters of a fountain dashing, splashing into the marble basin beneath, methinks I am listening to legends of the floating city. Aye, indeed, every liquid jet, as it rises in the air, might unfold a curious tale of thee, and every wave or breaker, as it dashes upon the shore, might sing a song of thee! Over the surface of the sea hovers a cloud—'tis her widow's weeds; the bridegroom of the sea is dead—his tower and city have become his mausoleum! Do you know the city? Never heard the streets the roll of the chariot wheel, or were they ever pressed by the hoof of the passing horse; but creatures of the deep swim therein, and the black gondolas like specters glide almost noiselessly o'er the green-tinted waters. I will point to you the forum, and show the grand square, and you may imagine yourself wandering in the city of legends. The grass now grows up between the broad flag-stones, and in the morning twilight flutter thousands of tame pigeons and doves around the lofty but isolated tower—the Campanile di S. Marco. Here on three sides is one surrounded by arcades. There beneath them sits a lazy Turk, drawing in soothing comfort from his margileh, or long pipe; or here, leaning on one of the pillars, stands a fair and beautiful Greek boy intently observing the still-remaining trophies of an ancient glory—the lofty masts—mementos of a vanished power. The flags droop as though they were mourning crape. Near by rests a girl. Her heavy pails filled with water lie on the pavement, while the yoke that supported them still remains in its place on her shoulders, while she leans forward on the mast of victory. Yonder, behold! 'tis not a fairy castle, but a church, you see before you. The gilded dome, the glittering ball above, fairly dazzle in the clear moonlight; while the magnificent brazen horse in the vane above pursues restless journeys like the brazen horse in the legend, now here, now there, and back again. Look at these exquisite paintings on walls and window-panes! It seems as though some genius had yielded to the whims of a child when this odd-looking, fantastic temple of worship was decorated. Do you see on those columns the winged lions—the ancient city's coat of arms? The gold on it still glitters, but the wings are bound, for the lion is dead since the king of the sea is dead. The great halls stand desolate, and often, where splendid paintings shone forth in all their beauty, nothing but the bare, dingy walls can be seen. The lowest, laziest street-beggar now sleeps under the arcades where once the floors were allowed to resound to the tread of the noblest alone. Out of the deep fountain there, or those prisons close by the Bridge of Sighs, issue spectral lamentations as once they really issued forth, when formerly the music of the tambourine from gorgeous gondolas floated o'er the waters, or when the bride's ring was flung from the magnificent Bucentoro into the Adriatic—the wedding of the city and the sea—Adriatic, the queen of the seas! Adriatic, shroud thyself in clouds! Let the widow's weeds conceal thy bosom. Hang them over the mausoleum of thy bridegroom—the phantom city, the marble city, Venice.

Sunol Glen, July 21, 1886.

**JOSH BILLINGS' MONUMENT.**—Before Josh Billings died he expressed a desire that his monument should be a large boulder of Pittsfield marble, with his name in raised letters on the side. The Hoosac Valley News says Messrs. Fuller & Maslin, of Pittsfield, have accordingly obtained a stone which weighs about six tons, and will soon begin the work of preparing it for the noted humorist's grave at Lanesboro. It is oblong in shape, being about four feet through each way, and about six feet long. On one side it will bear in large raised letters:

JOSH BILLINGS.

On the top will be two panels on which inscriptions will be chiseled. A simple border around the top will complete as unique monument as there is in this country.

**AFTER SUNSET GLOWS.**—From his observatory, at Colmar, M. Faye has noticed the phenomena of crepuscular lights at an altitude far higher than that of the terrestrial atmosphere. Without deciding on the merits of the different theories advanced to explain the origin of the after-glows, he considers that electricity alone would be capable of retaining at such an altitude the particles of matter producing the effect, whether these articles had a terrestrial eruptive source or had come from interstellar spaces.

**MODERN CAVE-DWELLINGS.**—It appears that there are inhabited cave-dwellings in Saxony even to this day. They are dug in a sandstone hill, have different rooms, dark and light, as well as chimneys, windows and doors, and are said to be very dry and habitable.

## YOUNG FOLKS' COLUMN.

### From Our Young Folks.

**EDITORS PRESS:**—We live on a large farm and keep poultry. We have about 300 chickens, 150 little chickens and the rest old ones. We tried to raise some geese and turkeys, but didn't succeed very well. We sat four goose eggs and only one hatched, and then it died. We sat 18 turkey eggs and 14 hatched, but something was the matter with them; they have kept dying off until we have only six left. We do not keep any ducks, for father does not like them. We have a number of kinds of chickens—the Brown Leghorn, Langshans, Black Spanish, etc.

There are a number of birds' nests in our orchard. I know where there are nine. Some of them are swallows, gray birds, linnets and two or three other kinds. There is one in our apple-house with four little green eggs in it, and we don't know what kind it is. This is all I can write this time, for I am very much afraid it will be put into the waste-basket.

Santa Cruz Co.

GRACIE D. HARMON.

**EDITORS PRESS:**—I have been interested in reading the Young Folks' Column in your paper. We like the RURAL PRESS very much, and I don't think we could hardly do without it. I live near Madison, 14 miles from Woodland, on the V. V. & Clear Lake R. R. We have a nice home with 258 acres of land, and would have had a good crop this year if it had not been for the north wind; it shelled out the grain very much. I am 13 years old.

**Answer to question in RURAL:** If a man worked for \$1.25 per day, and paying 50 cents a day for board, should lose a day how much would he be loser? I answer, \$1.25; I don't think he lost what he paid for his board. My great-grandmother, who celebrated her 80th birthday on the 16th of last May, said that he did not make anything, therefore he did not lose any thing.

Madison, Yolo Co.

EMMA GILLIAM.

**DEAR EDITOR:**—I am a little girl of 13 and live on a ranch five miles north of Stockton. My father is a well-to-do-farmer. I raise chickens, turkeys and ducks in the spring, and when they get old enough for market mamma sends them in town for me and the money I get for them I save and go to school with it in the winter time. I attend a district school in summer, for in winter the roads are muddy and the scholars cannot come to school very well.

Can some of the readers of the RURAL PRESS publish a recipe for candy pop-corn balls?

FROM A LITTLE READER.

Stock'on, Cal.

### A Morning Call.

[Written for the RURAL PRESS by BECCA M. SAMSON.]

Be careful, my son; do not sit in that arm-chair; do you not see that it is occupied?

No, it is not a bundle of rags; look again; don't you know your little friend Bobby Slocum? Well, I do not wonder at your astonishment; but I have told you the truth—that miserable little object muffled in red flannel and soaking in liniment is really Bobby.

Where are all his pretty yellow curls?

They are upstairs in his mamma's bureau drawer; poor Bobby had such a dreadful fever in his head that the doctor ordered his hair to be cut off.

Oh, no, he wasn't pleased; he made a great fuss about it, but it had to be done.

Why doesn't he open his eyes?

Because they are too weak to bear the light; they are so inflamed and swollen that if you saw them you would think they had been boiled.

Poor Bobby has not seen the sun or the pretty flowers for nearly two weeks.

I thought you would be sorry to hear that, but you need not try to console your unhappy little friend by offering him molasses peppermint drops; he can eat nothing but mush and milk toast.

Every tooth in his head is aching—that's why he is crying.

Poor boy! it is so painful to cry with inflamed eyes.

His mamma is doing all she can to relieve him; she has wrapped his face up in hot cloths and has just put on a steaming poultice of bread and milk. If that does not do any good, then the doctor will have to come with a sharp instrument called a lance, with which he will cut poor Bobby's swollen gums.

Of course it will hurt, but it won't do Bobby any good to kick and scream, because doctors always have their own way.

There is no use in asking your little friend if he feels better.

He cannot hear you; his ears are stuffed with sweet oil and cotton wool; that's the way they try to ease the dreadful pain in them.

Oh, dear! oh, dear! just hear the poor little fellow scream.

Wouldn't you think somebody was pinching him?

It's the rheumatism nipping his toes and fingers; but for that he might take a walk in the

fresh air, which would do him a great deal of good.

Isn't it awful the way he coughs?

Yes; it does sound just like your big dog, barking.

Here comes Bobby's mamma with a bottle of medicine for him.

I hope it will do Bobby good.

Ugh! what a face he makes.

It must be very bitter stuff.

Poor boy! there is still half a bottle left, besides a box of pills and any number of horrible powders, all which he must take to get well.

I'm afraid there is no use in inviting him to your birthday party. He won't be able to get out of that chair for a long time to come. Let us go home, then, and see if we cannot find some little dainty to send your suffering friend.

Now, my son, that we are safely out of the house, would you not like to know how poor little Bobby Slocum happens to be spending the beautiful summer in that dark room, with nothing to keep him company but aches and pains?

Perhaps it will surprise you to know that it is all his own fault. Yes, if during the long, cold winter Bobby had obeyed his good mother he would to-day be as well and strong as you are. He is simply being punished for all the foolish, wicked things he did.

I have no doubt that you were among those who applauded the day he threw away his rubbers and waded home through the gutter. I am sure you laughed when he ran out into the rain, without hat or umbrella, and thought himself wonderfully smart to hide the warm comforter his mother had knit for him, because, as he said, only "men Mollies" wore such things.

Perhaps Bobby would have behaved himself if he had known that all this time Mr. Rheumatism and Mr. Earache and Mr. Toothache and Mr. ever so many other disagreeable things were waiting to pounce upon him, which they did the first chance they got.

Now they have hold of him, good and tight, and it will take a lot of medicine to get rid of them. Let us hope that when Bobby does get well again he will be cured forever of his foolish, imprudent habits and will listen in future to what wise people tell him.

Alameda, Cal.

## GOOD HEALTH.

### What Science Says.

The Wonderful Mechanism of the Human System.

In the editorial columns of the New York Analyst H. Lassing, M. D., editor, writes the following beautiful description of the laboratories of the human system. We think we have never read a finer or more trustworthy one:

"Man is the greatest of all chemical laboratories. Magnify the smallest cell of the body and what a factory is spread before the eyes. Countless chambers in which are globes of air, masses of solid matter, globules of dying liquid; a flash comes and the whole is consumed and needful heat is carried into every part of the system. Electrical forces also generate and are conveyed to the brain, the muscles and the various nerve centers.

"In another set of a million chambers we see various classes and vapors. By chemical action these are changed and purified in the lungs and the skin. The blood, we often say, is a great living river. In its current are masses which the air in the lungs did not affect; blocks of chalk, slabs of tartar, pieces of bone-ash, strings of albumen, drops of molasses and lines of alcohol. How are these waste masses disposed of? Begin where you will in this great stream, you must come to the purifying places of the system. Here is all activity and an invisible force reaches out into the stream, seizes and carries this mass of waste into vast trenches, thence into a smaller reservoir, and finally into a larger reservoir, which regularly discharges its contents.

"This separation of lime, uric acid and other waste material from the blood without robbing it of a particle of the life fluid, passes human comprehension. In health, this blood-purifying process is carried on without our knowledge. The organs in which it is done are faithful servants whose work is silent as long as health remains.

"People strangely wait until pain strikes a nerve before they will realize that they have any trouble. They do not know that pain concerns chiefly the exterior, not the interior, of the body. A certain set of nerves connect these blood-purifying organs with the brain. They may not gnaw and bite as does the toothache or a scratch, but they regularly, silently report. When these organs are failing these nerves indicate it by drawing the blood from the face and cheek, leaving the lip and eye blanched, by sending uric acid poison into the smallest veins, the skin then becoming gray, yellow or brown. They also prevent the purification of the blood in the lungs and cause pulmonary difficulties, weariness and pain. Who enjoys perfect health, especially in this land where we burn the candle in one mass? The athlete breaks down in the race; the editor falls at his desk; the merchant succumbs in his counting-room. These events should not have been unexpected, for nature long ago hung out her 'lantern of alarm.' When the 'accident' finally comes, its fatal

effect is seen in a hundred forms—either as congestion, chronic weakness, as wrong action, as variable appetite, as head troubles, as palpitation and irregularities of the heart, as premature decay, as dryness and harshness of the skin, causing the hair to drop out or turn gray; as apoplexy, as paralysis; as general debility, blood-poisoning, etc.

"Put no faith, then, in the wiseacre who says there is no danger as long as there is no pain. Put no faith in the physician, whoever he may be, who says it is a mere cold, or a slight indisposition. He knows little, if any, more than you do about it. He can neither see nor examine these organs, and depends entirely upon experimental tests, that you can make as well as he.

"If the output is discolored or muddy, if it contains albumen, lymph, crystals, sweet or morbid matter, is red with escaped blood, or roily with gravel, mucus and froth, something is wrong, and disease and death are not far away.

"These organs which we have described thus at length, because they are really the most important ones in the human system, the ones in which a large majority of human ailments originate and are sustained, are the kidneys. They have not been much discussed in public, because it is conceded that the profession has little known power over them. What is wanted for such organs is a simple medicine, which can do no harm to the most delicate, but must be of the greatest benefit to the afflicted."

## DOMESTIC ECONOMY.

### Recipes.

**EDITORS PRESS:**—In the last RURAL I saw a Scotch way of making "Curd and Cream." Here is ours: Take some clabbered milk, pour it gently into a flour-bag; hang it up over night, so as to let all the whey run off. When being used, work in a little sweet cream. Chopped almonds will improve it wonderfully. It is to be eaten with milk or cream, sugar and cinnamon.

Napoleon Soup.

For a small family, slice up two large onions with three good-sized carrots. Let them simmer in butter (or lard), taking care not to let it brown. When soft, mash them, putting in one or two tablespoons of flour. Pour in some weak "stock," give it a boil, and you will have a soup worth eating. If you only want the taste of the onions or carrots in the soup, and not the vegetables themselves, strain it through a sieve before sending to table. This will require, however, a stronger "stock" of soup.

Macaroni and Ham Pie.

For a small family, take some handfuls of macaroni, boil in water until tender; chop some pieces of ham up very fine, mix with the macaroni, and when cool add one or two eggs. Put in a baking-dish and bake it in the oven till brown on the top. This is a very nice and quick dish for luncheon.

YOUNG SCANDINAVIAN.

### Jam and Potatoes.

**EDITORS PRESS:**—As this is the fruit-canning season, perhaps some one would like to know how to make a nice jam. After I made my plum jelly I took the pulp (which is generally thrown away) and added what peach juice I had left after canning peaches, stirred together, pressed through a colander, added sugar, boiled 30 minutes. I had the nicest jam, the peach juice giving the right flavor. If any one is willing to try this, I will warrant her a nice jam, and makes pies fit for a queen to eat.

Potatoes for Supper.

A nice dish for supper: Grate six large potatoes, add three well-beaten eggs, one tablespoonful of flour, or one coffee-cup of bread-crumbs, one-half teacupful of sweet milk, and salt to taste; fry in butter over slow fire.

Berlin, Colusa Co.

JENNIE FRAME.

**SCALLOPED CODFISH WITH CHEESE.**—Soak a pound of salted codfish six hours in tepid water, then boil it. When cold, pick into flakes with a fork and season with pepper. Heat a cup of milk to a boil, stir into it a tablespoonful of butter rolled into two of prepared flour; mix with the picked fish and pour into a bake dish. Strew grated cheese thickly on top and bake in a quick oven to a delicate brown. It is yet nicer if you add a raw egg to the mixture before cooking it.

**TOMATO SALAD.**—Peel ripe tomatoes with a sharp knife, slice crosswise, lay in a salad bowl and season on the table with salt, a little sugar, pepper, oil and vinegar. Keep the tomatoes on ice until actually served. They cannot be too cold. Never loosen the skins by pouring boiling water on them, and refrain as scrupulously from serving them with the skins on.

**GRAHAM BREAD.**—One and one-half cups of buttermilk, three cups of Graham flour, two tablespoonfuls of molasses, one teaspoonful of salt. Bake in cake-pan or deep tin, in a moderately hot oven, for one hour.





A. T. DEWEY.

W. B. EWER.

Published by DEWEY &amp; CO.

Office, 252 Market St., N. E. cor. Front St., S. F.  
Take the Elevator, No. 12 Front St.ADDRESS ALL literary and business correspondence and  
Drafts for this paper in the name of the firm.

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Registered at S. F. Post Office as second-class mail matter.

## SCIENTIFIC PRESS PATENT AGENCY.

DEWEY &amp; CO., PATENT SOLICITORS.

A. T. DEWEY. W. B. EWER. G. H. STRONG

SAN FRANCISCO:

Saturday, Aug. 14, 1886.

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## The Week.

The city streets are as dull this as last week they were gay. The wind-torn decorations are being gathered in. The stirring sounds of life and drum and the sonorous notes of brazen instruments are hushed. The city is endeavoring to recover from the indulgence in holiday idleness, and to fix its energies again upon its accustomed work. Another week, and the last banner will have disappeared, and the great event will be safely stored in the municipal annals.

This week the country gains what the city has lost. Oakland was fired with enthusiasm and surcharged with visitors on Monday. San Jose passed through a similar experience on Tuesday. To-day, Wednesday, the hosts are partakers of the rare hospitality of the Napa valley, and to-night the capital city will receive the multitude with a display of bunting and with floral decorations which will excel any similar garb which the city has ever donned. The State Capitol will be ablaze with light from dome to foundation, and the grand agricultural pavilion will be thronged at the official reception. Thus in a grand way will the State take leave of its distinguished guests.

## The Extra Session.

The legislators seem to be getting warmed up to their work, and something of importance may yet be accomplished. They have had many distractions. The unexpectedness of their coming together was in itself a disadvantage, and it has taken time for them to get their seats warm. Then came the senatorial question, which has been settled; then the impeachment of two of the Supreme Court judges on the ground of general physical and mental debility, and that has been defeated. Just now the issue seems to be between a desire to adjourn and a desire to do something. On this issue it seems to us that Senator Steele's position is the true one. He did not, he said, sign the call for the extra session, but now that the Legislature had been convened he believed in honestly trying to accomplish something. It would be bad indeed for the Legislature to accomplish nothing by their extra session. It would be worse for them to do something not in the public interest, but if there could be certain plain and necessary enactments which would foster the general irrigation interests of the State, it would be best of all. We have not lost hope that this result can yet be attained, and the coming political campaign in a measure freed from the issue which is now imminent.

The Assembly on Tuesday passed a resolution embodying an amendment to Section 25, Article 4, which opens the way for special legislation in the different districts according to their special needs. The form in which it was passed is as follows:

But nothing in this section shall prevent the Legislature from passing laws having local application, regulating the division and use of water for irrigation purposes, and for the construction and regulation of canals, ditches and other works therefor, as the same may be required in any county or counties, or in any district created by law for that purpose; provided, however, that such laws, having a local application, shall not grant to any private corporation or individual any special or exclusive right, privilege or immunity.

It had been expected that the bill might receive the opposition of the radical appropriators and the vote of 63 to 7 in its favor was something of a surprise. By its provisions the question of irrigation may be fought out in the separate districts. The riparianists have no objection to it, and the appropriators express themselves satisfied with it, if they can secure no other of more radical character.

The measure which has been pushed farthest forward is one looking to the annulment of the English common law and providing for appropriation. It was introduced by Goucher, amended in committee, and after a heated debate was ordered to engrossment as follows:

The water of every natural stream within the State of California is the property of the public and is dedicated to the use of the people of the State. Such water may be appropriated, diverted and used for irrigation or other beneficial purposes. The right to divert unappropriated waters of any natural stream to such beneficial purposes shall be regulated by law. Prior appropriation of water to any such use, whether heretofore or hereafter made, so long as applied to such use or other beneficial purposes, shall give the better right to the extent of the amount of water actually diverted and applied, and the right of appropriation, diversion and use shall be exercised under legislative regulations, provided that the navigation of navigable streams under the control of the United States shall not be impaired. The English common law of riparian rights, so far as it conflicts with this act, shall not be recognized as a rule of decision in any of the courts of this State.

As we go to press on Wednesday the situation is somewhat uncertain, and though adjournment may be taken, it seems rather more probable that the enactment of several measures will be secured.

AGRICULTURAL SCIENCE.—A circular from the Secretary of the Society for the Promotion of Agricultural Science announces that the 7th annual meeting of the society will be held at Buffalo, N. Y., next Tuesday and Wednesday, August 16th and 17th. There is a long list of addresses from prominent agricultural scientists, among others one from Prof. E. W. Hilgard, Ph. D., on the "Effects of Lime in Soil on the Development of Plants." Another paper, which will no doubt be of much importance to California, will be by Prof. W. G. Farlow, on the "Diseases of Fruits." As Prof. Farlow is eminent as a fungologist, his statements will no doubt be of much interest to our readers, and we shall expect to give them place in the RURAL.

## More of the County Exhibits.

Beside the exhibits we told somewhat of last week, made on occasion of the G. A. R. mustering in San Francisco, a neat collection of Shasta county's products was shown at No. 10 California street, under the supervision of Mr. D. N. Honn. We found the wall, at the south end of room 18, covered with an orderly array of grain and forage-plants, bound in small sheaves to the number of 40. There were wheat, rye, oats and barley, alfalfa and white clover, millet, Egyptian corn, and timothy six feet high; also, flax and broom-corn. Flanking these were maize, 13 feet or more in height, and bamboo nearly as tall, that came up on the 20th day of May. Leafy twigs of olive, palm-leaves, and a section of grape-vine, 30 feet in length, helped to frame the picture.

Below these were laid out choice peaches—half a dozen varieties—plums, Gloria Mundi apples, great green Bartlett pears, grapes of several kinds, both white and purple (with one sample of raisins), and golden oranges. Peach and plum shoots of the season's growth stood by, seven and eight feet long. The brown beans and potatoes, good enough in themselves, were quite dwarfed by their associates, the monstrous onions. Other noticeable items were a cotton plant from Redding; a very handsome urn-shaped card-receiver, nearly eight inches across, turned from manzanita; nine or ten varieties of natural wood; three or four specimens of coal; gray marble, ores, numerous ammonites, large and small, and other fossils.

Portions of the Tehama and Butte county exhibits, spoken of in our last issue, have been removed from Platt's hall to the same apartment; and Fresno, too, here makes a fine little show of wheat—about a dozen bundles—with millet, wild oats and tobacco.

An exhibit of Solano fruit well worth inspection was made during Encampment week and is still maintained by Messrs. Lyon & Platt, of Vacaville, at No. 339 Kearny street. The products displayed are all from Vacaville and its immediate vicinity. They were grown by various parties, and embrace choice plates of French and Hungarian prunes, Yellow Egg plums, Ooe's Golden Drop, Kelsey's Japan plum and Bartlett pears. The specimens of Crawford and Sequoia peaches are superb; and the clusters of grapes—Muscat, Malaga, Zinfandel, Tokay, Rose of Peru, Black Hamburg, etc.—fitted to arouse admiration, not only in Eastern tourists but in long-time Californians. One branch of a White Syrian vine, hung like a chandelier in the center of the room, must have borne nearly 30 pounds of berries.

There are also boughs of an orange tree, carrying green Mediterranean Sweets of this year's crop, and of green gage plums, heavily laden. Japanese persimmons, white figs, Northern Spy and other apples are sparsely represented. A single large ear of yellow corn is noteworthy as having been planted and raised since the rains ceased.

The dozen jars of assorted fruit in glass are very choice, and the apricots and white peaches, both evaporated and sun-dried, are as handsome as any we have ever seen.

The entire display, select, compact and tasteful, is pleasing to the beholder and creditable to the exhibitors.

MINISTERING TO VICE.—There are on our statute-books, we believe, nominal laws against gambling, which our police are reported to make occasional shows of enforcing, especially in the case of petty Chinese tan-games. Meanwhile it is a burning shame that papers claiming to be respectable keep on publishing the artful advertisements, both avowed and covert, of the biggest lottery swindles and complimentary notices of the gilded dens of professional gamblers. It is well-nigh appalling to find the press thus selling their influence to debauch the moral sense of our young men and women, and venally misleading them to "trust to luck" instead of guiding and cheering to useful, persevering, honest industry. Many of our city dailies continue from time to time this infamous practice. Where is the Society for the Suppression of Vice, that it does not bestir itself to have them—as they might be legally—excluded from the United States mail? We again emphasize our hearty detestation of all such journalistic bunko-steering.

## Look Out What You Sign.

We judge from our Eastern agricultural exchanges that there never was a time when swindlers were so numerous in the rural districts as at present. They are working ingenious schemes of almost every kind to fleece the unsuspecting farmer. A common way is to offer some kind of merchandise or farm tool, and, being exceedingly glib of tongue, they soon convince the listener that their material or tool possesses some great value. Their game is to secure the farmer's signature to what purports to be simply an order for one of the tools, but the document is so arranged that it is an order for a large quantity of useless stuff, which is shipped to him and then he is obliged to pay for it because his name appears signed to the document. Sometimes the simple order is manipulated so that it becomes a promissory note for a considerable amount. In either case the farmer is beset by some shyster of a lawyer who threatens suit, etc., and in most cases the farmer is frightened into settling rather than stand the suit at law. These games, and many others, are being constantly worked at the East to the great loss of farmers. We have not heard of their cropping out in this State yet, but we advise our readers to look out for them very vigilantly, because the East is pretty well worked out and the swindlers are very apt to seek new fields. It is a very good rule to refuse to sign your name to anything for an utter stranger. No matter how good a thing is made to appear, it will be much safer to take other counsel than that of the agent before fixing one's name to paper which may appear again in a very undesirable form. We can but emphasize the general caution: look out what you sign.

## California Forestry.

We have received many valuable trees and plants from Australia and the distinguished director of the Melbourne Botanic Gardens. Baron von Mueller has done us service which will cause his name to live in the history of California agriculture. The latest contribution he has sent to the California State Board of Forestry is seeds of about 30 varieties of eucalyptus, some of which have never been introduced in this country. In consequence of the difficulties experienced by the State Board in establishing the experimental farm in Merced county, these seeds will be planted by the commission, but turned over to the care of the gardener at the State University. Certain rare forest seeds will be sent to Baron von Mueller in exchange.

Abbot Kinney writes from Los Angeles that the School of Forestry lately established by the University of Southern California is progressing finely and growing in popularity. A lecturer has been secured on the "Sanitary Value of Forests" and one on "The Native Trees of the Country." The canvas signs printed by the board and posted in the southern counties offering a reward for the arrest of parties setting brush fires on public lands, are having good effect, and sheepmen and hunters are much more cautious since the warning has been given.

Herbert Vischer, the engineer who is preparing the forest map of the State, is at present in the extreme northern counties and meeting with great encouragement in his work.

RABBITS IN AUSTRALIA.—Rabbits are quite a serious trouble to our agriculturists and rabbit-proof fences are a desideratum in orchard and vineyard planting in some parts of the State. The rabbit-shooting excursions in different parts of the State have also reduced the supply somewhat. But our affliction, as we have remarked before, is a light one compared with the condition of affairs in Australia. The colonial governments have a steady expenditure to provide for in rabbit destruction. As an instance of the expenditure thus involved it may be mentioned that in Victoria alone, during the year 1885-86, the sum of £33,000 was voted by the Government, and that Parliament will be asked to grant at least £25,000 for the same purpose for the ensuing year. Similar sums of money have also been spent by the adjacent colonies, and the governments have had under consideration for some time other costly schemes for the limitation of rabbits within certain infested areas, by imprisoning them within wire fencing extending over many hundreds of miles of country. One proposition is a rabbit and dog-proof fence, along the boundary, for they have wild dogs which are injurious to the flocks,



## A Glimpse of San Francisco.

We present our readers on this page a glimpse of a portion of San Francisco which one might gain by standing on California street hill and looking toward Oakland. There is but a small segment of the bay included in the view, for San Francisco bay is a grand sheet of water, stretching from north to south about 60 miles and having an area of 480 square miles. And yet this view includes some of the most important points of interest connected with our commerce and passenger traffic. The outgoing and incoming ships are seen plying upon the channel which constitutes the harbor proper. Within this area most of the great wheat fleets anchor, and across this water ply the steamers which go down on the coast and across the Pacific ocean. The large island a little to the left of the center of the picture is Goat island, which won some Congressional fame a few years ago. Just to the right of Goat island, about two miles to the eastward, lost in the haze of the distance, are the wharves of the Central Pacific Railroad, where the vast host of travelers from the interior and the East take the ferry-boats for San Francisco. The city is fixed as the natural center of commerce of the whole west coast of North America. The great rivers, valleys and mountain passes lead unerringly to this main point, and thus converge the channels of inland trade from all the surrounding States and Territories.

Before the discovery of gold in California the State was merely a vast cattle range and in a state of semi-civilization. The population was scant and made up mostly of Mexicans and Indians, the few scattered missions being the only settlements. San Francisco was then known as Yerba Buena, and had the appearance shown in the lower one of the engravings on this page, which was made from a sketch taken in 1847. There was a great cove extending along the water front to the point where Sansome street now is, all that portion of the city between that street and the bay having been "filled in" since then. In 1847 there were 79 buildings of all kinds. In 1848 emigrants began to arrive, and early in 1849 the population had increased to 2000, and by July there were 5000 people.

The large engraving shows a portion of the city as it now appears. The view of the city taken in 1849 from Clay street hill covers nearly the same territory as the large engraving. In each, one gets a view of Goat island, but much of the city shown in the large engraving, as stated above, has been constructed where the tides ebb and flowed in '49.



SAN FRANCISCO IN 1849, FROM HEAD OF CLAY STREET



VIEW IN SAN FRANCISCO IN 1886.



PRIMITIVE SAN FRANCISCO.

## State Horticultural Society.

## Pear Growing in California.

The regular monthly meeting of the State Horticultural Society was held July 31st at Irving hall Parlor, 139 Post street, San Francisco, President Hilgard in the chair. There was a good attendance of members, and among the visitors was Prof. W. A. Henry, of the Wisconsin State University, and Mr. Buell, of Michigan.

Dr. Gustav Eisen, of Fresno, was elected to membership and the resignation of Dr. John Hastings, of Fresno, was accepted.

The death of Dr. S. R. Chandler, of Yuba City, was announced by the secretary and R. B. Blowers, of Woodland, was appointed by the president to draw up a suitable memorial.

A motion was made by Leonard Coates, of Napa, that a State exhibit of horticultural products be gotten up under the auspices of the society, but so many difficulties were found in the way of such a project, at least for this year, that the motion was finally withdrawn.

Judge Blackwood, of Haywards, asked permission to introduce a resolution upon the irrigation question, but most of the members evinced an aversion to entering upon the discussion of a question which might be interminable, and it was decided to take up first the discussion of pear culture.

## Pear Growing.

The discussion on pear growing was introduced by Mr. Jas. Shinn, of Niles. He said the pear would grow well on any strong, rich soil, and pears can be successfully grown in almost all parts of the State. The codlin moth he considered the greatest drawback the grower had to contend with. He thought there were better

pears than the Bartlett, though this variety pleases the shippers and the canners, and the fruit-grower does not propose to dispute with his customers. The Bartlett, however, does not pay so well as some other varieties in the coast valleys, because it ripens so late. He finds the Duchess d'Angouleme a satisfactory pear in his region; trees 30 years old are still growing vigorously and yielding 25 to 30 boxes per tree per year. The Vicar of Wakefield bears large crops and is healthy and vigorous, but the fruit is not of first quality. Varieties which he could recommend for regions near the coast, fruit suitable for shipping, would be the Beurre Hardy, which ripens just after the Bartlett; the Beurre Clairgeau, a standard favorite with shippers; Beurre d'Anjou, good, desirable and large; Duchess d'Angouleme, equal to the best and a great bearer. This variety, Mr. Shinn remarked, does very well on quince stocks, but he sees very little use of working on quince stocks in this State. The Louis Bon de Jersey is a good pear, and the Howell also worthy of attention.

Prof. Hilgard thought the Bartlett grown near the coast lacks flavor.

Mr. Shinn said correct taste would rate the Bartlett low in flavor, wherever grown. The Duchess d'Angouleme is much superior in this



regard. The Vicar of Wakefield is good for shipping and profitable, and large if thinned out. The Glout Morcean is good. The Winter Nelis is superior, but a defective bearer in some regions. Mr. Shinn remarked also the different habit of growth with different varieties of pears, the Bartlett having an upright habit and the Beurre d'Anjou spreading like a Rhode Island Greening apple tree. Thus, on soil that will stand it, the Bartlett may be planted closer than some other varieties. He deprecated, however, too close planting. He looked upon pear growing upon this coast as holding out good prospects of success and profit.

Leonard Coates, of Napa, spoke of the time of ripening with Bartletts. The earliest come from Suisun and Santa Clara valley. Vacaville, which gives very early fruit of most kinds, has late Bartletts, because they stop growing for a time in midsummer, and then start a second growth and mature well. Mr. Coates spoke of the interest he takes in watching the many kinds of pears now growing in the University orchard. The De Tongres, which has been favorably mentioned in the reports of the College of Agriculture, he finds better looking than the Clairgeau. He had grafted over 2000 Winter Nelis with this variety. The grafts sometimes bear fruit the first year. We need, said Mr. Coates, a good early pear and a very late and good-keeping variety. The Easter Beurre is a stand-by, but the quality is inferior. The P. Barry, one of the seedlings of the late B. S. Fox, of San Jose, is coming into wide favor for near-coast situations, as it does not mildew. The Easter Beurre ripens in Napa, though there is complaint of its not ripening in some places.

Mr. Coates also spoke of an advantage which seems now to be clearly appearing from mixing varieties in an orchard. The Bartlett, which is often a shy bearer when by itself, bears well when associated with the Beurre Clairgeau. Planters are now adopting the practice of alternating rows of different varieties when laying out pear orchards. It seems that sometimes when there is something the matter with the pollen of one variety, it can have its flowers fertilized from another variety near by.

As for pruning the pear, Mr. Coates said that the old way of using a single upright leader is giving way to, low heading sending up several main branches, shorting in laterals and pinching. With say four upright stems and the fruit borne in short laterals, better crops are borne and there is much less danger of sunburn. Some orchards started on the old plan are being re-formed that way.

Dr. Gibbons, of Alameda, spoke of the defects of the Easter Beurre in his locality. It softens and rots on one side—does not ripen evenly.

Mr. Coates said the Easter Beurre was a success in Suisun valley. It ripens in Napa, but shrivels afterward.

Mr. Shinn thought from the discussion that it might be inferred that it was desirable to have many varieties. He believed that with the pear, as with the apple and peach, a planter should confine himself to few varieties. The list of varieties is too large. Four or five sorts, which do best in the locality, would be enough for a large commercial orchard. As to the Easter Beurre, up to 15 years ago it grew smooth, large pears; now, on older trees, the pears are knotty, but the crops are large. He has no trouble in ripening them. When they decay it begins on the outside, which is much better than the Flemish Beauty, which may have a beautiful exterior and be all rotten within. Among varieties which he considered not desirable is the Souvenir du Congres.

W. G. Klee, State Inspector, being called upon, said his experience led him to pronounce the Winter Nelis not adapted to the coast region, and the Bartlett objectionable, because of its deficiency in flavor. He had found that on the coast the winter pears, as a rule, did best, and he mentioned favorably the St. Germain, Seckel, Howell, De Tongres (but is not sure of its keeping qualities), the Conseiller de la Cour (ripening in October), Josephine de Malines, Beurre Clairgeau, Beurre gris d'hiver Nouveau, Jaminette, Andre Desportes (ripening in September, but rather dry), Anne Ogereau, handsome but not fine quality, but standing shipment well.

Mr. Klee spoke of the fungus which is becoming so troublesome on the pear, causing black patches on the leaves, fruit, and on the

bark of the new growth. This disease has been especially severe on the Winter Nelis. The malady has been quite effectually checked in the University orchard, as described by Mr. Klee in his "Bulletin No. 3" of the State Board of Horticulture, and which we printed on page 74 of the RURAL of July 24, 1886. We repeat the remedy:

Dissolve 30 pounds of whale-oil soap (80 per cent soap, at the most costing five cents a pound) in 60 gallons of water, by heating the two together thoroughly. Then boil three pounds of American concentrated lye with six pounds of sulphur and a couple of gallons of water. When thoroughly dissolved it is a dark brown liquid, chemically called sulphide of soda. Mix the two—the soap and the sulphide—well, and allow them to boil for half an hour. Then add about 90 gallons of water to the mixture, and it is ready for use. Apply it warm, by means of a spray pump. Used warm its effect is better and less material is required than when cold.

Prof. Hilgard spoke of the good qualities of this wash. It is really a very simple method of intensifying the well-known fungus-killing property of sulphur. The sulphur is made soluble, and thus acts directly without having to be rendered gaseous by the heat of the sun. It is quite possible that this form of using sulphur may be found to have very wide application. In making the compound it is desirable to be sure that the sulphur is in excess of the alkali, to guard against the danger of free alkali when applied to foliage. The effect of the wash described by Mr. Klee upon the black smut of citrus trees is very satisfactory, the smut scaling off completely and leaving the leaves bright and clean.

#### Remarks by W. W. Smith.

Mr. Smith, of Vacaville, had been appointed to open the discussion on pear-growing, but was detained from attendance at the beginning of the meeting. He stated that good, rich and rather heavy valley land was best for a pear orchard. There should, however, be sand enough in the soil to make it work freely. Before planting the trees the land should be thoroughly prepared. There is no reason to fear getting it too fine; if it be as fine as a dust-bed it will be all the better, and will give a better growth of trees. There should be care in selecting the best stocks on which to bud the pear. California grown seedlings he thought the best, and the seed from the Seckel or the Bon de Jersey gives good seedlings to bud or graft other varieties on.

In handling the young trees great care must be taken not to rub off the buds. After the trees are all planted, they should be cut off to a height of 16 inches, as uniformly as possible—of course looking to see if there are sound buds to form the head where the cut is made. The best tree to plant is a yearling, which comes from the nursery as a straight switch; cutting such trees off at about a uniform height starts all the growths at about the same point and enables one to have a handsome, uniform orchard. At the second year's pruning he cuts back all the branches to about eight inches, cutting to an inside or an outside bud, according as the habit of the tree is too spreading or too upright. If it is desired to send a branch forward without changing its direction, you can cut to an outside bud one year and to an inside bud the next, and so on. Mr. Smith shapes his pear trees on the vase or goblet form, just as he does his stone fruit trees.

In handling the roots of young pear trees, he believes in cutting off the tap root, for this encourages the growth of small lateral roots. The pear is disposed to make a few large roots, and this is especially undesirable in a shallow soil. A deep soil should be had for a pear orchard if possible. It should not be less than six feet deep, and from that up to 30 feet in depth is all the better. Pear roots do not penetrate the hard-pan or rock crevices like vine roots, hence a deeper soil is more necessary for the pear than the vine.

Mr. Smith gave at length the peculiar behavior of the Bartlett in the Vacaville region. The Vacaville Bartletts are clean and as good as any, but they come very late. This is desirable because it brings them to market after all other Bartletts are gone, both here and at the East, and they bring a high price. He has picked Bartletts as late as Nov. 19th, but that is later than usual. The trees were on stiff adobe soil and very dry. They remained very small during the hot weather and then began to grow again in the fall, and grew large and handsome, until picked in November. The explanation given of the behavior of the Vacaville Bartletts is that in the hot weather of July and

August they become, as it were, dormant; they hang on, but do not increase in size. Afterward, when the moisture begins to rise in the soil, they start growth again and ripen up finely. Madeline and Doyenne d'Ete ripen, but Bartlett and winter pears are retarded as described. This peculiar manner of growth could be changed by irrigation, but it is more profitable to have them come in late, as they naturally do. It is true that Bartletts are now being shipped from Vacaville, but they are green.

The Winter Nelis pear does well in Vacaville, but few trees are yet in bearing. The Bartlett generally does best in warm valley situations. Clapp's Favorite ripens before the Bartlett and is a good shipping pear—selling for the Bartlett. Two years ago Mr. Smith grafted Clapp's Favorite into Winter Nelis, and this year he gets a good crop. The variety is a very early bearer.

Pears should be picked at the first indication of ripeness, the first sign being a tendency to let go at the stem, when the pear is gently raised up. This test applies especially to the Bartlett. Picking at this stage and laying away in the dark ripens up the Bartlett well. Sending them East when picked at this stage, they ripen en route and the boxes open well on the Eastern markets.

Mr. Klee commended Clapp's Favorite for canning. This variety does much better than the Bartlett on the coast. In Berkeley the two varieties ripen almost simultaneously. Clapp's bears earlier, however, than the Bartlett, and gives a crop the third year from planting.

Dr. Gibbons spoke of the soil as of great importance in pear-growing. The Winter Nelis does well in Alameda. The Flemish Beauty follows the Seckel, and bears uniformly and heavily. The Vicar is enormous.

Mr. Smith commended the Vicar as a cooking pear. Well baked and allowed to cool, it is delicious, but to eat raw it is no good.

Dr. Kimball, of Haywards, thought the fungus on the pear could not be attributed alone to the coast winds. Up to recent years the pears were clean and healthy, even though the winds blew just as they do now. He had checked the fungus by sifting on air-slaked lime before blossoming, and again when the pears were large as peas. The fruit came clean and good, but the fungus appeared again afterward, and the treatment must be continued.

#### California Fruit at the East.

Dr. W. P. Gibbons, of Alameda, read a short paper, giving the results of his observations on the sale of California fruit at the East. [This paper was published in last week's RURAL.]

Professor W. A. Henry, of the University of Wisconsin, was invited to address the meeting. He spoke of the hardships of the Northwestern fruit-grower because of the unfavorable climate he had to contend with. A few hardy fruits do well, and they have hopes to gain new hardy varieties from the systematic tests which are now being made with Russian fruits. There will, no doubt, be great consumption of California fruits in the large towns and prosperous rural communities of Wisconsin providing good fruit is sent and it is sold at a reasonable figure. The hard, green and tasteless stuff which is now too often sent does not commend itself, and so long as a farmer has to take all the money he can get for a bushel of potatoes to buy a single pound of California fruit he is not apt to buy much of it.

Professor Henry spoke glowingly of the progressive disposition of the Wisconsin farmers and of the liberality with which the State Legislature encouraged agricultural investigation and experimentation. He showed the advantage to the practical farmer of demonstrating the truth about agricultural materials and processes which could only be gained by careful scientific investigation. He appealed to all present to advance such work in California and to stand by Professor Hilgard and his assistants, who are doing this work at the University experiment station. Professor Hilgard, he said, is looked upon by Eastern investigators as at the head of the profession, and unless the continuation and extension of his work is generously provided for in California there are plenty of places at the East which would be glad to secure his services.

Mr. Buell, of Michigan, being called upon, spoke also of the poor quality of much of the California fruit placed upon the market at the

East. He had found by examination that we did grow good fruit here and we must get more of it at the East and sell it cheaper. He upheld the credit of his own State as a fruit region and invited California growers to exhibit their fruit at the State fair, in Jackson, in September.

#### Buds for Budding.

In answer to a question, Mr. Smith said that in taking buds for budding it was desirable to take them from one or two-year-old trees, because then you get leaf buds alone, while if you take them from older trees you are apt to get a leaf bud with fruit buds also. He thought good buds could be had from trees in nursery row provided you took those which are well filled out and mature. Taking buds from a bearing tree may give you fruit sooner than by taking from a young one not yet in bearing.

#### Resolutions on Irrigation.

Judge Blackwood offered the following resolution on irrigation:

*Resolved*, That the State Horticultural Society of California, recognizing the necessity of irrigation to the prosperity and welfare of the State, is in favor of a well-considered plan of irrigation which shall prevent the waters of the State from flowing past the lands of riparian owners to waste, and which shall prevent the appropriators from impairing vested rights without compensation to riparian owners, and which shall give to such appropriators no exclusive right to the water diverted, but which shall provide just means for its fair distribution to all who need it.

After considerable discussion an amendment, introduced by Dr. Kimball, was adopted. It reads as follows:

*Resolved*, That the climatic conditions of this State demand the use of water in all our interior valleys for the most productive agricultural and horticultural results; that the waters of all streams not navigable should be declared for public use, and that any legislation tending to private ownership or monopoly in water will produce untold disaster and oppression.

At the next meeting, on Friday, August 27, the culture of plums and prunes will be discussed. Judge Blackwood will lead the discussion.

#### Grape-growers' Meeting.

A regular meeting of the Grape-growers' and Wine-makers' Association of California will be held at the rooms of the State Board of Viticultural Commissioners, 204 Montgomery street, San Francisco, on the 17th day of August, 1886, at 11 o'clock A. M. A meeting of the directors will be held at 9 o'clock. All in the grape interest are invited to attend the meeting.

**ORIGIN OF CARRIAGES.**—The oldest carriages used by the ladies of England were called whirlicotes or turning coaches. These became unfashionable after Ann, the daughter of Charles IV and Queen of Richard II, about the end of the 14th century, showed the ladies how gracefully they could ride on a side-saddle. Coaches were first known in England in the year 1530. They were introduced from Germany by the Earl of Arundel. They came into general use among the nobility in the year 1605. The celebrated Duke of Buckingham was the first who rode in a coach and six horses; to ridicule this pomp the Earl of Northumberland put eight horses to his carriage. Coaches to hire were first established in London in 1625. There were only 20 of them kept at the principal inns. In the year 1637 there were 50 hackney coaches; in 1654 there were 200; in 1694 they were limited to 700 and in 1755 to 800; there are now 1100.

**NEW YORK DAIRY COMMISSION.**—The State of New York is doing much for its vast dairy interest through its Dairy Commissioner, Hon. Josiah K. Brown, whose second annual report we have just received. It is a closely printed pamphlet of 424 pages, and gives full information of the progress of the work against adulterated dairy products. It has extended appendices which give the results of most careful study and compilation of all that has been ascertained of the materials used in debasing milk and milk products and ways to detect them. The report is, in fact, a compendium of information on these subjects and will be of inestimable service to all students of the subject.

**THE tires on the wagons used for hauling soda from the two soda lakes in Churchill Co., Nev., to Wadsworth, lately made, are immense. The tires are an inch thick and 10 inches wide. Those for the large wheels weigh 750 pounds; those for the small wheels 500 pounds. The wheels for each wagon weigh about 3500 pounds.**

**THE Santa Rosa woolen mills turn out on an average about 26,000 yards of flannel a month. All is sold from the mill, no contracts being taken.**

**THE Manufacturers' Association, of this city, will shortly appoint an agent to permanently represent it at Washington.**



## THE IRRIGATOR.

## Storage Reservoirs.

## One Mistake of the Late Irrigation Convention.

EDITORS PRESS:—I have read with much interest the report of the proceedings of the late Irrigation Convention which you, with your usual enterprise, published in full in the RURAL PRESS.

The action of the convention, in the main, was broad and wise; and I believe so large and intelligent a body of men speaking so ably and so earnestly for the most vital interest of our State cannot fail to produce a profound impression on the public mind, and largely influence legislation in the right direction.

I beg, however, to respectfully protest against the action of the convention in reference to the subject of storage reservoirs. It was sought by delegates from my own county—San Bernardino—to so modify one of the resolutions as to prevent injustice to individuals and companies who have constructed, or who may hereafter construct, reservoirs for storing winter water for summer irrigation. An amendment to this effect was unfortunately voted down through, I believe, a misapprehension of the nature of the storage reservoirs referred to. Mr. John Brown, of San Bernardino, who defended the amendment, made special mention of the Bear valley reservoir, one of the greatest and most beneficent irrigation enterprises ever attempted in California.

Space will not permit me to give an extended description of this great work, now happily finished and ready for use; but I would refer all those who care to know more of the value and nature of mountain reservoirs to a very full and interesting paper on "Bear Valley," published in the RURAL PRESS of April 10, 1886. The facts, briefly stated, in reference to the Bear Valley reservoir, are these:

## The Situation.

Bear valley is the bed of an ancient lake situated in the heart of the San Bernardino mountains, at an altitude of about 6300 feet above the level of the sea. The ancient lake, once confined in this valley, discharged its surplus waters northward into the Mojave desert. By some convulsion of nature ages ago the southern rim of the lake was violently rent asunder, and its waters escaped into the Santa Ana river through a narrow outlet thus made. All that remained of the ancient lake was a shallow pond during the wet season, which dried up altogether in very dry years. The waters of the ancient lake were collected from a watershed or catchment basin, containing an area of 60 square miles. This drainage area, owing to its great elevation, receives three times as much rainfall—including snowfall—as the San Bernardino valley, which lies 5300 feet lower. During the years 1884-5 the rainfall and snowfall of Bear valley was equivalent to 100 inches of rainfall.

## The Water Supply.

I now wish to call special attention to a statement, on the truth of which this defense of the owners of the Bear Valley reservoir depends, viz: That the large precipitation of water in rainfall and snowfall in this large mountain valley has heretofore run, unused to the sea before the beginning of the irrigation season, through a rocky canyon which, during the summer months, is practically dry. On the highest peaks of the San Bernardino mountains, 10,000 feet above the sea, snow remains all the year round, feeding the Santa Ana river and other streams and maintaining a perpetual flow. The snow which falls in Bear valley, at a much lower altitude, melts every year before the irrigation season begins.

It seems to me a reasonable proposition that if this vast amount of water which has heretofore escaped in great floods to the sea in the winter season, when nobody wanted it or could use it, can be kept back by an artificial reservoir, it is an unmixed blessing to the State.

## Now What has been Done?

Mr. F. E. Brown, a civil engineer largely interested in the Redlands colony scheme, determined to find out if a reservoir, on a large scale, for the storage of winter water could be constructed in the San Bernardino mountains. Bear valley was suggested to him by Dr. Ben Barton, of Old San Bernardino, one of the oldest settlers of our county. When Mr. Brown, accompanied by Mr. Hiram Barton, visited Bear valley on a prospecting tour, it was instantly apparent to the practical eye of the civil engineer that the desired locality had been found and that nature had already done the greater part of the work, only a comparatively small outlay being necessary for the construction of a very large reservoir.

The violently rent passage through which the ancient lake had escaped was so narrow that a dam 50 feet wide at the bottom, 300 feet wide at the top and 60 feet high in the center would restore, to a great extent, the former lake, making a reservoir over five miles long, about three-fourths of a mile wide in average width, and of an average depth of about 14 feet, and capable of storing the enormous

quantity of 8,000,000,000 gallons of water. This amount of water will furnish a flow of 6000 inches for 100 days without even then exhausting the supply. It has been estimated that after leaving enough water in the reservoir to guard against extremely dry seasons, enough may be used annually to double the present irrigated lands of the San Bernardino valley. The increased population and wealth made possible by this improvement may be imagined.

Immediately after this important discovery, Messrs. Judson & Brown, founders of the now prosperous and famous Redlands colony, the Messrs. Barton & Son, and other owners of dry and desert lands, formed a company to build this reservoir. They purchased, for \$22,000, about 4000 acres of land covering the site of the reservoir, and erected the dam at a cost of nearly \$100,000.

The reservoir lies wholly within the 4000 acres of land owned by the company, and covers at the present time about 2000 acres.

The Bear Valley Company has not encroached upon the rights of anybody. Neither riparianists nor anti-riparianists have been injured in the slightest degree by this great public improvement. I say public improvement because, directly and indirectly, the whole State is benefited by it.

The water formerly precipitated in Bear valley was sometimes an injury to the State rather than a blessing, because it sometimes rushed out of the mountains in destructive winter floods, sweeping away bridges, roads and everything in its path on its violent passage to the sea, as was the case in 1883-4, when a thousand times the present ditch capacity of San Bernardino county could not have carried this raging torrent.

Now this formerly unused water is held back till the dry season begins, when it may be spread out over lands which, but for this enterprise, might have remained forever a barren desert. Tens of thousands of desert acres have been added to the irrigable area of the county, each acre of which may be made to "blossom as the rose," adding millions of dollars to the taxable property of the State. "Blessed is he who makes two blades of grass to grow where only one grew before," is a beautiful saying, here realized in a most wonderful degree.

Nor is there anything resembling monopoly in this beneficent scheme. The water is owned in shares by a large number of farmers, who use it on their lands, and whose lands would be worthless without its use. It is distributed in such a manner that it can never be absorbed by any great ring or monopoly.

## Who Owns the Water?

Now, in right and equity, who owns the water of the Bear Valley reservoir? Does it belong vaguely to the million individuals who compose the State? Does it belong to the State as a commonwealth? Does it belong to the persons who live on the banks of the Santa Ana river, and who, like the dog in the manger, might insist, under our present law, that this precious water shall go to the ocean in a winter torrent?

Or does it not rather belong, in all justice, to the men who conceived the scheme, and the many farmers who with them invested and risked their money in good faith and for the public good in the accomplishment of this noble work, and whose farms would relapse into deserts were they deprived of its benefits?

The resolution of the Irrigation Convention to which I object would deprive the owners of Bear valley of their property, if it were embodied in legislation such as the convention recommended. This resolution was passed without due consideration of the nature of reservoirs like that in Bear valley, and it is to be hoped that the Legislature now in session will very carefully consider the facts in this particular case, which is only one of many possible cases of the same character.

Adverse legislation would not only ruin hundreds of farmers now interested in Bear valley water, but it would prevent similar enterprises from being carried out, and would greatly retard the material progress of the State of California.

WM. P. ROGERS.

New York, Aug. 1st.

TOKOLOGY.—What is this new word? It means birth-science. It is the title given by Dr. Alice B. Stockham to her "Book for Every Woman"—a work grounded in the conviction that women do not need to suffer so in bearing children, that pain in pregnancy and childbirth is unnecessary and can be escaped by proper living. To teach this proper living, practically, and save needless ailments and agonies, is the purpose of the earnest, motherly author, a Chicago physician, with many years of successful experience and with grown-up children of her own. The photograph which serves as frontispiece is an excellent likeness of the good woman. Her directions as to dress, exercise, diet, marital relations, mental influences, etc., are wise and explicit; the printer has presented them tastefully, and the illustrations in the cover-pocket are suitable. In this revised edition we note marked improvements upon that which we read approvingly a year ago. The work is issued by the Sanitary Publishing Co., Chicago, can be obtained of them, or if desired, through this office. We are pleased to learn that it has reached its fiftieth thousand, and heartily echo the wish of an enthusiastic lady reader that it could be put into the hands of every marriageable girl in the land, as well as every mother, young and old.

## The Legislature.

## Various Propositions on the Irrigation Question.

The distractions of Encampment week broke in upon our report of the propositions brought before the Legislature, looking to a solution of the water problem; so, in this issue, we go back a few days so as to introduce a few points which should be known to those who desire to preserve the chain of legislative thought and action:

Fifth Day—Wednesday, July 28th.

## SENATE.

Senator Reddy offered the following:

The Legislature of the State of California, at its session commencing July 20, 1886, hereby propose that Article XIV of the Constitution of the State be amended by adding the following new section to said Article XIV, two-thirds of all the members elected to the Senate and Assembly respectively voting in favor thereof; The Legislature shall have power, anything to the contrary in this Constitution notwithstanding, to provide for the acquisition by the State of any and all waters, water rights, or water-works within this State, either by donation, purchase or the exercise of the right of eminent domain in the manner provided by law, and to provide for the storage of any and the distribution of all the waters which are now or may hereafter become the property of the State for the purpose of irrigation and other beneficial uses, and may establish or provide for the establishment of irrigation or water districts, and delegate to the directors, trustees or other governing body in such districts, the power to fix the boundaries of and provide for a system of drainage for such districts, to make by-laws and regulations for the government thereof not in conflict or inconsistent with the laws of the State; the power to levy taxes on property in the district for district purposes, to fix the limits and places of holding elections for district purposes. The Legislature may also confer on such irrigation or water districts the power or right of eminent domain and such other powers as it may deem necessary, not in conflict or inconsistent with the laws of the State.

Referred to Committee on Irrigation.

## ASSEMBLY.

Edwards, of Los Angeles, obtained permission to withdraw his constitutional amendment to district the State with regard to irrigation, and introduced a substitute to conform to constitutional provisions, but without making any material changes.

## FIREBAUGH'S RESOLUTION.

The special order of the day was Assembly Concurrent Resolution No. 1, relative to the sale of public lands. It was taken up, and its author, Firebaugh, argued at length in favor of its passage. The preamble and resolution are as follows:

WHEREAS, The great valley of California, between latitude 34 deg., 50 min., near Fort Tejon, and 40 deg., 40 min. near Shasta with an extreme length of 550 miles, and an average width of 60 miles, lying between the Coast Range and Sierra Nevada mountains, and containing an area of nearly 35,000 square miles, or more than 22,000,000 acres of land—an area nearly equal in extent to half of all the Middle States—possesses all the elements of fertility, except moisture, and has a climate agreeable in winter, hot and desiccating in summer, but yet not enervating nor unfavorable to industry; and Whereas, all of this great domain is wonderfully fertile, and capable of being made to yield what, in other countries, would be considered fabulous crops, of all the useful grains, fruits, berries, vegetables, nuts and grasses, if stimulated by water, applied by irrigation to bring out its fertility and make it useful; and

Whereas, The sources from which water for irrigation may be obtained belong, in the main, to the United States, being situated upon, arising in, and flowing through the mountains bordering this great valley, which mountains are largely public land of the United States; but, under the existing laws, the innavigable streams and lakes, the sources in question, will, when the land is sold, pass to the purchasers, and render very difficult, if not impossible, the application of these waters to the greatest good—the irrigation of the valley; and

Whereas, If said waters are dedicated to the State for public use, under legislative control, for irrigation, mining, manufacturing and other beneficial uses, they will be devoted to the general and greatest good in changing sightless deserts into fruitful farms and perennial loveliness, while otherwise they will be grabbed by monopolists and held to their individual use, to the detriment of the general public and the injury of the State. Therefore, Resolved by the Assembly of the State of California, the Senate concurring, That our Senators and Representatives in Congress be requested to urge the amendment of the United States statutes relative to the sale of public lands in the State of California, so that hereafter the innavigable streams and lakes therein will not be conveyed with the land; and to obtain, if possible, a dedication to the State of such streams and lakes for public use, under legislative control, for irrigation, mining, manufacturing and other beneficial uses.

Resolved, That his Excellency, the Governor, is requested to transmit to our Senators and Representatives in Congress a copy of these resolutions.

Dr. May said that if the resolution should pass, there would be nothing left for the House to do but to adjourn and go home. "The passage of that bill," said May, "would leave nothing for us to discuss. Whether or not when land is purchased bordering a river, the river is included in the purchase, I am in doubt."

Firebaugh—The purchaser purchases the right to have the river run there.

May—I differ with the gentleman, and am inclined to the belief that the purchaser purchases only the dry river bed. My own judgment of the resolution is that it will not hold water. I shall vote in favor of transforming the branding-iron into the pruning-hook, and in favor of the thousand small farmers who are building up our great State. I do not believe that it is a fact that our waters are to be grabbed by monopolists.

(Weaver took the chair and Parks the floor.)

## SPEAKER PARKS' REMARKS.

I suppose that some time during the session each member, either by vote or word, will give an opinion on this subject of the ownership of water—it seems to me that is the entire question, the ownership—and when the ownership is determined it will be easy to invent a plan for its distribution. I go farther even than the doctor. I think it is to be regretted that we are called on to take sides on this question at a time when there is such a controversy going on between different interests. It is to be regretted that it could not have been settled before such large expenditures were made for the distribution of the water, that the parties could have had a better understanding of their rights. It won't take me but about five minutes to lay down a proposition that will govern me in my vote, and I think I shall close before that. In the first place, I deny the right of property in water to any one or to any government until it is appropriated. There is no such thing as property in water until it is appropriated, in my judgment. Water is an element so changeable in its nature that it is impossible to be in the possession of any man for any given time, any specified time. It is finding its way to the sea, it is taken up by evaporation and by percolation. The water that runs in the Mississippi to-day does not run to-morrow. The water that falls on the 40-acre tract the gentleman proposes to reserve from Government sales this season does not fall next. The Government had no title in the land until it appropriated it. Governments appropriate land by discovery or otherwise, and make proper provisions for its distribution. Water must be appropriated the same as land before title can be given. There are many ways of appropriating water. If I live on the bank of a stream and have a thousand head of cattle to water in it, the appropriation is in this, in my cattle drinking the water. If I fail to use it to-day it passes on to my neighbor below me, who can then appropriate it. In my judgment, sir, the doctrine of riparian ownership is not a true doctrine in a country like this. Now, the Government may itself appropriate, it may provide for individual appropriations. When our riparian doctrine grew up it was on the question of the use of water for power. The common-law doctrine rests upon the fact that the first appropriator has the first right. That is to say, if Dr. May built a woolen mill on the river and appropriated so much water, he would be entitled by his appropriation to the use of such water, but he could not sit still and let the water pass by him and continue his ownership till it got to the sea, nor has he any power to say to the man who owns the land on which the rain and snow fall that makes the water that he shall not use it. The man living at the mouth of the Mississippi cannot dictate to the man in Minnesota what he shall do with each little rivulet that flows through his land. There is no ownership, except by appropriation, in my judgment. It is one of the elements, and you cannot have a property qualification without appropriation; you cannot sell, you cannot undertake to say you have a property right in the air we breathe. It is the appropriation of the air that makes it property. Each time I inhale a breath of air it is my property, but not before. A man may have property in air, the doctor in his chemical skill might compress air, and might bottle it up if he could not use it; but if I have appropriated 160 acres of air I cannot say that not another man shall use it after it passes my door, or shall bottle the air passing him. The doctor could not say because the trade winds, blowing in from the sea, pass his door I must not have the benefit of the breeze. A man must use his property so that it will not infringe on the rights of others, and a man's right in water is as sacred as his right in any other property.

The resolution is so impracticable that I imagine the man introduced it merely to bring about this discussion. What would any man give for a section of land if another man controlled every drop of water that passed over it? According to that resolution the Government sells water that she has not got. She discounts in the future. We depend upon an unerring law that distributes the water, and no man has any right to it until he makes use of it. I concede this, that the State has a right to appropriate water. We must regulate how individuals can appropriate. But we must make a law which will detain a man from infringing upon the rights of his neighbor.

The Government does not pretend to own the water which flows through the land. It only owns the river bed through which the water flows. If water is worth more for irrigation than it is for navigation, then let us use it for that. Let the navigation go. This is a day of railroads. When the water leaves the channel it covers a large area of land. I only throw this out to show you what might happen if we appropriate too much of it. This is an element



which cuts a large figure in this question and must be carefully thought of.

I should not have discussed this matter today, and would not, only that I think it is full time that each member declared himself on this question.

McGlashen—The water belongs to the people if we can get it there. We are here to legislate on that question.

Firebaugh—I move that further discussion on the resolution be made a special order for Friday, at 11 o'clock.

The motion was carried. Adjourned.

Sixth Day—Thursday, July 29th.

#### SENATE.

Senate Bill No. 1 (Del Valle) was reported back from the Irrigation Committee without recommendation. Del Valle then withdrew the original bill and introduced a substitute, which was referred to the Irrigation Committee, as follows:

"The waters of all natural streams within the State are hereby declared to be the property of the public and dedicated to the use of the people of the State. Such water may be diverted for irrigation or other beneficial purposes, under regulations prescribed by law; provided, that navigation in navigable streams under the control of the United States shall not be impaired; and provided, that the rights now acquired to appropriate, divert and use such water shall not be impaired so long as such water is applied to the purposes for which the same has been appropriated."

Boone offered the following concurrent resolution:

WHEREAS, We as a body are aware of the great necessity which exists in a large portion of this State for a just and equitable system of irrigation that will equally distribute the waters of the State so that the dry and unwatered sections shall be supplied with a proper share thereof for agricultural purposes; and

Whereas, It is apparent to the members of the legislative body that any extended legislation enacted at the present time on the subject of irrigation would be likely to result in the committing of the State to a policy that might result in great injury to large public and private interests; therefore be it

Resolved, That it is the sense of this Legislature that the best interests of the State will be subserved by limiting the action of this extra session to the submission to the people of the State a constitutional amendment in relation to water rights and irrigation matters, and that the plans and details for inaugurating and carrying out such irrigation system or systems be left to the people and to subsequent legislative action.

Referred to the Committee on Irrigation.

#### ASSEMBLY.

Goucher introduced an amendment to the Constitution relative to the public waters of the State. [The amendment is a copy of the one introduced by Senator Reddy, in the Senate on the 28th.]

Moffitt's bill to repeal Section 1422, Civil Code, was reported back to the House, with the recommendation that it pass.

Walrath offered the following substitute to Assembly bill No. 2: An Act to amend Section 1422 of an Act entitled "An Act to establish a Civil Code," approved March 21, 1872, relative to water rights.

Section 1. Section 1422 of an Act entitled an Act to establish a Civil Code, approved March 21, 1872, is hereby amended so as to read as follows: "1422. Nothing in the foregoing sections shall in any manner be construed to interfere with a proprietor's natural right, which shall be construed to be water for family and domestic purposes, for the purpose of watering live-stock, and water for irrigation purposes to such an extent as shall have been appropriated and used up to the time of the passage of the act." Referred to Committee on Irrigation.

Adjourned.

Seventh Day—Friday, July 30th.

#### SENATE.

Nothing was done as to irrigation. Adjourned to Monday, August 2d.

#### ASSEMBLY.

Walrath, Chairman of the Committee on Irrigation, reported back without recommendation Bill No. 7, relative to water and water rights.

Goucher introduced a bill entitled, "An Act concerning the ownership of water in natural innavigable streams."

Assembly Concurrent Resolution No. 1, relative to the sale of public lands in California, was taken up under special order, and Firebaugh, the author, discussed it at length. No other speeches were made, and when a vote was taken, Firebaugh alone voted for it.

Adjourned to Monday, August 2d.

Eighth Day—Monday, August 2d.

#### SENATE.

Nothing done as to irrigation.

#### ASSEMBLY.

The following bills were read the first time: Moffitt's Assembly Bill, No. 2, an Act to amend an Act to establish a Civil Code, approved March 21, 1872.

Section 1. Section 1422 of the Civil Code is hereby repealed.

Section 2. This act shall take effect from and after its passage.

Walrath's Assembly Bill, No. 7, an Act to amend Section 1422 of an Act entitled "An Act to establish a Civil Code," approved March 21, 1872, relative to water rights.

Section 1. Section 1422 of an Act entitled

"An Act to establish a Civil Code," approved March 21, 1872, is hereby amended so as to read as follows:

1422. Nothing in the foregoing sections shall in any manner be construed to interfere with a proprietor's natural right, which shall be construed to be: Water for family and domestic purposes, for the purpose of watering live-stock, and water for irrigation purposes to such an extent as shall have been appropriated and used up to the time of the passage of this act.

Section 2. This act shall take effect and be in force from and after its passage.

The Irrigation Committee reported back Assembly Bills Nos. 3 and 8. The latter, Goucher's bill, was amended and substituted for No. 3, and its passage recommended. The amended bill is as follows:

An Act concerning the ownership of water in natural innavigable streams, and providing for the acquisition thereof by appropriators.

The people of the State of California, represented in Senate and Assembly, do enact as follows:

Section 1. The water of every natural stream within the State of California is the property of the public, and is dedicated to the use of the people of the State. Such water may be appropriated, diverted, and used for irrigation or other beneficial purposes. The right to divert unappropriated waters of any natural stream to such beneficial uses shall be regulated by law. Prior appropriations of water to any such use, whether heretofore or hereafter made, so long as applied to such use or other beneficial purposes, give the better right to the extent of the amount of water actually devoted and applied, and the right of appropriation shall be exercised under legislative regulations; provided, that navigation in navigable streams under the control of the United States shall not be impaired. The English common law of riparian rights, so far as it conflicts with this act, shall not be recognized as a rule of decision in any of the courts of this State.

Section 2. All acts and parts of acts in conflict with this act are hereby repealed.

Section 3. This act shall take effect immediately.

The amended bill was ordered printed.

Ninth Day—Tuesday, Aug. 3d.

Both houses met shortly after midnight, elected A. P. Williams U. S. Senator, and adjourned to enable members to attend the G. A. R. parade in San Francisco.

Tenth Day—Wednesday, Aug. 4th.

#### SENATE.

Nothing done as to irrigation.

#### ASSEMBLY.

Britt introduced an Act proposing an amendment to the Constitution relative to water and water rights. It was referred to the Committee upon Constitutional Amendments. The text of the bill is as follows:

The right of appropriating to public uses the waters of any lake, river, stream, canyon or ravine in this State is reserved to the State and the inhabitants thereof; such public uses shall be deemed to include the use of said water for irrigation, mining and manufacturing purposes, the supplying of any city and county, manufacturing town, or the inhabitants of the same, with fresh water, and such other purposes as the Legislature may by law permit. All persons or corporations appropriating any of the waters of this State for any other purposes above mentioned do so as agents of the State, and as such are subject to legislative control. Any right acquired by any appropriation of said waters for such public uses shall be deemed an interest in real property. The common-law rule of riparian rights, in so far as the same may be inconsistent with the right of appropriators of water, as herein allowed, is hereby forever abolished in this State.

Eleventh Day—Thursday, Aug. 5th.

#### SENATE.

Cross offered the following: "Resolved, That all the committees of the Senate be instructed to report next Monday all bills referred to them." He thought it about time to do something. It was desirable that a test vote be taken at an early day on some proposed irrigation measure, to determine whether or not the Senate is disposed to pass any bills relating to that subject. If not, the members had better go home. He thought the committees could all act on the bills before them by Monday; but, if not, further time could be granted. Most men need spurring up to act promptly in this superheated weather. In his opinion, every Senator knows already how he would vote on any of the bills on the file. Another branch of the State Government is resting, and disposed to do nothing until the Senate shows its hand.

Lynch spoke in favor of the resolution. For his part he was ready to vote in favor of adjourning sine die, and he thought the people of the State would prefer to have the Legislature do so at once.

On motion of Kellogg, the resolution was amended by inserting Tuesday instead of Monday, and was then adopted.

By McClure—An Act to propose an amendment to the Constitution relative to the Legislative Department. [The bill re-enacts the present provisions of the Constitution, and adds the following addition: "But nothing in this section shall prevent the Legislature from passing laws having a local application to regulate the diversion, distribution, and use of water for irrigation purposes, and for the construction

and regulation of canals, ditches, and other works therefor; as the same may be specially required, in any county or district created by law for that purpose."]

#### ASSEMBLY.

Hollister, of Sacramento, presented a memorial from Pomona Grange, Sacramento, which expressed profound alarm at the proposition to reorganize the Supreme Court.

Firebaugh introduced a bill to amend Section 1238 of an Act entitled "An Act to establish a Code of Civil Procedure," approved March 11, 1872, as amended and in effect July 1, 1874, and relating to eminent domain.

Hazard introduced an amendment to Edwards' amendment to Section 25, Article IV, of the Constitution relating to special legislation.

Watson, of Alameda, introduced a proposed Constitutional amendment relative to water and water rights. The bill provides that non-navigable lakes and rivers, not wholly on the lands of one proprietor, shall be the property of the people and subject to diversion and distribution, under laws hereafter to be made.

Assembly Bill No. 2, entitled "An Act to Amend an Act Entitled an Act to Establish a Civil Code," came up for second reading. Firebaugh offered an amendment to Sec. 1 by inserting "in so far that said Sec. 1422 shall not hereafter apply to any of the following counties or any lands or waters therein, to wit: Fresno, Tulare, Kern, San Bernardino, Los Angeles and San Diego; but nothing in this act shall be construed to take away or impair any vested rights to land or water."

Munday opposed the amendment, and said that it had been introduced for the purpose of securing an unconstitutional provision.

May also opposed the amendment, and claimed that if Sec. 1422 was repealed vested rights would not be interfered with.

Upon voting upon the amendment, Firebaugh's voice was alone heard in favor of its passage, and it was lost.

Walrath offered an amendment which he asked might be made a special order for Monday next.

Munday said the amendment was an exact copy of the original Walrath bill, and he hoped that something might be done at once. All that the amendment implies is to put back into the code in different language the purport of Sec. 1422. By a vote of 31 to 29 the further discussion of the matter was made a special order for Monday.

Adjourned.

Thirteenth Day—Monday, August 9th.

#### SENATE—COMMITTEE REPORTS.

Taylor, from the Committee on Irrigation and Water Rights, reported back Senate Bill No. 16, entitled "An Act concerning the ownership, appropriation, diversion and use of waters in this State" (introduced by Del Valle), with a majority recommendation that it pass, and an adverse minority report.

Also, Senate Bill No. 12 (Saxe), "An Act to define riparian rights," with a majority recommendation in favor of and a minority report against its passage.

[The following is the bill: Riparian rights are hereby declared to consist of the right to use of so much of any body of water flowing through or contiguous to the lands of any proprietor as is necessary for domestic use, the watering of stock, irrigation when practicable, and mechanical purposes, provided the water for such mechanical purposes is returned into its original channel, and all surplus of said waters may be used by the others for the same purposes.]

Also, Senate concurrent resolution No. 3, "relative to limiting the action of the extra session to the submission of a constitutional amendment relative to water rights," with the recommendation that it do not pass.

Day, of San Francisco, introduced an amendment to the Constitution providing for five new sections to Article 14 of the Constitution. The measure, in effect, provides that all waters in non-navigable streams and natural courses are to be the property of the public, subject to being leased for a term not exceeding 20 years. Ordered on file.

Senate Bill No. 16 was read the first time.

Day presented a resolution instructing the Judiciary Committee to see what action was necessary to give proper relief to people desirous of irrigation, to ascertain what individual rights to the waters of the State, if any, had accrued under the laws and decisions, and what effect the repeal of Section 1422 would have on the right acquired by the appropriator and riparianist. The resolution was referred to the Judiciary Committee.

Adjourned.

Twelfth Day—Friday, Aug. 6th.

#### SENATE.

Kellogg introduced an amendment to the Constitution, relative to the waters of the State. Section 1 provides that the waters of every natural or artificial innavigable stream within the State, and the use of all such water, is dedicated to the people of the State for irrigation, mining, manufacturing and other beneficial purposes, subject to the control and regulation by the State in a manner to be provided by legislative enactment.

The water of all such streams and the right to the use of such water is subject to condemnation for such uses and purposes upon compensation thereof being made to all persons whose claim to such water or use thereof, either by prior appropriation or otherwise, has been estab-

lished by law, or the decisions of competent courts, or otherwise.

Section 3 says that the State shall be divided into five districts, and that in each district three commissioners shall be elected, the salary to be \$250 per month each. The term of office shall be four years.

The Legislature shall provide by law for the suitable and equitable division and distribution of the water of the natural or artificial innavigable streams of the State so as to secure the greatest beneficial use.

The Legislature is authorized to pass laws providing for the issuance of bonds of the State not exceeding the sum of \$70,000,000, said bonds to be payable 20 years from date.

The Legislature shall have the power to district the State into State Irrigation districts, but until such apportionment is made the following shall be the districts:

District No. 1—Del Norte, Siskiyou, Trinity, Shasta, Modoc, Lassen, Plumas, Sierra, Nevada, Placer, El Dorado, Anador, Alpine, Calaveras, Mono, Inyo.

District No. 2—Humboldt, Mendocino, Tehama, Colusa, Butte, Yuba, Sutter, Lake, Sonoma, Napa, Yolo, Sacramento, Solano, Marin, Contra Costa.

District No. 3—San Francisco, Alameda, San Mateo.

District No. 4—Santa Clara, Santa Cruz, San Joaquin, Stanislaus, Tuolumne, Mariposa, San Benito, Monterey, San Luis Obispo, Santa Barbara, Ventura, Los Angeles.

District No. 5—Fresno, Tulare, Merced, Kern, San Bernardino, San Diego.

#### COMMITTEE REPORTS.

Taylor, from the Committee on Irrigation and Water Rights, reported back Senate Bill No. 16, with a majority and minority report. Placed on file.

[The following is the bill: An Act concerning the ownership, appropriation, diversion and use of waters in this State. Section 1. The waters of all natural streams within the State are hereby declared to be the property of the public and dedicated to the use of the people of the State. Such waters may be diverted and used for irrigation or other beneficial purposes under the regulations prescribed by law; provided, that navigation in innavigable streams under the control of the United States shall not be impaired; and provided, that the rights now acquired to appropriate, divert and use the water shall not be impaired so long as such water is applied to the purposes for which the same has been appropriated and for other beneficial purposes.]

#### ASSEMBLY.

On motion of Heath, the rules were suspended and Constitutional Amendment No. 7, as amended by the committee, was read the first time. It is an amendment to Section 25, Article IV, and provides that special legislation shall not be had upon certain subjects, and concluding: "But nothing in this section shall prevent the Legislature from passing laws having local application, regulating the diversion, distribution and use of water for irrigation, and the construction and regulation of canals, ditches and other works therefor, as the same may be specially required, in any county or counties, or in any district created by law for that purpose."

Assembly Bill No. 8, introduced by Goucher, was read first time. All the other bills upon the first reading file were passed.

#### San Luis Obispo Lands.

The West Coast Land Company has entered upon a great work for themselves and for San Luis Obispo county. It involves the settlement in our borders of at least 10,000 persons, necessarily citizens of the most valuable character in point of means and intelligence. From the character of the enterprise and the reputation of the gentlemen who are to conduct it, a brilliant success must certainly follow. Its directors comprise Mr. George C. Perkins, recently the Governor of California; Mr. John L. Howard, a principal executive of the Oregon Improvement Co., which embraces the principal lines of steamships on the coast and several railroad lines; Mr. R. E. Jack, the president of the banking house of Jack, Goldtree & Co.; Mr. Isaac Goldtree, the head of the mercantile house of Goldtree Brothers, established here for 20 years, and Mr. C. H. Phillips, whose name is a synonym for energy and business sagacity. It is a notable combination, only possible in the face of so great a work, and their representations will have the strongest possible effect upon all intending immigrants. — San Luis Obispo Tribune.

#### Consumption Cured.

An old physician, retired from practice, having had placed in his hands by an East India missionary the formula of a simple vegetable remedy for the speedy and permanent cure of Consumption, Bronchitis, Catarrh, Asthma and all throat and lung affections, also a positive and radical cure for Nervous Debility and all Nervous Complaints, after having tested its wonderful curative powers in thousands of cases, has felt it his duty to make it known to his suffering fellows. Actuated by this motive and a desire to relieve human suffering, I will send, free of charge, to all who desire it, this recipe, in German, French, or English, with full directions for preparing and using. Sent by mail by addressing with stamp, naming this paper, W. A. Novas, 149 Power's Block, Rochester, N. Y.

#### Cheap Money for Farmers.

Farmers in this State will be glad to learn that they can borrow on mortgage any amount, from \$500 to \$500,000, from S. D. Hovey, 330 Pine St., San Francisco, at 6 to 7 per cent and taxes.



## PACIFIC COAST WEATHER FOR THE WEEK.

[Furnished for publication in this paper by NELSON GOROM, Sergeant Signal Service Corps, U. S. A.]

DATE.	Portland.				Red Bluff.				Sacramento.				S. Francisco.				Los Angeles.				San Diego.			
	Rain.....	Temp.....	Wind.....	Weather..	Rain.....	Temp.....	Wind.....	Weather..	Rain.....	Temp....	Wind....	Weather..	Rain.....	Temp.....	Wind.....	Weather..	Rain.....	Temp.....	Wind.....	Weather..	Rain.....	Temp.....	Wind.....	Weather..
Aug. 4-11.																								
Thursday .....	.00	79	NW	CL	.00	100	SE	CL	.00	90	SW	CL	—	64	SW	CL	.00	84	W	CL	.00	75	SW	CL
Friday .....	.30	84	S	CL	.00	92	S	CL	.00	72	SW	CL	.00	62	W	Fr.	.00	85	SW	Cy.	.00	75	NW	Fr.
Saturday ... ..	—	72	N	Fr.	.00	86	S	CL	.00	78	S	CL	—	60	W	Fr.	.00	91	SW	CL	.00	73	NW	CL
Sunday .....	.00	71	SW	Cy.	.00	84	S	CL	.00	79	S	Fr.	—	59	SW	CL	.00	89	W	CL	.00	78	NW	CL
Monday .....	.00	71	W	CL	.00	87	NW	Cy.	.00	82	NW	Fr.	.00	73	SW	CL	.00	90	W	CL	.00	75	NW	CL
Tuesday .....	.00	76	NW	CL	.00	96	N	CL	.00	88	NW	CL	.00	76	W	CL	.00	96	W	CL	.00	78	NW	CL
Wednesday .....	.00	79	NW	CL	.00	96	SW	CL	.00	91	SW	CL	.00	65	W	CL	.00	91	SW	CL	.00	70	SW	CL
Totals.....	—	—	—	—	.00	—	—	—	.00	—	—	—	—	—	—	—	.00	—	—	—	.00	—	—	—

EXPLANATION.—CL for clear; Cy., cloudy; Fr., fair; Fy., foggy; — indicates too small to measure. Temperature Wind and weather at 12:00 M. (Pacific Standard time), with amount of rainfall in the preceding 24 hours.

## List of U. S. Patents for Pacific Coast Inventors.

Reported by Dewey &amp; Co., Pioneer Patent Solicitors for Pacific States.

From the official report of U. S. Patents in Dewey &amp; Co.'s Patent Office Library, 252 Market St., S. F.

FOR WEEK ENDING AUGUST 3, 1886.

- 346,716.—ANTI-FRICTION BEARING—L. W. Boyer, S. F.
- 346,473.—WASHING MACHINE—Gooch & Olsen, Bellingham, W. T.
- 346,547.—PORTABLE BOOK-HOLDER—Mary J. Holt, S. F.
- 346,589.—WHIFFLETREE CLIP—G. C. Johnson, Fort Bragg, Cal.
- 346,590.—WHIFFLETREE HOOK—G. C. Johnson, Fort Bragg, Cal.
- 346,766.—GANG-PLOW—E. H. Nicholson, Santa Maria, Cal.
- 346,682.—BOOT-JACK—Wm. Quinlan, Punta Arenas, Cal.
- 346,776.—BOOT-PROTECTOR—L. C. Rodenberger, Medford, Ogn.
- 346,624.—VEHICLE SHAFT—W. L. Walker, Brooks, Cal.

NOTE.—Copies of U. S. and Foreign Patents furnished by Dewey &amp; Co., in the shortest time possible (by mail or telegraphic order). American and Foreign patents obtained, and general patent business for Pacific Coast inventors transacted with perfect security, at reasonable rates and in the shortest possible time.

## The Coming State Fair.

The State Board of Agriculture met last evening, with the following members present: Messrs. Finigan, Shippee, Chase, La Rue, Green, Shafter, Hancock, and President Carr. Much of the preliminary business of the coming fair was agreed upon.

A communication was received through Governor Stoneman from the Governor of Minnesota inviting the board to suggest the names of eight delegates to the Farmers' International Congress, to be held at St. Paul, Minn., August 25, 26 and 27, 1886. The matter was referred to President Carr, with power to act.

The secretary was instructed to advertise for bids for hay and straw.

Messrs. Green, La Rue, Finigan, Hancock and Chase were appointed a committee to examine combined harvesters in the field, in the vicinity of Stockton, on Thursday and Friday of next week.

The usual amounts in premiums were appropriated for special floral displays during the coming fair.

The sum of \$150 was appropriated toward a State pigeon-shooting tournament during the fair, the same to be under the direction of D. J. Stevens, of Elk Grove.

The entries for races were opened and considered and found to exceed the expectations of the board in point of numbers. The running races contain from 9 to 28 entries each. The trotting and pacing races filled in every case except the 2:22 class, which was referred to the Speed Programme Committee for action. Our limited space prevents publication in full this issue.

The board resolved not to permit book-making upon the track.

The outlook at present is very encouraging in every department. Much space has already been engaged in the pavilion. The large number of stalls engaged at the park insures a successful exhibition there. Over 300 cattle stalls have already been engaged, and the horse stalls in proportion.—Record-Union, August 5.

FARMERS' THRASHERS.—Many grain-growers who cultivate comparatively small farms in the valleys, and others who are out of the great grain region of the State, can often make money by owning their own thrashing outfit and using the time of their own hands and animals. Especially in the hilly districts of the State it is very desirable to have a small thrasher which can be easily moved from place to place, and neighbors can often combine to advantage and help each other get out the grain. While in this State we can use to advantage the grandest harvesters in existence, we have also many situations where a small machine is very handy and profitable. On the last page of this issue there is an advertisement by G. G. Wickson & Co. of the latest styles of small thrashers and horse-powers.

## Complimentary Samples.

Persons receiving this paper marked are requested to examine its contents, terms of subscription, and give it their own patronage, and, as far as practicable, aid in circulating the journal, and making its value more widely known to others, and extending its influence in the cause it faithfully serves. Subscription rate, \$3 a year. Extra copies mailed for 10 cents, if ordered soon enough. If already a subscriber please show the paper to others.

## Our Agents.

OUR FRIENDS can do much in aid of our paper and the cause of practical knowledge and science, by assisting Agents in their labors of canvassing, by lending their influence and encouraging favors. We intend to send none but worthy men.

JARED C. HOAG—California.  
G. W. INGALLS—Arizona.  
E. L. RICHARDS—San Diego Co.  
R. G. HUSTON—Idaho and Montana.  
Geo. McDOWELL—San Luis Obispo and Santa Clara Co's.  
FRANK W. SMITH—Montana, Utah and Colorado.  
M. S. PRIME—Alameda Co.

## Don't Fail to Write.

Should this paper be received by any subscriber who does not want it, or beyond the time he intends to pay for it, let him not fail to write us direct to stop it. A postal card (costing one cent only) will suffice. We will not knowingly send the paper to anyone who does not wish it, but if it is continued, through the failure of the subscriber to notify us to discontinue it, or some irresponsible party requested to stop it, we shall positively demand payment for the time it is sent. LOOK CAREFULLY AT THE LABEL ON YOUR PAPER.

## Government Seeds.

Senator Stanford has sent to the German Land & Cattle Co. a quantity of seeds for distribution, which will be sent, free of charge, to any one applying for them. Address, German Land & Cattle Co., 123 California street, San Francisco, Cal.

## FLOWERS, BOUQUETS, ETC.

With the many improvements inaugurated at my Nurseries during the season, I am now better prepared than ever to furnish all manner of designs for exquisite Bouquets, Flowers for Marriage Ceremonies, private and public Parties and all other Entertainments. Will also rent shrubs in pots or boxes for Hall or House Decorations. Mourning Wreaths and other Funeral Designs to order at the shortest notice, and on reasonable terms. EMIL BOURGUIGNON, Naissevain Villa, near Narrow Gauge Railroad, 1/4 mile from Depot. Telephone No. 34 free to all patrons. Floral Depot, 72 N. 1st St., San Jose.

ALL misfits, ocularly demonstrated errors of refraction, carefully diagnosed. C. Muller, the leading optician, 135 Montgomery street. x



## ARE YOU USING

## Wellington's Improved Egg Food For Poultry?

## IF NOT, WHY NOT?

NOTE.—Eggs have now doubled in price and will continue to advance to 50 or 60 cents per dozen, and from this time on every one should feed this Egg Food in order to have plenty of Eggs to sell at those food prices.

## Excelsior Improved Hot Water Incubator.

NOTE.—This is the only Incubator in the world which is run literally without any expense whatever, saving the full price of the machine every year used—in oil alone. We use NO LAMP, no oil, no heating apparatus with the machine, and guarantee it to run strictly to any degree.

## EGG TESTER. The long-needed Tester just patented. Testing six eggs at a time, as quick as one at a time by the usual process, and six times as effectually.

## SEEDS. Alfalfa, Grass, Clover, Vegetable, Flower, Fruit, and Seeds of every variety.

B. F. WELLINGTON, Proprietor, Inventor, and Importer and Dealer in Seeds, 425 Washington St., San Francisco, Cal.

## THE GOAT-BREEDERS' ANNUAL MEETING

Will take place on Thursday, September 16, 1886, at Pioneer Hall, SACRAMENTO, at 8 o'clock P. M. of said day.

All Goat-breeders invited to attend at that meeting, and also requested to exhibit specimens of their flocks at the State Fair. C. W. SCHLEIFFER, Chairman. July 29, 1886.

## Educational.

## MILLS SEMINARY.

The next term of this well-known Institution will commence on

Wednesday.....August 4, 1886.

For Circulars giving particulars, address

MRS. C. T. MILLS,  
Mills Seminary P. O., Alameda Co., Cal.

## VAN NESS SEMINARY

San Francisco, Cal.

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Young Ladies and Children,  
1222 Pine St., San Francisco.

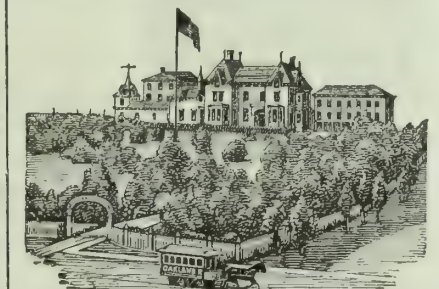
Thorough training in practical studies and accomplishments, and pleasant surroundings, are the principal advantages offered.

Fall Term Opens July 26, 1886.

For Catalogues and particulars, apply to MRS. S. B. GAMBLE, or MRS. E. H. WOOD.

REFERENCES.—Rev. W. I. Kip, Bishop of California; Rev. C. O. Tillotson, Santa Cruz; Hon. C. H. Hartson, Napa; John D. Yost, San Francisco; F. A. Hihn, Santa Cruz; E. J. Wilson, Vallejo; Capt. A. D. Wood, San Francisco; Eugene Sherwood, San Francisco.

## California Military Academy, Oakland, Cal.



Special Feature—Commercial Department. Next Term begins July 19, 1886. Send for circular.

COL. W. H. O'BRIEN, Principal.

## MISS BISBEE'S SCHOOL

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1020 OAK STREET, - - OAKLAND.

WILL RE-OPEN

WEDNESDAY, JULY 28th, 1886.

## BOWENS ACADEMY,

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First-Class Boarding School for Boys.

Preparatory, Commercial, and Academic Classes. Preparatory Department, \$30 per school month. Commercial and Academic Department, \$35 per school month. Next Term will begin Monday, August 2, 1886. Send for Circular.

T. STEWART BOWENS, A. B., T. C. D., Principal.

## STOCKTON

Business Telegraph Institute and NORMAL SCHOOL.

Open day and evening for both sexes. Expenses less than one-half the usual rates. Excellent board in private families from \$4 to \$10 per month. Address, for College Journal and Circulars, J. C. BAINBRIDGE, Principal, Stockton, Cal.

## UNIVERSITY OF THE PACIFIC,

Between San Jose and Santa Clara.

(Founded in 1851.) Twenty-two Professors and Instructors. Courses of study embrace the regular college curriculum, four years; Conservatory of Music course, Post-graduate course leading to degree of Ph. D.; Business course, and complete Preparatory courses leading to and connecting with College Classes. All classes open to both sexes. \$250 per year includes ALL REGULAR EXPENSES. Fall Term begins Aug. 11th. Address, C. C. STRATTON, Pres., SAN JOSE, CAL.

## TRINITY SCHOOL,

1534 MISSION ST., SAN FRANCISCO.

CHRISTMAS TERM OPENS

Monday.....August 2, 1886

REV. E. B. SPALDING, Rector.

## HEALD'S BUSINESS COLLEGE,

24 Post St. S. F.

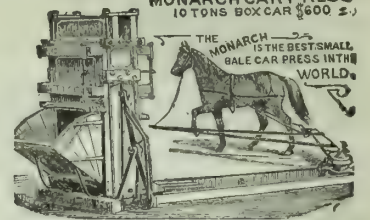
Send for Circular.

CUTS FOR SALE. Duplicates of most of the Engravings appearing in this journal will be sold, after thirty days from date used, at very reasonable prices.

—THE—

## MONARCH PRESS.

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10 TONS BOX CAR \$600 20



Puts 10 Tons in a Box Car.

Bales from 10 to 15 tons per day.

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STEEL BALING TIES,  
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HOLLOW IRON AXLE WAGONS.

SEND FOR CATALOGUE.

## CALIFORNIA STATE FAIR—1886.

At Sacramento, Sept. 6th to 18th.  
TWO WEEKS.

The Attention of the Farming Community of this State is particularly called to the Liberal Awards, and advantages offered for

COUNTY EXHIBITS.

The importance of an exhibit made by separate counties, showing the productive qualities of the various sections of our State, has become more apparent each year since the system was inaugurated by this Board. Recognizing the interest made manifest in the past by both the public and the exhibitors, through whose energy and enterprise valuable agricultural lands have been brought to the notice of the world, and counties with small populations have increased in a manifold degree, by reason of the producer having come forward with his products that were of such quality as to enable him to meet all competitors, the Board have deemed it proper to increase the premiums in this Department, and to that end have appropriated \$2000 to be distributed among the various counties making displays under the following provisions: To those who may have charge of the exhibits, we would call their attention to the fact that these awards will be made for the most extensive, perfect, and varied exhibit of Farm Products (exclusive of live stock) exhibited as a County Production. Thus it will be seen that it is to be wholly devoted to the products of the farms located in the county where the exhibit is made from, and does not include manufactured goods of any kind or character except those grown and raised in the county from whence the display comes.

For the best display, as per explanation above, First premium of \$500, cash. The remaining exhibits shall receive premiums in proportion to their excellence, as compared with that receiving the First Premium. Competition to be between counties only. That is to say, that the entire exhibit made by one county must compete against the entire exhibit of another county. The premium awarded to each county exhibit will be paid to the committee in charge of said exhibit.

The State Board of Agriculture earnestly desires the hearty co-operation of the various subordinate Granges throughout the State, in making this exhibition of California's products a success, whereby the varied products of different localities may be fully shown. We would ask the appointment of a committee from the Grange in each county to call upon and urge the patrons to make a display representing their respective counties.

Address the Secretary at Sacramento for Premium Lists and other information.

JESSE D. CARR, President.

EDWIN F. SMITH, Sacramento.

## TWENTY-FIRST

## Mechanics' Institute Fair,

SAN FRANCISCO, 1886,

Opens August 24th, Closes September 25th,

—IN THEIR—

IMMENSE PAVILION ON LARKIN ST.,

WITH A GRAND DISPLAY OF

NATURAL AND MANUFACTURED PRODUCTS OF THE PACIFIC COAST, including a magnificent collection of Oil and Water Color Paintings, Art Work, and Photography; MACHINERY in operation; a SPECIAL FLORAL EXHIBIT each week; the finest display of FRUITS, GRAINS, and VEGETABLES ever before presented to the people, and a Grand Instrumental Concert day and evening.

The San Francisco and North Pacific Railroad Company and the South Pacific Coast Railroad Company, and the steamers under the management of Messrs. Goodall, Perkins & Co. will transport perishable articles consigned to the Mechanics' Institute Exhibition free of charge, and other articles at half rates.

LIBERAL PREMIUMS of Gold, Silver and Bronze Medals, Diplomas and Cash, will be awarded. Members of the Institute entitled to Season Tickets at half rates.

PRICES OF ADMISSION.—Double Season Ticket, \$5; Single Season Ticket, \$3; Adult's Single Admission, 50 Cents; Children's Single Admission, 25 Cents.

Full information given or sent on application to the Assistant Secretary, 31 Post St.

W. P. STOUT, Sec'y.  
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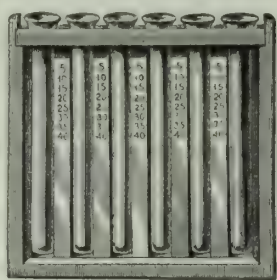
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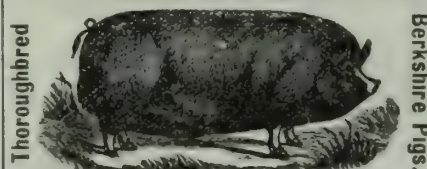
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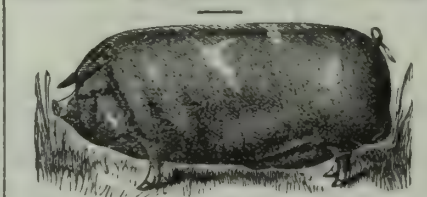


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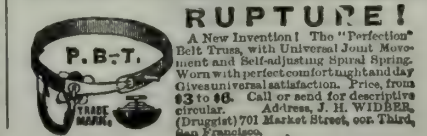
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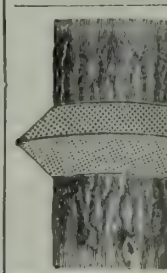


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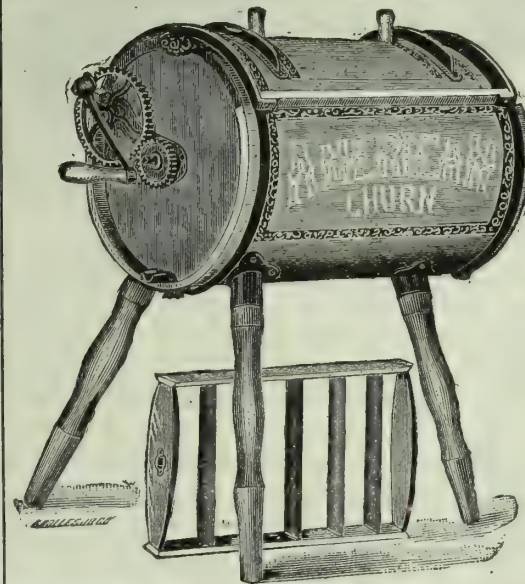
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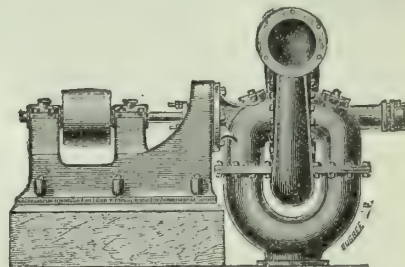
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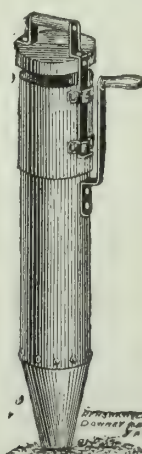
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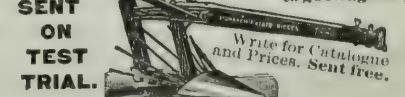
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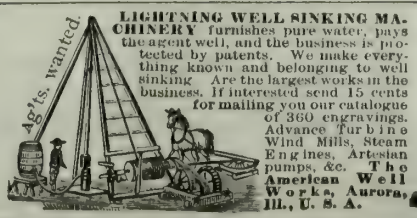


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## S. H. MARKET REPORT

NOTE.—Our quotations are for Wednesday, not Saturday  
the date which the paper bears.

## Weekly Market Review.

## DOMESTIC PRODUCE, ETC.

SAN FRANCISCO, August 11, 1886.

The produce markets are rather stronger this week. The details of the course of each item will appear in our reports below.

The latest by cable is as follows:

LIVERPOOL, Aug. 11.—WHEAT—Not much inquiry. California spot lots, 6s 5d to 6s 3d; off coast, 3s 9d to 3s 3d; just shipped, 3s 6d; nearly due, 3s 3d; cargoes off coast, quiet; on passage, not much demand; Mark Lane Wheat, slow; Maize, steady; English and French country markets, generally firm; Wheat and Flour in Paris, firm; quantity of Wheat on passage to Continent, 340,000 qrs.; Wheat and Flour to U. K., 2,025,000; weather in England, finer.

## English Wheat Markets.

LONDON, Aug. 7.—The wheat market is firm, but not quotably higher. The weather is favorable to the crops. At present, trade is in an expectant attitude awaiting the definite outcome of the crops in Europe and America. In Europe the promise is for generally fair, if not large, crops. And, as regards America, notwithstanding the recent unfavorable reports from the Atlantic side, which are believed to have been exaggerated for speculative purposes, a crop of not less than 400,000,000 bushels is reckoned upon. Consequently there seems no reason at present to anticipate any deficiency in the world's supply, and with California off coast at about 3s 6d, the only inclination to pay a premium of 1s and 1s 6d for distant positions is founded upon the possibility of a wet harvest. The buying power of the trade has been seriously curtailed by long-continued losses.

## Foreign Review.

LONDON, Aug. 9.—The *Mark Lane Express* in its review of the British grain trade for the past week says: The weather has been unfavorable for wheat. Prices are steady. Sales of English wheat during the week were 41,123 quarters at 3s, against 38,070 quarters at 3s 6d during the corresponding period of last year. Oats are rather dearer. Barley and corn are slow of sale. Mixed American corn is scarce and 6d dearer. Four cargoes of wheat arrived; four were sold, including one of California at 3s, one of Oregon at 3s 6d, and one remained. Trade in forward suffered from apathy. The market to-day was quiet. There was only a very small supply of English wheat, which sold at full late rates. English flour was steady and not in favor with buyers. There was an excessive supply of foreign, and the market for it was depressed. American mixed corn is very scarce and brings 21s ex ship. Oats were steady. Barley was firm but quiet. Beans and Peas were 6d dearer.

## New York Wheat Market.

NEW YORK, Aug. 8.—Wheat prices are firm; options were 1/4 higher at close; September, 86 1/2 cents; October, 87 1/2; November, 88 1/2; December, 89 1/2.

## Eastern Wool Markets.

NEW YORK, Aug. 8.—The general distribution of stock has been somewhat irregular, as operators are not all in close accord as to the policy most desirable in conducting the market. The differences, however, are hardly sufficient to make a positively disturbing element. There is, however, reason to believe that in some cases the future was anticipated in the investments made, and two or three large sales were put through of which no report is given. Sales include 200,000 pounds Valley Oregon at 24c; 10,000 pounds unwashed Colorado at 20c; 2000 pounds Colorado pulled at 17 1/2 @ 28 1/2 c; 2000 pounds same at 27 @ 30c; 1000 pounds scoured spring California at 60c. The Philadelphia market is quieter. Buyers have been unable to meet the extreme views of sellers, and, as far as practicable, have been holding off. The market, in fact, has shown very stubborn firmness in the face of the bearish talk that interested parties have indulged in to depress prices. Sales include 50,000 pounds California at 22 1/2 c; 3200 pounds California at 23 1/2 @ 24c; 3500 pounds California at 22 1/2 c; 3200 pounds California at 23 1/2 @ 24c; 3500 pounds California at 18 1/2 c. The Boston market is less active, with smaller sales and less interest from manufacturers. Sales include 35,000 pounds California spring at 23 @ 25c; 25,000 pounds California spring at 37 1/2 c.

NEW YORK, Aug. 10.—Wool is quiet and firm. Domestic fleeces, 30 @ 38c @ lb; pulled, 14 @ 35c; Texas, 9 @ 25c.

BOSTON, Aug. 7.—There is a more quiet market for all kinds of wool than last week, the sales of the week amounting to 247,200 pounds. The prices show very little, if any, change. Fine wools were a trifle easier earlier in the week, but at the close firm, under the influence of higher markets abroad for all good and medium wools. Holders are stiff in their views, and will accept only the full asking prices. These stocks cannot be duplicated at interior points at prices which will permit them to be sold at the present prices quoted on the seaboard. The California wool market has been comparatively quiet, but prices are firm, as previously noticed. The sales here for the past week have been 35,000 pounds spring at 19 to 25 cents and 100,000 pounds spring, part choice, at 28c. There has been considerable movement in Oregon wools with prices at 23 @ 25 1/2 c. The receipts of the week have been 20,540 bales domestic and 1376 bales foreign.

BOSTON, Aug. 10.—Wool is firm with fair demand. Ohio and Pennsylvania fleeces, 32c @ lb; do XX, 35c; do XX and above 36c; Michigan X fleeces, 31 @ 37c; medium washed wools, 36 @ 38c; unwashed wools, 25 @ 30c.

PHILADELPHIA, Aug. 10.—Wool is quiet and prices steady. Ohio, Pennsylvania and West Virginia medium, 37 1/2 @ 38c @ lb; New York, Michigan, Indiana and Western coarse, 37 @ 38c; fine washed delaine and XX, 36 @ 38c; medium washed combing

and delaine, 38 @ 40c; coarse and unwashed combing and delaine, 29 @ 30c.

## New York Hop Market.

NEW YORK, Aug. 8.—Dealers seem still to be very cautious, with a marked disinclination to part with hops with good body, flavor and keeping qualities. Brewers are showing more interest. Several were in the market for fine goods previously offered at 25c, but were unsuccessful in finding the same, except at a good margin over that rate, and 27 @ 29c was as low as they could secure a desirable article. For comparatively few really choice goods holders will not get below 30c. Letters from the interior state that some New York dealers are offering to sell fine goods at 25c, but withdrawing when met by offers to take stock. Several contracts were made by brewers for 1888. Pacific Coast hops at 25c. Cable advices from Europe report increased strength, both in England and on the Continent. One cable stated that the estimates of the German crop were reduced to one-half of last year's crop, and that the estimates of the English crop had been modified. Pacific Coast crop of 1885, common to choice, 20 @ 27 1/2 c.

NEW YORK, Aug. 10.—Inquiry among the hop dealers to-day elicits the fact that the market is dull and stagnant. The full prices quoted some time ago are now hard to obtain. Very few, if any, orders were in from brewers. Local dealers do not appear as buyers, and offerings are moderate, with only fair and medium qualities shown, for which full quoted prices are asked. For the moment the situation is such that anything in the way of round lots could be placed only at concessions, while any spirit to demand would be very apt to stiffen the market materially. The quotations are as follows for New York State crop of 1885: Prime to choice, cash, 28 @ 30c; medium grades, 23 @ 26c; low grades, 15 @ 20c. New York State crop of 1884: Fair to prime, 18 @ 22c. Pacific Coast crop of 1885: Common to choice, 20 @ 27 1/2 c.

## California Fruit at the East.

CHICAGO, Aug. 7.—The special fruit train of six cars from California, which arrived here yesterday, was for Butts & Frye, Earl Bros. and Thacher Bros. Porter Bros. also received a special train from the same State. There is one fact of which shippers should not lose sight, which is, that while fruit may appear in fine shape when it is loaded into the cars in California, much of it has a very different appearance on its arrival here. Take Bartlett pears, for instance, large portions of which are "cooked" or "baked" (a term used by fruitmen) on their arrival here. Pears in one part of the box appear all right, while in another part they have become so heated that they have all turned black, and are almost worthless. This is one reason why Chicago will undoubtedly, through necessity, always have to be the principal distributing point for all California fruits, as it is necessary to overhaul all fruit here, and open it up and select out that which is green and in good condition for Eastern shipment, and sell the remainder here for what it will bring. It is reported that some cars which have been consigned direct from California to Eastern markets have arrived in such poor condition that the prices have been but little if any more than the freight charges. In fact, some cars consigned to Chicago have arrived in such poor order during the last ten days that, taken in connection with the low prices, there must be serious losses to growers and shippers, and to have consigned them further East would have resulted in almost a total loss. Bartlett pears are mostly in bad condition, and on this account are selling at low prices at 1 1/2 @ 2 per box. Muscat grapes arrived in fine order, and bring 1 1/2 @ 2 per box, but with increased receipts it is expected they will share the same fate as that of the Bartlett pears, and prices will decline materially. It is doubted by commission men if Muscat grapes will bring 1 per crate when the crop arrives freely, and the same may be said of Gros pines, which are at present selling at 1 1/2 @ 2. Peaches are doing very well and bring from 1 1/2 @ 1 7/5 per crate, owing to condition, but as the Delaware and Michigan peach crop is near at hand, it is probable lower prices will have to be accepted for those now in. It is getting late in the season for nearly all early varieties of plums, for which prices are ruling low.

CHICAGO, Aug. 7.—Plums, 20-lb crates, \$1.00 to \$1.50; Nectarines, \$1.50 to \$2.00; Crawford Peaches, 20-lb crates, \$1.75 to \$2.25; Bartlett Pears, 40-lb box, \$1.50 to \$2.50; Grapes, 20-lbs Fontainebleau, \$1.25 to \$1.50; Muscat, \$1.75 to \$2.25; Black Hamburg, \$3.00 to \$3.75.

## Local Markets.

BARLEY—The market is strong and rates about 5c higher all around than last week. Call sales to-day were as follows: Spot—100 tons, 88c; 100, 85 1/2 c. Seller 1886—200 tons, 85c; 100, 84 1/2 c; 200, 84 1/2 c; 100, 84 1/2 c; 100, 84 1/2 c. Seller 10 days, on cars or afloat—100 tons, 86 1/2 c @ ctl. Buyer 1886—300 tons, 90c; 400, 90 1/2 c. Seller 1886—500 tons, 84 1/2 c; 100, 84 1/2 c; 500, 84 1/2 c; 300, 84 1/2 c @ ctl.

BEANS—Beans are not materially changed, though there have been slight fluctuations in white and pea beans.

CORN—Corn is higher; about 10c per ctl. on all good lots.

FEED—The best hay has sold up to \$13, but the general tendency is lower. We quote: Alfalfa, \$6 @ \$9; Oat, \$7 @ 9; Barley, \$5 @ 8; Wheat, \$9 @ 12.50 @ ton.

OATS—Oats have advanced. For the choicest there is no price, as the supply is small and prices irregular, up to \$1.75 @ ctl.

PROVISIONS—Prices are advancing. Hams are notably higher this week.

WHEAT—Wheat rules about the same as last week. Call sales to-day were as follows: Buyer season—100 tons, \$1.33 1/2; 400, \$1.33 1/2; Seller, 1886—5900 tons, \$1.24; 100, \$1.24 1/2 per ctl. Buyer season—1200 tons, \$1.33 1/2. Buyer 1886—100 tons, \$1.29 1/2; 100, \$1.29 1/2; Seller 1886—200 tons, \$1.24 1/2; 700, \$1.24 1/2 per ctl.

[COMMUNICATED.]

## Market Information.

## Live-stock.

Beef cattle are barely steady for choice, but fair to good are weak, with a strong selling pressure reported. Cows sold as low as 4 cts the past week. Mutton sheep are weak, with the offerings reported to be in excess of the demand. Lambs are barely steady. Hogs on spot are weak, but for delivery in November they are firm at an advance on quotations. The large and excessive supply of fruits, together with warm weather, appears to be against the meat market. Horses continue to be reported unchanged. Good draft horses are wanted, but small-sized, suitable for street cars, are slow and hard to sell. Matched horses, of fine carriage, easy movement, and gentle, are in good demand and fetch former prices. Saddle horses are only in fair request, with single footers given the preference.

The following are to-day's meat prices: Beef—Stall-fed 7 @ 7 1/2 c @ lb; grass-fed, extra, 6 @ 6 1/2 c; first quality, 5 1/2 c @—; second, 5 @ c—; third, 4 @ 4 1/2 c. Calves, small, 8 @ 9c; larger, 6 1/2 @ 7 1/2 c @ lb. Mutton—Ewes, 4 1/2 c; wethers, 5c. Lamb—Spring, 6 @ 6 1/2 c @ lb. Pork—Live hogs on foot, 3 1/2 @ 4c for grain and dairy fed; 2 1/2 @ 2 3/4 c for soft; dressed, 6 @ 7c for hard, and 4 @ 5c for soft. Grass-fed stock sell on foot, gross weight, at one-half the price they fetch dressed; stall-fed, on foot, fetch one-third less than they sell at dressed.

## Cereals.

Crop estimates for this State have lowered very materially. Wheat is now placed at from 850,000 to 1,000,000 short tons for export. The last named is the estimated surplus of those who claimed six weeks ago that there would be all of 1,500,000 tons for export. The barley crop is placed at from 450,000 to 500,000 tons. The last is the estimate of persons who in June last claimed a crop of 900,000 tons.

Export buyers, aided by a small ring of mining stock-brokers on call, made desperate efforts to break wheat; but owing to the large fleet of engaged tonnage in port, with a very large number under charter to arrive, and holders of wheat not selling, the efforts were futile. On Friday \$1.27 1/2 was paid for choice No. 1 shipping and again on Saturday; but the sellers were bound to secrecy, so that the advanced price on the bids should not be known. On Monday the price was freely paid, and yesterday \$1.28 1/2 was paid.

Farmers' firmness in not offering their wheat on the market has kept Call Board manipulators from putting the price of choice No. 1 shipping to \$1.25 and even lower, as was their intention.

Barley has gained strength throughout the week under moderate receipts and an increased consumptive demand. The consumption of the State this season is placed at from 375,000 to 450,000 tons, with the crop about 500,000 tons. This will leave only a small quantity for export, and a very small quantity for each farmer to have at the end of the season to feed in harvest time.

Continued wet weather in England makes it morally certain that the wheat will be damp, and consequently heavier imports of America's dry wheat will be required for mixing.

In ry and buckwheat nothing of moment can be ascertained.

Oats have ruled exceedingly strong, with fancy prices obtained. It is claimed that choice No. 1 feed sold at \$1.80, and poor at \$1.25 and even higher. Light receipts, still lighter stocks, and a good demand are assigned as reasons for the advance.

Oregon advices report that the supply of oats and barley for feed is short in several sections for harvest purposes, and consequently drafts had to be made in districts having fair supplies. It is also claimed that never before at the close of the season was the supply of barley and oats so light. Some shipments of barley have been made from here.

Corn has ruled strong and high throughout the week under light, available supplies. Some choice was sold at an advance.

Eastern advices report that the damage to the corn crop in the West, where the drought was worst, varies from 20 to 40 per cent.

The sample market for wheat, barley and oats closed very strong to-day, with few sellers in the market.

## Dairy Product.

Contrary to general expectations, cheese continues to hold to firm prices. This is conceded to be due to dairymen sending only enough here to feed the market, thus keeping back any excuse for breaking prices by an undue selling pressure.

The consumption of butter the past fortnight has been exceedingly large, causing better prices to obtain, particularly for gilt-edge. Toward the close fair to good is pressing the market at concessions, owing to the hot weather being against its keeping. Retail dealers have commenced on the better grades of pickled butter, claiming it to be superior to most of the fresh received.

The stock of eggs has been fairly well cleaned, but owing to hot weather, receipts are put on the market as soon as received, with only strictly choice fresh laid from near-by places fetching 27 to 28 cts a dozen. Eastern eggs continue to arrive, but the quality is poor, necessitating low prices to clean up consignments. It is claimed that the ventures netted a loss to shippers.

## Vegetables.

Potatoes under light receipts and a large consumptive demand have been gradually advancing, with extra choice Peerless scarce and fetching as high as \$1.20 on the wharf since Monday last. Garnet Chilis have sold for more money, as have Early Rose; the latter did not fetch over \$1.15 for extra choice on the wharf. River Reds are in good demand at 70 cts to \$1 in sacks on the wharf. Sweet Potatoes have ruled low and weak throughout the week, with a wide range in values, owing to a wide difference in the quality. Some yams were in the market on Tuesday last and sold at 2 to 2 1/2 cts.

After a fortnight's depression in tomatoes with very low prices ruling owing to heavy receipts, prices began to strengthen on Monday, with a decided advance yesterday. Choice sold on the wharf at 60 cts in large boxes against 35 cts on Saturday last. The advance was due to light receipts and a good demand. To-day they were weaker. Cucumbers, summer squash, green peppers, green

okra, and egg plants have ruled weak throughout the week under heavy receipts and a strong selling pressure. Some parcels of the first three had to be dumped.

Red onions have ruled dull and heavy, but silver-skins have ruled firm with the market well in hand throughout the week. The inquiry at the close is fairly active.

Cabbages and root vegetables have ruled weak, and in buyers' favor, with receipts generally free.

String beans have been sold with considerable difficulty. Green Lima beans, under free receipts, have weakened off until 3 1/2 cts is the top for very choice.

## Bags.

The bag market is unsettled, with prices continually slipping down under light buying and a fairly strong selling pressure. Sales are reported to have been made as low as 6 1/2 cts for Calcuttas; but this low figure cannot be verified. It is known that 6 1/2 cts was paid, cash, for some on spot.

## Fruits.

The demoralized fruit market continued up to Tuesday, when a general better feeling was noticeable, resulting in slightly better prices for choice pears, plums and peaches; but grapes were weaker, with the very best from Fresno fetching only 75 cts a box.

Figs closed slow and lower, with 75 cts hard to obtain for the very best in large boxes.

Choice peaches fetched \$1 to-day; but the general run was from 60 to 85 cts, with carry-overs sold as low as 25 to 40 cts.

Blackberries broke to \$1.25 a chest, then rallied on Monday to \$2 to \$3; at this price they sold yesterday; to-day they are weak, at \$1.50 to \$3, with canners paying from \$1.50 to \$2.

Strawberries advanced to \$3 to \$5 per chest, but have since fallen to \$3 to \$4.

Raspberries, after going up to \$9 top price, closed weak to-day, at \$6 to \$8.

Fair to good apples are in heavy supply, with a strong selling pressure; but extra choice continue scarce.

Huckleberries are generally small and of poor quality, yet they sell at from 4 to 5 cts per pound.

Plums have been in overstock with considerable dumped; but to-day, under lighter receipts, there was a firm feeling, as canners cleaned up the market for the better varieties.

Pears, after going to \$1 to \$1.25 for choice varieties, closed to-day firm at a slight advance.

Large quantities of canteloupes were dumped the past week, which, with warmer weather and only moderate receipts, to-day caused a better feeling, with a slight advance obtained. Nutmeg canteloupes move off at \$1 and \$1.25 per cwt.

Watermelons are in heavy receipt, but warmer weather creates a better demand.

It is reported that \$20 to \$22 per ton has been paid for Zinfandel grapes, and \$16 for common wine grapes.

Nectarines are slow of sale.

## Hops.

It is difficult to get at the true condition of the hop market, for buyers talk down while paying well up for all choice parcels offered. It is said that higher prices were paid the past week than have been paid for all of three years past. It appears as if buyers have their wants met for the immediate future, and are waiting developments before buying more.

## Wool.

About all of the spring wools of this State have been marketed, and all that are now for sale are from Oregon. Fall wool is beginning to come forward, but, as yet, receipts are not sufficient to establish prices. It is generally claimed they will rule higher than last year. The feeling is one of strong confidence.

## Miscellaneous.

The tonnage movement compares with last year at this date as follows:

	1886.	1885.
On the way.....	311,251	233,281
In port, disengaged.....	58,690	102,774
In port, engaged.....	59,855	14,572

Totals.....429,796 350,627

The above gives a carrying capacity as follows: 1886, 687,673 short tons; 1885, 561,003 short tons; increase over last year, 126,670.

The exports by sea from this port from July 1, 1886, to date, compared with the like time in 1885, are as follows, in cents:

	1886.	1885.
Wheat.....	819,339	569,411
Barley.....	81,016	5,683
Oats.....	1,441	3,011
Corn.....	3,704	642

Poultry, after selling down to very low prices, began to improve on Tuesday, with slightly higher prices paid to-day for choice stock. Some fair-sized large hens sold at \$8; but the general run of the market was \$6 to \$7. Young fowls, also, did better.

Choice gilt-edged hay continues scarce, with \$13 readily obtainable afloat; but poor to good is in over-supply and weak.

Mustard seed continues to be purchased for Eastern account.

Ships are very weak for both spot and to arrive; indeed, for the latter no one will make a bid. The latest spot charter was made at 325 6d U. K.

## Domestic Produce.

WEDNESDAY, August 11, 1886.

BEANS AND PEAS		Peanuts	
Bayo, cts.....	1 40 @ 1 50	Filberts.....	3 @ 14
Butter.....	1 25 @ 1 60	POTATOES.	
Caster.....	1 25 @ 1 60	New cts.....	@ —
Pea.....	1 75 @ 1 95	Burbank.....	@ —
Red.....	1 15 @ 1 20	Early Rose.....	60 @ 1 10
Fluk.....	1 15 @ 1 17 1/2	Curry Cove.....	@ —
Large White.....	3 00 @ —	Jersey Blues.....	@ —
Small White.....	1 75 @ 1 95	Petaluma.....	@ —
Lima.....	2 00 @ 2 25	Tomasas.....	@ —
Old Peas, blk eye	@ 1 10	Round.....	@ —
do green.....	1 00 @ 1 12 1/2	Humboldt.....	@ —
do Niles.....	1 25 @ —	do Kidney.....	@ —
BROOM CORN.		Chile.....	90 @ 1 10
Southern.....	3 @ 34	do Oregon.....	@ —
Northern.....	4 @ 36	do Peerless.....	1 00 @ 1 20
OHIO CORN.		Salt Lake.....	@ —
California.....	4 @ 47	Sweet.....	1 @ 14
German.....	6 @ 47	POULTRY AND GAME.	
DAIRY PRODUCE, ETC.		Hens, doz.....	4 00 @ 6 00
BUTTER.		Roosters.....	4 00 @ 6 00
Cal. fresh roll, lb.	24 @ 28	Broilers.....	2 50 @ 3 50
do Fancy brands	27 @ 28	Ducks, tame.....	3 00 @ 5 50
Pickle roll.....	20 @ 21	do Mallard.....	@ —
Firkin, now.....	15 @ 18	do Spring.....	@ —



Eastern.....	8 @	11	Geese, pair.....	1 25 @	1 75
Cheese, Cal. lb.....	7 @	8 1/2	do Gosling.....	1 @	1 1/2
Eastern style.....	10 @	13	Wild Gray, doz.....	1 @	16
Cal. ranch, doz.....	25 @	26	White do.....	12 @	16
do store.....	20 @	24	Turkeys, lb.....	10 @	20
Ducks.....	1 @	1	do Dressed.....	10 @	20
Oregon.....	14 @	16	Turkey Feathers, doz.....	1 @	25
Pickled here.....	20 @	21	do Common.....	1 @	25
Utah.....	20 @	21	Doves.....	1 @	25
FEED.....			Rabbits.....	1 @	25
Bran, ton.....	15 00 @	15 50	Hare.....	1 @	25
Cornmeal.....	5 00 @	5 25	Venison.....	12 @	13
Hay.....	16 00 @	17 00	PROVISIONS.....		
Middlings.....	16 00 @	17 00	Cal. Bacon.....	8 @	9
Oil Cake Meal.....	25 00 @	28 50	Heavy, lb.....	8 @	9
Straw, bale.....	35 @	50	Medium.....	10 @	11 1/2
FLOUR.....			Light.....	12 @	12 1/2
Extra, City Mills.....	3 75 @	4 20	Extra Light.....	12 @	12 1/2
do Co'ntry Mills.....	3 60 @	4 00	Lard.....	7 @	9
Superfine.....	2 75 @	3 00	Cal. Smoked Beef.....	11 1/2 @	12 1/2
GRAIN, ETC.....			Hams, Cal.....	11 @	14 1/2
Barley, feed, cbl.....	85 @	90	do Eastern.....	14 1/2 @	15 1/2
do Brewing.....	1 50 @	1 65	SEEDS.....		
do new.....	95 @	1 00	Alfalfa.....	11 @	11 1/2
Chevalier.....	1 35 @	1 45	Canary.....	3 1/2 @	4
do Coast.....	1 @	1 10	Clover red.....	4 @	15
Buckwheat.....	1 00 @	1 10	White.....	45 @	50
Corn, White.....	1 25 @	1 35	Cotton.....	20 @	24
Yellow.....	1 25 @	1 35	Hemp.....	5 @	5 1/2
Small Round.....	1 07 1/2 @	1 20	Italian Rye Grass.....	25 @	25
Nebraska.....	1 07 1/2 @	1 20	Perennial.....	25 @	25
Oats, new.....	1 35 @	1 40	Millet, German.....	10 @	12
do No. 1.....	1 20 @	1 30	do Common.....	7 @	10
do No. 2.....	1 15 @	1 20	Mustard, white.....	2 25 @	2 50
do black.....	1 15 @	1 20	Brown.....	1 @	1 1/2
do Oregon.....	1 65 @	1 75	Rape.....	1 @	1 1/2
Wheat, No. 1.....	1 25 @	1 27 1/2	2d quality.....	15 @	16 1/2
do No. 2.....	1 20 @	1 22 1/2	Ky. Blue Grass.....	30 @	40
Choice milling.....	1 27 1/2 @	1 30	Sweet V. Grass.....	75 @	75
HIDES.....			Orchard.....	20 @	25
Dry.....	16 @	16	Red Top.....	15 @	15
Wet salted.....	8 @	9 1/2	Hungarian.....	8 @	10
HONEY.....			Lawn.....	10 @	12
Beehive, lb.....	20 @	22	Timothy.....	5 1/2 @	5 1/2
Honey in comb.....	7 1/2 @	9	TALLOW.....		
Extracted, light.....	3 1/2 @	4	Crude, lb.....	1 1/2 @	4
do dark.....	3 @	3 1/2	Refined.....	6 1/2 @	6 1/2
HOPS.....			WOOL, ETC.....		
Oregon.....	20 @	20	SPRING-1886.....		
California old.....	17 1/2 @	32 1/2	Humboldt and.....	23 @	25
do new.....	17 1/2 @	32 1/2	Mendocino.....	17 @	20
ONIONS.....			Sacramento valley.....	17 @	20
Red.....	65 @	85	Free Mountain.....	17 @	20
Silverskin.....	65 @	85	N. hern defective.....	14 @	18
NUTS-JOBBER.....			S. Joaquin short.....	14 @	18
Walnuts, Cal. lb.....	7 1/2 @	9	do long.....	14 @	18
do Chile.....	7 1/2 @	9	Cava & F. Phil.....	17 @	22
Almonds, hdshl.....	6 @	6	Oregon Eastern.....	23 @	25
Soft shell.....	11 @	12 1/2	do valley.....	23 @	25
Brazil.....	11 @	12 1/2	Southern Coast.....	13 @	17
Pecans.....	10 @	12 1/2			

Fruits and Vegetables.	
FRUIT MARKET.	
WEDNESDAY, August 11, 1886.	
Apples, box.....	25 @ 50
do red.....	1 00 @ 1 25
Apricots, lb.....	3 @ 4
Bananas, bunch.....	1 75 @ 2 25
Blackberries, cr.....	2 00 @ 3 00
Cantaloupes, ch.....	30 @ 50
Cherries blk.....	1 @ 1
do white.....	1 @ 1
do Royal Ann.....	1 @ 1
Cherry plums.....	40 @ 50
Crabapples.....	25 @ 50
Cranberries.....	7 00 @ 10 00
Currents chest.....	3 60 @ 3 50
Figs, lx.....	1 25 @ 1 50
Grapes.....	25 @ 50
do Rose Hart.....	25 @ 50
do Muscat.....	40 @ 75
Limes, Mex.....	13 00 @ 13
do Cal. box.....	1 @ 1
Lemons, Cal. bx.....	2 50 @ 4 00
do Sicily, box.....	10 @ 10
do Australian.....	1 @ 1
Nectarines, box.....	50 @ 75
Oranges, Cal. bx.....	1 50 @ 1 75
do Tahiti, bx.....	3 35 @ 3 50
do Mexican, M.....	1 @ 1
do Panama.....	1 @ 1
Peaches, bx.....	50 @ 75
do basket.....	50 @ 75
Crawfords, bx.....	60 @ 90
do bkt.....	60 @ 100
do or'g cl'g bkt.....	1 00 @ 1
Pears bx.....	25 @ 45
do basket.....	25 @ 45
do Bartlett, bx.....	50 @ 1 50
do do bkt.....	40 @ 50
Persimmons.....	1 @ 1
Jap. bx.....	4 00 @ 5 00
Pineapples, doz.....	4 00 @ 5 00
Pomegranates, b.....	1 @ 1
Plums lb.....	1 @ 1 1/2
Prunes bx.....	1 @ 1
Quinces bx.....	1 @ 1
Raspberries ch.....	6 00 @ 9 00
Strawberries ch.....	3 00 @ 5 00
Watermelons 100.....	5 00 @ 9 00
DRIED FRUIT.	
Apples, sliced, lb.....	2 1/2 @ 3
do evaporated.....	6 @ 8

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PATENT

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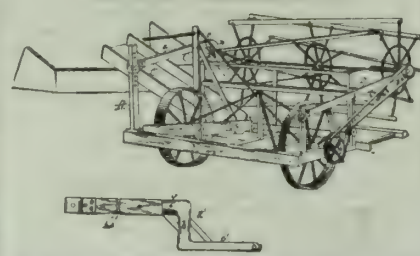
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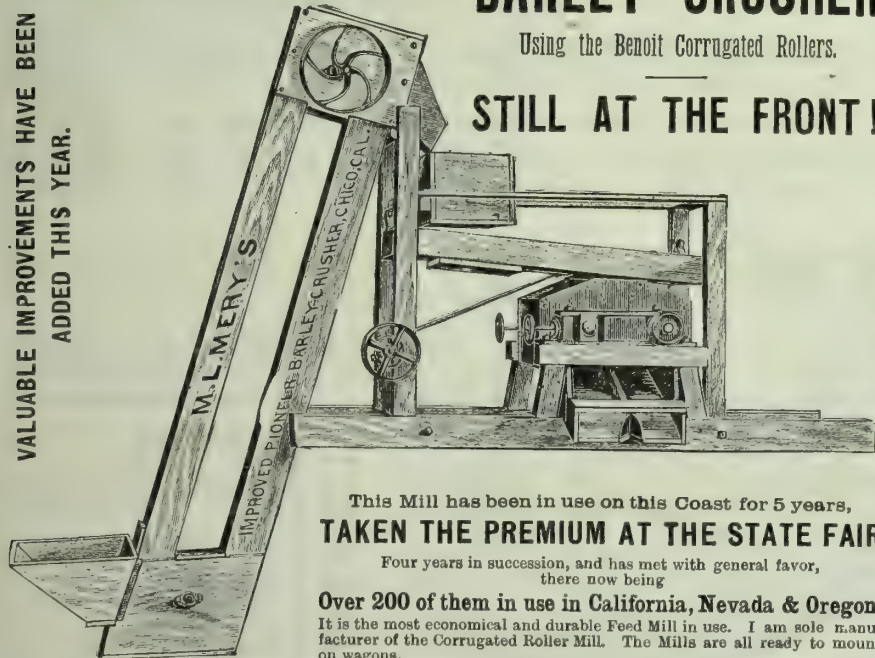
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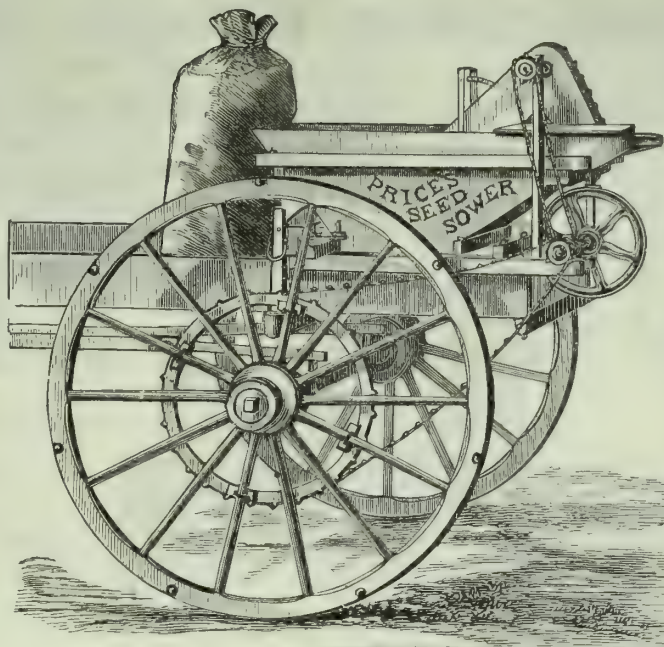
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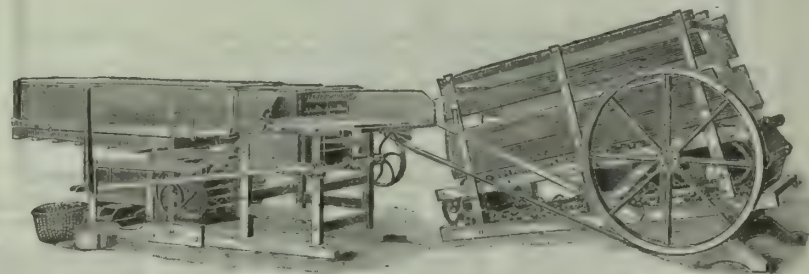
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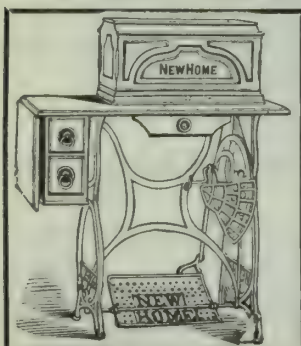
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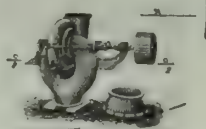
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# PACIFIC RURAL PRESS

TWENTY-PAGE EDITION.

Vol. XXXII.—No. 8.]

SAN FRANCISCO, SATURDAY, AUGUST 21, 1886.

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## The Triumphal Arch.

One of our younger correspondents thinks we have not given enough of the grand parade in this city August 3d. If we have been remiss in this respect we shall try to square the account by the crayon sketch, which we give on this page, of the triumphal arch, erected on Market street, and which was the cynosure of all eyes during the encampment. The structure con-

feet. Over its center a golden eagle, whose extended wings measure over 30 feet from tip to tip, perched on crossed cannon, below which hung the badge of the G. A. R.

Farragut above, with figures below representing the soldier and the sailor, respectively.

The design was by Wright & Sanders, architects of San Francisco; the carpenter work was

THE CANADIAN PACIFIC.—Englishmen are not in the least scared by the enormous cost of the Canadian Pacific Railway, so long as it may result in building up British trade. The London Chamber of Commerce petitions the Government to support the railway and the proposed steamship line to Australia and the East.

THE GOVERNMENT SILK STATION.—The U. S. Silk Station, at Piedmont, was recently sold



CRAYON SKETCH OF THE GRAND ARMY PARADE.—[PASSING THE GRAND ARCH, S. F., AUG. 3, 1886.]

sisted of a strong timber frame, heavily ballasted, and covered with canvas; but painted so skillfully as to impress the eye like a massive pile of granite.

The towers on either side were nearly 80 feet in height and surmounted with stacks of mimic but gigantic muskets and groups of national flags. The main arch had a span of nearly 60

The east side bore above the keystone the motto: "E Pluribus Unum." To the left, as you looked at it, was a statue of Washington 12 feet high, and to the right a corresponding effigy of Lincoln. Below these were colossal typical figures of a mechanic and a miner.

On the western side the motto, "The Union Forever," was flanked by statues of Grant and

done by Jos. R. Willcox; the painting by Longley & Johnson; and the statuary by F. Marion Wells. About 40,000 feet of lumber and 2000 yards of cloth were used in the building, and the total cost exceeded \$3000.

The structure as a whole was at once pleasing and majestic, and was greatly admired by the thousands who gazed upon and passed beneath it.

by order of the Commissioner of Agriculture, as the appropriation for work at that point had been exhausted.

THE amount of lumber coming up to Los Angeles from San Pedro daily is far heavier than ever known before in the history of the city.



## THE IRRIGATOR.

### Irrigation and Water Rights.

EDITORS PRESS:—The matter of irrigation and water rights is evidently the next big thing demanding the thought and action of the Legislature and people of California.

That it is an elephant of huge proportions is beginning to be seen and confessed. Very likely Governor Stoneman and his advisers will admit by this time that this is even so. So far as one can judge from published speeches, writings, resolutions and reports on the subject, no one has yet mastered it or has matured a satisfactory plan of legislation thereon. All agree that something ought to be done. Just what, who knows? That is where the writer stands, looking, listening. Yet the truth and the right cannot be far off, and with patient and conscientious thought we shall reach it in due time. In making the new departure it is important that we start right. And to suggest something on that point is the object of this article. And the first point I make is this: We must be careful in our effort to be generous to holders of desert lands, to large water corporations and to the State, not to be mean and unjust to the people who have bought farms and established homes on the streams whose waters it is proposed to divert from their natural channels. To be generous at the expense of justice is not generally regarded as a virtue. The lands bordering on nearly all the streams in California, little and great, were bought and occupied by settlers long before lands remote from them. And the pioneer farmers of our State bought their lands and located their homes there for the obvious reason that they supposed that they thereby acquired riparian rights. And they did acquire them—according to all previous English and American legislation; according to all decisions of courts, up to the present time. And the extra price asked and paid for such lands shows the universal belief in riparian rights. Just the extent of these rights has often been a matter of dispute. But up to this time I know of no court or legal authority which has questioned the right of such riparians to water sufficient for stock and domestic purposes. And if for any public use it has been found necessary to deprive said riparian of that amount of water, never have the courts denied him full indemnity for the loss. Let it be borne in mind, also, that the riparian is annually exposed to great inconvenience and damage from overflow and wash of lands. The writer of this article has lost within three years not less than \$2000 worth of property from this cause, and some of his neighbors even more. And it is no more than even justice to accord to him the perpetual right to water for stock and domestic use.

And would it not be the rankest injustice to allow a corporation to put across the river just above me a cement dam, and divert every drop of water from the natural channel during the summer, and then in winter allow the flood to rush down again upon me and sweep away my property, and all without one cent of indemnity? Is it possible the doctrine of such a right as that can be put into our Constitution? Is it possible a court of justice will sustain and indorse it?

Perhaps it may be replied by the anti-riparians that the companies or persons diverting the streams for irrigation purposes cannot afford to indemnify riparians for loss of water, for stock and the house; cannot afford to pay them enough to pipe water or dig wells, etc. If they take this ground, then we reply: This is a confession that the advantages of these irrigation schemes are small—not enough to pay for the damage it works! But if, on the other hand, the advantages are to be immense, as they claim, enriching individuals, corporations and the State, then what excuse is there for refusing to pay the damages entailed upon those whose waters they take away?

It may be said, "The irrigationists are not opposed to proper indemnity," etc. Then why have they studiously avoided all allusions to it in all their speeches, conventions, manifestoes, etc.? They have been asked to define their position on the matter in the public prints, but to this day they are silent, and because they have been thus reticent on this most important matter they have aroused against them the suspicions and opposition of pretty much all farmers living on the banks of rivers throughout the State.

Some years since some farmers above me on the Santa Clara river obtained a charter to divert a portion of the waters of the river for irrigation. Since that time the franchise has fallen into the hands of the man who owns the most land of any one living in the county. And that will be the fate of nearly all the great irrigation franchises in our State.

Other companies, still further above, have been organized, till now, in ordinary seasons, water ceases to flow in mid-summer by my place, and my neighbors and I have had to haul water for our stock, etc., from a distant spring. Two years ago, a neighbor and I went to the owner of the ditch first mentioned (the large land-holder), and asked him to let enough water pass down the river to supply the house and the barn-yard. He replied: "Perhaps I may do it as a favor, but not as a right!" We talked about a lawsuit; but what can a poor

man do in a lawsuit against the rich, with "the law's delay," the venality of judges and juries, and the ingenious deviltry of well-paid lawyers, against him?

Brother farmers living on the banks of rivers, are you ready to make the Constitution and laws such that you can be snubbed after the above manner? Let me not be misunderstood. I am in favor of irrigation; I am in favor of the appropriation of the waters of our rivers and streams so as best to develop the resources of our State; I am in favor of legislation indispensable thereto—but I claim that proper indemnity shall be made for loss of water to riparians injured thereby.

S. BRISTOL.

San Buenaventura, Cal., Aug. 5, 1886.

## HORTICULTURE.

### Fruit and Grapes in the Mountains.

EDITORS PRESS:—I had promised you in the spring to send you some notes on the condition of the fruit crop in this part of the State, but I was glad I did not; otherwise, I should have to take back a good deal of what I might have reported then.

Of course you saw, in our local papers, about the time the fruit trees were out full of blossoms, the same old stereotyped phrase, "The fruit crop in the mountains will be immense this year." I am very sorry to say that such is not the case, for our fruit crop—everything bearing taken in, frost, gum and insect pests—will be rather slim in the mountains, and in the foothills and valleys it will not be "immense."

To start with, we had a frost on the night of the 11th of March that killed the almonds and apricots and half the peaches and early plums. But, on the other hand, the "gum" that has for the last 10 years played such great havoc among our stone fruit was not so bad this year, our cherry and plum crop having been an average, and the peach crop—notwithstanding frost and gum—better than was expected.

The pears were so far advanced, though not yet out, on that frosty night of the 11th of March, that the stems got badly injured by the frost, and for that reason they fell off badly after being just formed. We reckoned then on a good average, but we reckoned without that greatest of all pests, the codlin moth. Our apple crop, I must say, was promised to be immense, so full were the trees, but, at this time of writing, that crop may be well regarded as annihilated, so great have been the ravages of the codlin moth—greater than I ever saw it before. Two-thirds of the crop have already dropped off, and the remaining third is all wormy. The worst is, that the second brood of the codlin moth, having no more sound apples to ruin, fell back on the pears, of which from one-fourth to one-half, especially Bartlett's and Clairgeaus, are already attacked by the worms and falling off badly. I find three-fourths of my Bartlett's wormy, and still I use "bands" of sack-cloth on my trees, but nobody else around me does. It must be said that the ravages of that terrible pest, the codlin moth, are this year simply appalling, and its ravages are far from being confined to the mountains, for foothills and valleys are, I am told, as badly affected, and more particularly so where nothing is done in checking the breeding of the pest. I intend, when time will permit, to discuss in your columns those two most important questions so vital to the fruit interest of California, the insect pests of California and the remedies to check their ravages, and the "gum," which this year seems to have spread all over the State. It is no use to disguise the truth; we have to do something or the fruit-grower's business, so precarious already, will have to go to the dogs. I presume that by this time every fruit-grower in California is satisfied that our indolent Board of Horticulture is only an ornament to the State, and the office of Inspector of Fruit Pests, whether the latter be a competent or incompetent horticulturist, a mere sinecure. What is the use of having the Legislature pass laws in regard to the enforcement of rules and regulations for the destruction of insect pests, and not have the law enforced? Better abolish the law, Board and Inspector of Fruit Pests, and save the State \$10,000 a year. [There has no doubt been much ground for criticism of the State Board, but we expect better of it through the work of the present inspector. It may be well to hold judgment in abeyance until the Sacramento Fruit-growers' Convention in November.—EDS. PRESS.]

As to grapes, the crop will be very large in the mountains, notwithstanding a little coulure with certain varieties, such as Black Prince, Muscatels and other sorts; in fact, the coulure was very mild, and nothing to compare with what it had been in the counties around the bay. Zinfandels are looking splendid.

The small fruit crop has not been so large as usual, except gooseberries and currants.

On my own place I have a 15-year-old Missouri Paw-paw loaded with fruit; and in nursery rows a couple of hundred two and three-year-old Proporturiens walnut trees with one to four nuts on. My larger trees have not a large crop this year. Black mulberries and medlars never fail to have a good crop, also chestnuts, as they all bloom very late in the spring.

FELIX GILLET.

Nevada City, Aug. 13, 1886.

## THE DAIRY.

### The National Oleomargarine Law.

The following is the full text of the new U. S. law on the manufacture and sale of oleomargarine, as passed by both Houses of Congress and signed by the President:

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That for purposes of this act the word "butter" shall be understood to mean the food product usually known as butter, and which is made exclusively from milk or cream, or both, with or without common salt, and with or without additional coloring matter.

Sec. 2. That for the purposes of this act certain manufactured substances, certain extracts and certain mixtures and compounds, including such mixtures and compounds with butter, shall be known and designated as "oleomargarine," namely: All substances heretofore known as oleomargarine, oleo, oleomargarine oil, butterine, lardine, suine and neutral; all mixtures and compounds of oleomargarine, oleo, oleomargarine oil, butterine, lardine, suine and neutral; all lard extracts and tallow extracts, and all mixtures and compounds of tallow, beef, fat, suet, lard, lard oil, vegetable oil, annatto and other coloring matter, intestinal fat and offal fat made in imitation or semblance of butter, or when so made calculated or intended to be sold as butter or for butter.

Sec. 3. That special taxes are imposed as follows:

Manufacturers of oleomargarine shall pay \$600. Every person who manufactures oleomargarine for sale shall be deemed a manufacturer of oleomargarine.

Wholesale dealers in oleomargarine shall pay \$480. Every person who sells or offers for sale oleomargarine in the original manufacturer's packages shall be deemed a wholesale dealer in oleomargarine. But any manufacturer of oleomargarine who has given the required bond and paid the required special tax, and who sells only oleomargarine of his own production, at the place of manufacture, in the original packages to which the tax-paid stamps are affixed, shall not be required to pay the special tax of a wholesale dealer in oleomargarine on account of such sales.

Retail dealers in oleomargarine shall pay \$48. Every person who sells oleomargarine in less quantities than 10 pounds at one time shall be regarded as a retail dealer in oleomargarine. And sections 3232, 3233, 3234, 3235, 3236, 3237, 3238, 3239, 3240, 3241 and 3243 of the Revised Statutes of the United States are, so far as applicable, made to extend to and include and apply to the special taxes imposed by this section, and to the persons upon whom they are imposed: Provided, that in case any manufacturer of oleomargarine commences business subsequent to the thirtieth day of June in any year, the special tax shall be reckoned from the first day of July in that year, and shall be \$500.

Sec. 4. That every person who carries on the business of a manufacturer of oleomargarine without having paid the special tax therefor, as required by law, shall, besides being liable to the payment of the tax, be fined not less than \$1000 and not more than \$5000; and every person who carries on the business of a wholesale dealer in oleomargarine without having paid the special tax therefor, as required by law, shall, besides being liable to the payment of the tax, be fined not less than \$500 nor more than \$2000; and every person who carries on the business of a retail dealer in oleomargarine without having paid the special tax therefor, as required by law, shall, besides being liable to the payment of the tax, be fined not less than \$50 nor more than \$500 for each and every offense.

Sec. 5. That every manufacturer of oleomargarine shall file with the Collector of Internal Revenue of the district in which his manufactory is located such notices, inventories and bonds, shall keep such books and render such returns of materials and products, shall put up such signs and affix such number to his factory, and conduct his business under such surveillance of officers and agents as the Commissioner of Internal Revenue, with the approval of the Secretary of the Treasury, may, by regulation, require. But the bond required of such manufacturer shall be with sureties satisfactory to the Collector of Internal Revenue, and in a penal sum of not less than \$5000; and the sum of said bond may be increased from time to time, and additional sureties required at the discretion of the collector, or under instructions of the Commissioner of Internal Revenue.

Sec. 6. That all oleomargarine shall be packed by the manufacturer thereof in firkins, tubs or other wooden packages not before used for that purpose, each containing not less than 10 pounds, and marked, stamped and branded as the Commissioner of Internal Revenue, with the approval of the Secretary of the Treasury, shall prescribe; and all sales made by manufacturers of oleomargarine and wholesale dealers in oleomargarine shall be in original stamped packages. Retail dealers in oleomargarine must sell only from original stamped packages, in quantities not exceeding 10 pounds, and shall pack the oleomargarine sold by them in suitable wooden or paper packages, which shall be marked and branded as the Commissioner of Internal Revenue.

with the approval of the Secretary of the Treasury, shall prescribe. Every person who knowingly sells or offers for sale, or delivers or offers to deliver, any oleomargarine in any other form than in new wooden or paper packages, as above described, or who packs in any package any oleomargarine in any manner contrary to law, or who falsely brands any package or affixes a stamp on any package denoting a less amount of tax than that required by law, shall be fined for each offense not more than \$1000 and be imprisoned not more than two years.

Sec. 7. That every manufacturer of oleomargarine shall securely affix, by pasting, on each package containing oleomargarine manufactured by him, a label on which shall be printed, besides the number of the manufactory and the district and State in which it is situated, these words: "Notice.—The manufacturer of the oleomargarine herein contained has complied with all the requirements of law. Every person is cautioned not to use either this package again or the stamp thereon again, nor to remove the contents of this package without destroying said stamp, under the penalty provided by law in such cases." Every manufacturer of oleomargarine who neglects to affix such label to any package containing oleomargarine made by him or sold or offered for sale by or for him, and every person who removes any such label so affixed from any such package, shall be fined \$50 for each package in respect to which such offense is committed.

Sec. 8. That upon oleomargarine which shall be manufactured and sold, or removed for consumption or use, there shall be assessed and collected a tax of two cents per pound, to be paid by the manufacturer thereof; and any fractional part of a pound in a package shall be taxed as a pound. The tax levied by this section shall be represented by coupon stamps; and the provisions of existing laws governing the engraving, issue, sale, accountability, effacement and destruction of stamps relating to tobacco and snuff, as far as applicable, are hereby made to apply to stamps provided for by this section.

Sec. 9. That whenever any manufacturer of oleomargarine sells, or removes for sale or consumption, any oleomargarine upon which the tax is required to be paid by stamps, without the use of the proper stamps, it shall be the duty of the Commissioner of Internal Revenue, within a period of not more than two years after such sale or removal, upon satisfactory proof, to estimate the amount of tax which has been omitted to be paid, and to make an assessment therefor and certify the same to the collector. The tax so assessed shall be in addition to the penalties imposed by law for such sale or removal.

Sec. 10. That all oleomargarine imported from foreign countries shall, in addition to any import duty imposed on the same, pay an internal revenue tax of 15 cents per pound, such tax to be represented by coupon stamps as in the case of oleomargarine manufactured in the United States. The stamps shall be affixed and canceled by the owner or importer of the oleomargarine while it is in the custody of the proper custom-house officers; and the oleomargarine shall not pass out of the custody of said officers until the stamps have been so affixed and canceled, but shall be put up in wooden packages, each containing not less than 10 pounds, as prescribed in this act for oleomargarine manufactured in the United States, before the stamps are affixed; and the owner or importer of such oleomargarine shall be liable to all the penal provisions of this act prescribed for manufacturers of oleomargarine manufactured in the United States. Whenever it is necessary to take any oleomargarine so imported to any place other than the public stores of the United States for the purpose of affixing and canceling such stamps, the collector of customs of the port where such oleomargarine is entered shall designate a bonded warehouse to which it shall be taken, under the control of such customs officer as such collector may direct; and every officer of customs who permits any such oleomargarine to pass out of his custody or control without compliance by the owner or importer thereof with the provisions of this section relating thereto, shall be guilty of a misdemeanor, and shall be fined not less than \$1000, nor more than \$5000, and imprisoned not less than six months nor more than three years. Every person who sells or offers for sale any imported oleomargarine, or oleomargarine purporting or claimed to have been imported, not put up in packages and stamped as provided by this act, shall be fined not less than \$500, nor more than \$5000, and be imprisoned not less than six months nor more than two years.

Sec. 11. That every person who knowingly purchases or receives for sale any oleomargarine which has not been branded or stamped according to law shall be liable to a penalty of \$50 for each such offense.

Sec. 12. That every person who knowingly purchases or receives for sale any oleomargarine from any manufacturer who has not paid the special tax shall be liable for each offense to a penalty of \$100, and to a forfeiture of all articles so purchased or received, or of the full value thereof.

Sec. 13. That whenever any stamped package containing oleomargarine is emptied, it shall be the duty of the person in whose hands the same is to destroy utterly the stamps thereon, and any person who willfully neglects or refuses so to do shall, for each such offense, be fined not exceeding \$50, and imprisoned not less than 10 days nor more than six months.



And any person who fraudulently gives away or accepts from another, or who sells, buys or uses for packing oleomargarine, any such stamped packages, shall, for such offense, be fined not exceeding \$100, and be imprisoned not more than one year. Any revenue officer may destroy any emptied oleomargarine package upon which the tax-paid stamp is found.

Sec. 14. That there shall be in the office of the Commissioner of Internal Revenue an analytical chemist and a microscopist, who shall each be appointed by the Secretary of the Treasury, and shall each receive a salary of \$2500 per annum; and the Commissioner of Internal Revenue may, whenever in his judgment the necessities of the service so require, employ chemists and microscopists, to be paid such compensation as he may deem proper, not exceeding, in the aggregate, any appropriation made for that purpose. And such commissioner is authorized to decide what substances, extracts, mixtures or compounds which may be submitted for his inspection in contested cases are to be taxed under the act; and his decision in matters of taxation under this act shall be final. The commissioner may also decide whether any substance made in imitation or semblance of butter, and intended for human consumption, contains ingredients deleterious to the public health; but in case of doubt or contest his decisions in this class of cases may be appealed from to a board hereby constituted for the purpose, composed of the Surgeon-General of the Army, the Surgeon-General of the Navy, and the Commissioner of Agriculture, and the decision of this board shall be final in the premises.

Sec. 15. That all packages of oleomargarine subject to tax under this act that shall be found without stamps or marks as herein provided, and all oleomargarine intended for human consumption which contains ingredients adjudged, as hereinbefore provided, to be deleterious to the public health, shall be forfeited to the United States. Any person who shall willfully remove or deface the stamps, marks or brands on a package containing oleomargarine, taxed as provided herein, shall be guilty of a misdemeanor, and shall be punished by a fine of not less than \$100 nor more than \$2000, and by imprisonment for not less than 30 days nor more than six months.

Sec. 16. That oleomargarine may be removed from the place of manufacture for export to a foreign country without payment of tax or affixing stamps thereto, under such regulations and the filing of such bonds and other security as the Commissioner of Internal Revenue, with the approval of the Secretary of the Treasury, may prescribe. Every person who shall export oleomargarine shall brand upon every tub, firkin, or other package containing such article the word "oleomargarine" in plain Roman letters not less than one-half inch square.

Sec. 17. That whenever any person engaged in carrying on the business of manufacturing oleomargarine defrauds, or attempts to defraud, the United States of the tax on the oleomargarine produced by him, or any part thereof, he shall forfeit the factory and manufacturing apparatus used by him, and all oleomargarine and all raw material for the production of oleomargarine found in the factory, or on the factory premises, and shall be fined not less than \$500 nor more than \$5000, and be imprisoned not less than six months nor more than three years.

Sec. 18. That if any manufacturer of oleomargarine, any dealer therein, or any importer or exporter thereof, shall knowingly or willfully omit, neglect or refuse to do, or cause to be done, any of the things required by law in the carrying on or conducting of his business, or shall do anything by this act prohibited, if there be no specific penalty or punishment imposed by any other section of this act for the neglecting, omitting or refusing to do, or for the doing or causing to be done, the thing required or prohibited, he shall pay a penalty of \$1000; and if the person so offending be the manufacturer of or a wholesale dealer in oleomargarine, all the oleomargarine owned by him, or in which he has any interest as owner, shall be forfeited to the United States.

Sec. 19. That all fines, penalties, and forfeitures imposed by this act may be recovered in any court by competent jurisdiction.

Sec. 20. That the Commissioner of Internal Revenue, with the approval of the Secretary of the Treasury, may make all needful regulations for the carrying into effect of this act.

Sec. 21. That this act shall go into effect on the ninetieth day after its passage; and all wooden packages containing 10 or more pounds of oleomargarine found on the premises of any dealer on or after the ninetieth day succeeding the date of the passage of this act shall be deemed to be taxable under Sec. 8 of this act, and shall be taxed, and shall have affixed thereto the stamps, marks, and brands required by this act, or by regulations made pursuant to this act; and for the purpose of securing the affixing of the stamps, marks and brands required by this act, the oleomargarine shall be regarded as having been manufactured and sold, or removed from the manufactory for consumption or use, on or after the day this act takes effect; and such stock on hand, at the time of the taking effect of this act, may be stamped, marked and branded under special regulations of the Commissioner of Internal Revenue, approved by the Secretary of the Treasury; and the Commissioner of Internal Revenue may authorize the holder of such packages to mark and brand the same and to affix thereto the proper tax-paid stamps.

### Wilder's Dairy.

The Santa Cruz Sentinel gives the following particulars concerning the Wilder dairy at Santa Cruz, of which we gave an account some months ago: About three miles from Santa Cruz, in one of the many canyons that cross the coast road, is one of the most noteworthy and extensive dairy ranches on the Pacific Coast, the property of D. D. Wilder. On this ranch are employed 16 men, who twice a day milk nearly 300 cows. Each man has certain cows to strip of the lacteal fluid, some to the number of 25. As soon as the pail is well filled, the milker goes to a strainer close by and pours in the milk, which runs through a tin pipe and empties into a tank of 200 gallons capacity in the interior of the large milk-room, wherein is a "De Laval" cream separator of wonderful power. The centrifugal force is so great that the cream is separated from the milk, thence emptying into a large can, while the creamless milk passes off, empties into a trough and is carried through an underground pipe to the pig-pen, a distance of 200 yards. This separator has a capacity of working 120 gallons per hour, and a six-horse power is used in running it. When regulating the revolutions, a period of 15 minutes is consumed to bring it up to the proper motion, and a sensation similar to the shock from a galvanic battery is experienced by the bystander.

This is said to be the only cream separator in operation in this county, and Mr. Wilder speaks highly of its merits, and says that with it, since October 1st last, a period of nine months, he has turned out over 50,419 pounds of butter, while from October 1, 1884, to October 1, 1885, a period of 12 months, by the old process, he turned out only 43,984 pounds. At present he makes 140 pounds of butter per day, all of which finds a ready market in San Francisco. In a clean and capacious room, adjoining the milk-room, is a large churn which is turned by steam and it is said as high as 300 pounds of butter have been churned at one time. With the use of an ice-chest to cool the animal heat from the milk, and by the new process, butter can be made in one-half an hour after the milk leaves the cow. All the appointments about this dairy are perfect. Of the 2330 acres of land owned by Mr. Wilder, 80 are in the cereals now ready for the thrasher and 80 are in hay, and a number of acres are in corn, pumpkins and beets, while the greatest portion is pasture and waste land.

Mr. Wilder is yearly improving his stock by working in the Durham breed, and in time will make his dairy second to none in the United States.

## SHEEP AND WOOL.

### Wool-growing and Its Manufacture.

From the earliest period of history, the growing and manufacture of wool has been one of the leading industries of the world. Sheep husbandry has also been considered as the highest type of agricultural employment. It affords abundant opportunity to its followers for study and reflection—opportunities which, in early days especially, were most profitably employed in advancing both the moral and the intellectual condition of mankind. In addition to the most valuable, most healthy and most easily wrought material for clothing, the sheep also furnishes the most nutritious animal food. This class of agriculture has ever been encouraged as a profitable source of employment, and the one above all others best calculated to preserve the original fertility and productiveness of the soil—so unlike the cultivation of the cereals and most other products which constantly deteriorate the land which is devoted to their culture.

While very little improvement has been made in the husbandry of the business even from its earliest inception, its manufacture has been made the subject of great progress and improvement. That has been brought fully under the influence of the material sciences. Every step in its progress from the back of the animal through its clipping, washing, carding, spinning, weaving, and dyeing, has been carefully studied by the scientist and inventor until its manufacture may now be considered almost perfect.

It would seem that with our increased population and needs, such a great and important industry would meet with a most encouraging hand from both people and Government—to the end that our country may be placed as far as possible above dependence upon any other land for its supply of one of the most important necessities of life. But, whether from lack of proper appreciation, interest or knowledge, it cannot be told, the facts are that there is a great spirit of distrust and unrest in regard to the manner in which our legislators have treated this industry, whether in connection with field or loom.

Legislation ought to be so devised, as foreshadowed by the fathers of the Republic, that the wool-growers of the United States might supply our manufacturers with all the varieties and to the fullest extent of their demands; while the manufacturers should, at the same time, be placed in a position to supply all our people with all the woolen goods needed for home consumption. The interests of wool-growers and wool manufacturers ought to be

made identical, and the combined industry of the two the chief corner-stone that should underlie all our varied systems of industry. Such a course of legislation would relieve our people of the heavy burdens of bulky transport of the raw material, and under foreign flags at that, and a like cost with duties added upon much of the same material imported in a different shape. Manufactures and agriculture should ever go hand in hand to the end that we may build up prosperous communities and secure employment to the incoming and increasing thousands which are annually added to our industrial ranks.

### The Mohair Industry.

Closely allied to the wool industry is that involved in raising of the beautiful, long-haired goat of Angora, and of all States in the Union, California is the one best calculated by location and climate for this industry. The first essential of a mohair goat ranch is climate. In Western Asia, some 200 miles inland and 4000 feet above the sea level, lies the native home of the Angora goat, with a climate and surroundings somewhat peculiar, but almost identical with those of the interior of California. No better place exists in the wide world, outside of its native home, than among the foothills of the western slope of the Sierras for establishing the mohair industry. We have no time in this connection to enter largely into a discussion of this question, but propose to refer to it more fully at some future time. The business is not new or altogether unknown in this State. It has already, so far as the production of the fleece is concerned, passed the experimental stage here. It should and might be made an important California industry. There is now a good market for the fleece and the demand must largely increase in the early future.

### Wrinkled Sheep.

A. B. Allen, in the New York Tribune, discusses the subject of wrinkles in sheep, and evidently thinks they might be dispensed with. He says: It is admitted by those who favor them that in what they call the old-fashioned, less-improved merinos, wrinkles are injurious to the fleece, and that with them the staple or fiber of the wool is shorter, coarser, and abounding more or less in hair. This renders the fleece quite uneven, and materially lessens its value. Yet suppose it to be the case that two wrinkled sheep shear as much wool as three smooth ones, I think the cost of it from the former would be quite as much as from the latter, and I doubt whether it can ever be grown of so even a length of staple. In addition to this, the smooth-skinned sheep can be sheared in one-third to one-fourth the time of the grossly wrinkled, and their skins are never painfully and badly cut, as is unavoidable with huge folds.

Although the contenders for these monstrous folds or wrinkles assert that the sheep bearing them are as hardy, prolific, thrifty, and make as good mutton as others, it is not in the nature of things that they should. They will endure cold, perhaps, as well, but when it comes to hot weather how can it be the case with such numerous thick folds of skin and wool covering their bodies? The extra growth of these must consume the most food, and necessarily draw from the juiciness of the flesh and leave it comparatively dry and unsavory. I cannot conceive how the carcasses of such sheep can properly fatten and abound with tender, lean, nicely-marbled, savory mutton, as it is said the well formed smooth-skinned make. Many of the merino flockmasters are strenuously opposed to these huge folds and wrinkles, and only cultivate those of moderate form. They say that the motive of the breeders of the monstrosities is to enable them to boast of the superior weight of their fleeces, and thus give this sort of sheep the fashion and a preference, at much higher prices, in the sale of them.

## THE APIARY.

### Muth-Rasmussen's Device.

EDITORS PRESS:—Your engraving of my device in the RURAL PRESS of July 31st is very good, except that the two guide-posts should come up even with the top edge of the guide-back, as mentioned in the description. Otherwise they cannot accomplish their object, viz., guiding the frame sidewise. As the three up-rights, which are the principal part of the implement, are hidden from view by the frame, filled with sections, lying upon them, it is necessary that the frame should be accurately guided both ways before you begin pressing down upon it, as well as during the operation.

As the article was written nearly a year ago, it is consequently now the second season in which I am using the device, and I may say that I am as well pleased with it to-day as I was on the first day of its invention. In fact I do not see how I could get along without it with my present system of management.

I now smoke the bees out from under the separators and brush them off from the opposite side of the combs, and I very seldom have any cells uncapped by the bees, as but few are left to do any mischief.

WM. MUTH-RASMUSSEN.

Independence, Cal., August 4, 1886.

## THE STOCK YARD.

### A Nevada Man's Experience with Shorthorns.

We find in the Inyo Register a letter from W. J. Marsh of Fort Churchill, Nevada, which gives what the writer describes as "a few plain, common facts regarding the improvement of cattle." There is a general feeling among farmers and stockmen that to pay more than \$50 for a sire is the prelude to financial ruin. They go on supplying three-year-old beef steers to the butchers that weigh 500 pounds, and are elated if a few reach 550 pounds, and fail to see that by the expenditure of \$200 to \$300 for a sire that is purely bred, and worth something to their herds, they could sell two-year-olds as heavy as their three-year-olds now average, saving a year in time and the cost of keeping and all attendant risks for a year. I recently sold 30 beef steers, all three years old but six, which were four years old. Among them was a one-half Shorthorn steer, three years old, and in no way superior to the average half-breed steer, that weighed alive, after driving 26 miles in one day, 1284 pounds. The other 29 made an average live weight of 1049 pounds, and dressed only 50 per cent of live weight, or 524 pounds, while the grade Shorthorn dressed 730 pounds, or 57 per cent of live weight. He dressed 80 pounds more than the best four-year-old, and 206 pounds more than the other 29 head averaged. This steer ranged in the mountains with the others and fed with them, showing his contempt for the stale and false notion that Shorthorns cannot rustle for a living, and proving their ability to outgrow other animals under equal conditions. All this is simply the result of using a pure Shorthorn sire. This steer did not cost me any more than the others, and on the butcher's block brought me over \$15 more than they did. Now, I should like to ask such of your readers as think they cannot afford to buy thoroughbred sires, how many half-breed Shorthorn steers it will take to pay for even a \$500 bull, out of the extra pounds of meat they will dress over and above the animals they are now raising? The first 40 steers raised will cover the price. When there are 40 steers there will be 40 heifers that will be worth \$25 a head more than their mothers as a foundation for further improvements. To all intents the sire is half the herd in determining the force for good or evil within it. No breeder of cattle can afford to use a common sire. To do so is a bad type of economy—a penny wise and pound foolish practice. The man who does not improve his stock will get left. Breed from the best forever, which is the only road to success.

### Meat Supply of Great Britain.

At a "conference on the supply of meat" in London last month, Major Craigie read a paper, of which the following is a summary: Although the 36,000,000 people of the United Kingdom have not for many years raised all the meat they consume, home produce still forms by far the largest section of the whole supply. On the basis of the estimates commonly employed, it is supposed that 25 per cent of our cattle, 40 per cent of our sheep, and 116 per cent of the enumerated pigs of each year go annually to the butcher. If so, the home produce of 1885 may be put at 1,361,000 tons of meat. The imported supplies were of two sorts, live animals and dead meat, the former representing 129,000 tons, and the latter 335,000 tons of meat. The entire consumption of the country was thus 1,825,000 tons, or 112 pounds to each inhabitant.

Analyzing this total more closely, so as to discover how much comes from Colonial sources, the proportion does not appear to be absolutely great, the supply being made up as follows:—

	Tons.	Per ct. of whole.	Lb. per head.
Home produce.....	1,361,000	74.6	83.9
Imported from Colonies..	67,000	3.7	4.1
" " U. S.....	293,000	16.0	18.0
" " Europe....	96,000	5.3	5.9
" " S. America	8,000	.4	.5
	1,825,000	100.0	112.4

In this calculation the several sorts of meat are combined. If it is preferred to distinguish beef, mutton and the products of the pig—bacon, ham and pork, a rough classification may be made, assuming that the undistinguished tinned meat imports are about equally divided between beef and mutton.

	Beef.	Mutton.	Pig meat.	Total.
Home produce.....	728,000	376,000	257,000	1,361,000
Live imports.....	107,000	21,000	1,000	129,000
Dead meat ...	71,000	42,000	222,000	335,000
	906,000	439,000	480,000	1,825,000

The Colonial import of dead meat represents 44,000 tons, whereof only 2000 tons are distinguished as beef, 17,000 tons as mutton, and 15,000 as pig meat, leaving 10,000 tons in the unenumerated class. Almost all the latter comes from the Australasian colonies, and is, no doubt, chiefly mutton.



## PATRONS OF HUSBANDRY.

Correspondence on Grange principles and work and reports of transactions of subordinate Granges are respectfully solicited for this department.

## The Irrigation Question.

We gave recently the views of Bro. J. V. Webster on some features of the irrigation question. One of our Riverside readers, Mr. James Boyd, who has been long known and respected by us, sends us a communication, which we print below, contesting some of the points made by Mr. Webster. We believe that frank discussion by those honestly moved in this matter will be for the general benefit, and lead to a correct understanding of the problem sooner than anything else. Mr. Webster studied well the Constitution of the State while he was a member of the convention which made it. We are sure that a comparison of views by such earnest and intelligent students of the question as Messrs. Webster and Boyd will be of mutual advantage to them and to others who follow the discussion:

EDITORS PRESS:—In your issue of August 7th is an article on the "Water Question" from the *Patron*, by Bro. Webster, which, being written under a total misapprehension of facts, I propose to set him right from our standpoint here in Southern California. To quote from Mr. Webster: "It is rather late in the history of the world to make many converts by misrepresentation, and he who endeavors to foist a fraud on his neighbor is usually the first to bite the dust."

Such is the quotation, and it is applicable to Mr. Webster in an eminent degree—not that we accuse him of willful misrepresentation, but he has taken his facts (?) from papers interested on the side of the monopolists.

Mr. Webster says "there is no alternative left the producer in the irrigated districts but to pay the price demanded for water or to perish." Now, Mr. Webster, the shoe is just on the other foot; for if this doctrine of riparian rights is to prevail, we will have no alternative but to pay the price demanded by the riparian proprietors "for water or perish."

If Mr. Webster had studied the Constitution of the State he would have found that it was mandatory on the part of Boards of Supervisors of the several counties to annually fix the rates to be paid for water for the ensuing year, so that we are not by any means at the mercy of any corporation. If he had also posted himself on the true status of land ownership here in Southern California he would have come to a very different conclusion to what he has done.

The average resident of the upper portion of the State is as ignorant of the true state of affairs in Southern California as the average Eastern man is ignorant of the Chinese question on the Pacific Coast, and they seem to be just as unwilling to learn.

## Water and Land.

The proprietors of the PACIFIC RURAL PRESS are well aware of how matters are conducted in Redlands, and it may stand as typical of all the newer fruit-raising settlements in Southern California, and we refer Mr. Webster to them for confirmation of what we say. The owners of land in Redlands are also the sole owners of the water, and in place of selling the water they simply levy assessments to pay running expenses. As long as there is plenty of water each one has all he wants to use, but should a scarcity occur, it would be divided *pro rata* according to acreage. In Los Angeles city and suburbs, the city authorities own the water, and by law they are the ones to fix the rates. Riverside is the only place that I know of in this county where the rates are fixed by law, and that is only because the plan of selling the water with the land had not been evolved by the necessities of the case.

Redlands profited by Riverside's example and advice, and adopted her present satisfactory system. Nine-tenths of the owners of the land in Riverside also own the water, but because the other one-tenth will not purchase stock, we are perforce compelled to submit to having our rates fixed by the "powers that be."

The Bear Valley reservoir, which has a capacity of water enough to irrigate 12,000 or 15,000 acres, is owned by a corporation. But who is the corporation? Simply the owners of the lands to be benefited, and where stock is held by outsiders, it is only because Mr. Brown, the projector, could not induce the land-owners to take hold. I think it is safe to say that it does not enter into the head of any one to sell water for use. Stock can be bought which will give the holder a right to his *pro rata* of water, and I would say that stock can yet be bought at one-tenth of its value, as will be seen in a few years.

## Land Monopoly.

Our troubles on the riparian question do not come at all from water monopoly, but from land monopoly. We would here call Mr. Webster's attention to Sec. 2, Article 17, of our State Constitution, which says: "The holding of large tracts of land, uncultivated and unimproved, by individuals and corporations, is against the public interest and should be discouraged by all means not inconsistent with the rights of private property."

In Southern California we went to work to carry out these principles and bought out large ranches and dug ditches and sold the land and water with it in 5, 10, 15 and 20-acre lots, and where there was nothing to be seen but cactus and sagebrush, and nothing heard but the howl of the coyote, we have rose-embowered and vine-clad cottages and the busy hum of industry on every hand. Take, for instance, the Riverside of 1870 and the Riverside of 1885-6, and mark the contrast. In 1870 there was only 20 miles of railroad in all of Southern California, and everything one used (except farm produce raised in the county) had to be hauled from Los Angeles, 60 miles distant, by wagon. For years we had nothing to sell. At that time it took us longer to get the PACIFIC RURAL PRESS than it does now to get papers from the Eastern States, and there were no telegraphs or telephones; but we had faith, and that faith which removes mountains. In our innocence we did as has been done from time immemorial, and which we always believed we had a right to do, that right being guaranteed by the United States by treaty with Mexico. We set to work and appropriated water and built ditches and ran it on to land which had no actual value, and what is the result to-day? The land is being covered with a network of railways until they foot up hundreds of miles in Southern California. What was once a barren desert is covered with homes until we have really the city in the country. The whole of Southern California is becoming like the suburb to a large city. We have not any available statistics at hand for Southern California, but we will give a few figures from Riverside, premising that Riverside is only one of a score of settlements, new ones being projected at intervals. With the exception of Anaheim, Riverside is the oldest colony in Southern California, and has a population of say 4000. All told, less than 6000 acres are in cultivation, and not one-half of that being in full bearing. Not much more than 1000 inches of water per day are used in summer, which is sold at 7½ cents per inch for 24 hours, involving a current expenditure of \$1000 per month on ditches, besides from \$100,000 to \$200,000 to be expended in permanent improvements on our ditches and water supply within two years, and what do we find on the assessor's books?

Our real estate is valued at .....	\$ 625,254
Improvements .....	641,855
Cash .....	19,059

Showing a total of .....

.....\$1,286,168  
In less than 16 years, and it is safe to say that the property could not be bought for three times that amount. In 1885-6 Riverside produced one-fourth of the oranges of California and one-eighth of the oranges of the United States, and our total productions brought the producers nearly half a million dollars for the season of 1885-6.

Now, the riparian owners propose, if they can, to carry this exploded English doctrine of riparian right into our midst, and what does it mean? Simply, that we shall pay them for something which they had not the slightest hand in making valuable. When we first started our enterprise here our land had no actual value, neither had the water. By our industry we brought the two together, and look at the change! And we say right here that we do not propose to pay riparian owners one cent, practically giving something for nothing.

## The Monopolists' Quarrel.

The whole trouble comes from holding land in large tracts. If Miller & Lux and Haggin & Carr had not held large tracts of land, and had made money out of something which they never gave value to and expected to make more, we would not have heard of this suit. The State Committee on Irrigation have been working for the rights of appropriators for two years or more, and we had the support of the press and people of the State and a fair prospect of a peaceable settlement of the same. But two sets of public robbers get to quarreling, and what do we see? a scattering of the forces and a changing of sides on the part of many papers that would indicate some powerful interest at work. Because Haggin & Carr are on our side should we be deprived of our rights? We ask for nothing but our rights, the fruits of our own labors, the values we have created, and we are willing to accord the same to any other man. If Haggin & Carr appropriate water and build ditches they will be obliged to sell their lands in small tracts, for land will then be too valuable to farm in large tracts. They cannot sell the lands without selling the water with them. Small tracts of land mean a dense population—a yeomanry, the solid support of a stable State.

## Political Action.

In regard to Mr. Webster's remarks on political action, we would say that the people of Southern California are sound on the doctrine of appropriation, and no judge can get any support who will not support the state of things as they exist here at the present time. The Supreme Court is by no means unanimous on the riparian issue. If our judges are antiquated and fail to catch the spirit of the age, they ought not to stand in the way of our progress. What are our laws for, anyhow; are they our masters or our servants? If they are helps, all is well; but whenever they get the mastery, then are we the veriest slaves. What says the higher law?—that we have "certain inalienable

rights, among which are life, liberty and the pursuit of happiness." \* \* \* "That whenever any form of government becomes destructive of these ends, it is the right of the people to alter or abolish it."

Article 1, Sec. 2, of our State Constitution says, "All political power is inherent in the people. Government is instituted for the protection, security and benefit of the people, and they have the right to alter or reform the same whenever the public good requires it."

This, in our estimation, covers the whole ground. In the first place, the doctrine of riparian rights has never prevailed in Southern California; and now when Mr. Webster and others of like opinion insist on foisting that issue on us we reply that it is destructive to our "life, liberty and pursuit of happiness," and we will have none of it. JAMES BOYD.

Riverside, Aug. 12, 1886.

## Grange Resolutions on the Water Question.

Besides the resolutions we have hitherto republished, action has recently been taken by a number of subordinate Granges in the State, as follows:

Alhambra Grange, Aug. 7th.

*Resolved*, That the proceedings of said extra session, so far, indicate that no satisfactory adjustment can be reached. That the questions of irrigation and reorganization of the Supreme Court are of momentous interest to the welfare of the people and cannot be hastily passed upon. That the coming election will offer facilities for intelligently scrutinizing legislation required and selecting adequate representation; therefore, that we unanimously indorse the resolutions of Eden Grange. MRS. M. B. LANDER, Secretary.

## Two Rock Grange.

*Resolved*, That we call on the Legislature now in session to adjourn at once, and leave the legislation of the water question until the regular session.

*Resolved*, That we urge upon farmers and all good citizens the urgent necessity of nominating and electing members to the coming Legislature of comprehensive judgment, and those who are above being influenced by self-interest or a personal consideration; men of mature thought, and who are able to grapple with the great question of a fair and equitable distribution of water for irrigation purposes.

*Resolved*, That we believe the waters of the State should be public property, for the use of the people, and its appropriation should be sacredly guarded so that another grinding monopoly be not fastened upon this State. HOWARD ANDREWS, Sec. pro tem.

Washington Grange, Aug. 7th.

*Resolved*, That the waters of all innavigable streams belong to the people, and no law should be enacted to confer vested rights to any man, or set of men, but the State should retain the power to legislate on the matter from time to time as experience might dictate, but always for the greatest good to the greatest number. CHAS. BAMERT, Sec.

Wheatland Grange, Aug. 7th.

*Resolved*, That we are in favor of a just distribution of the waters of our rivers under the control of the State only, and not by any individual or corporation whether called irrigationists or riparianists, and that equitable distribution of the waters of our rivers is absolutely necessary to the progress and development of our State; that we are determinedly opposed to all monopoly in water, whether the monopolist lives on the river or 20 miles more or less from it. FRANK KIRSHNER, HUGH MORRISON, J. M. C. JASPER, Committee. J. W. HUFFACKER, Sec.

Roseville Grange, Aug. 7th.

*Resolved*, That we are in favor of the State taking control of all the innavigable waters of the State, and passing laws for the equitable distribution of the same for agricultural purposes.

*Resolved*, That we oppose the monopoly of water in any form, and that a distribution of the waters of the State is indispensable to the progress and development of the resources of the same. S. J. CROSS, Sec.

## Not so Moribund.

That moribund Order, the "Grangers," has been aroused out of its cerements to indorse riparianism and the common-law doctrine.—*Fresno Expositor*, August 11.

Our contemporary is very much mistaken about the moribund portion of his able essay on the water question which we print above. The Grange may make less noise than it did 10 years ago, as a matter of fact the noisy element has been quite completely eliminated, and much to its advantage, too. The reaction which came from over-exertion and unwise expansion has long since passed away. For the last few years the Order has been steadily and healthily growing, and it may now claim to hold the balance of power in this State—a force which may be trusted to be turned irresistibly against the aggression of monopolies or other menace to the public welfare. Since the water question seemed to have fallen between the upper and nether millstones of two monopolies, the Grange has been alert to rescue the public interest from its perilous position. The result is a large increase in membership. For example, just as we write there comes a cordial invitation to attend a meeting of Valley Grange, Pacheco, on Aug. 28th, which says the "4th degree will be conferred upon a class of 20."

Whatever parties who think the causes they serve are endangered by Grange influence may say about the Order, they deceive only themselves when they say it is a moribund institution.

## Delegates to the Farmers' National Congress.

The State Board of Agriculture has written as follows to Governor Stoneman:

Governor George Stoneman—DEAR SIR: Yours of the 28th ult., containing copy of letter received from Governor Hubbard, of Minnesota, asking you to name delegates to the Farmers' National Congress to be held at St. Paul, with request from you to the State Board of Agriculture to suggest names of persons qualified to act, received. In compliance therewith we would recommend the appointment of the following named:

At large—Hon. William Johnston, Master of the State Grange; Hon. S. T. Coulter, Past Master of the State Grange.

Alternates—Hon. A. L. Chandler, of Sutter; Hon. George Steele, of San Luis Obispo.

First Congressional District—G. N. Whitaker, Santa Rosa. Alternate, A. D. Logan, Colusa.

Second Congressional District—Dr. Grattan, Stockton. Alternate, George Ohleyer, Sutter.

Third Congressional District—George W. Hancock, Sacramento. Alternate, Joel Russel, Alameda.

Fourth Congressional District—Amos Adams, San Francisco. Alternate, George W. Meade, San Francisco.

Fifth Congressional District—I. A. Wilcox, San Jose. Alternate, B. Pilkinton, Santa Cruz.

Sixth Congressional District—Dr. Thomas Flint, San Juan South, Monterey county. Alternate, Hon. J. F. Clark, Los Angeles.

Governor Stoneman has appointed the above, as recommended by the State Board.

## Call for a Farmers' Convention.

Three prominent Granges of the State have made a call for a farmers' convention at Sacramento during the last week of the State Fair, beginning Wednesday, September 15th, next.

All Granges are requested by them to appoint one delegate for each 10 members.

The appeal is to every farmer in the State to act with the Granges in making the representation general. Matters of deep interest to farmers and producers of all classes will be discussed, and such political action be taken as to them shall seem advisable.—*California Patron*.

LIQUOR AT THE FAIRS.—The Ohio State Fair having taken a decided and advanced position on the sale of intoxicating liquors on its grounds, and prohibited them, it stands the farmers of Ohio well in hand to sustain this commendable action by giving them an attendance this year unheard of in the days of free liquor. The new grounds, the grand displays and large attendance all will warrant the attendance of the farmer and his family from every county of the State.—*Grange Bulletin*.

VALLEY GRANGE.—We learn from Bro. Geo. P. Loucks, Master, that Valley Grange, No. 279, at Pacheco, will give a harvest feast on Saturday, the 28th inst., when the fourth degree will be conferred on a class of 20. All Patrons from abroad will be received with welcome. The members of this young Grange are evidently doing excellent work and setting a worthy and cheering example for many older in the Order.

TEMESCAL GRANGE meets at 2 P. M. to-day.

## Fairs to Come.

For the information of our readers, we give below a list of the coming exhibition on this coast in the order of their occurrence:

Fourth District—Sonoma, Marin, Solano and Napa counties—Petaluma, Aug. 23d to 26th.

Seventeenth District—Nevada and Placer counties—Glenbrook Park and Pavilion, Nevada City, Aug. 24th to 26th.

Mechanics' Institute Fair, San Francisco, Aug. 24th to Sept. 25th.

Golden Gate Fair, Oakland, Aug. 30th to Sept. 4th.

Thirteenth District—Sacramento, Yolo, Yuba and Sutter counties—Marysville, August 31st to September 4th.

Eighth District—El Dorado, Amador, Alpine and Mono counties—Placerville, August 31st to September 4th.

Contra Costa Agricultural Society, Pacheco, Sept. 6th to 10th.

State Agricultural Society, Sacramento, September 6th to 18th.

Oregon State Agricultural Society, Salem, September 13th to 18th.

Eleventh District—Plumas, Lassen, Sierra and Modoc counties—Greenville, September 20th to 24th.

Second District—San Joaquin, Calaveras, Tuolumne, Stanislaus, Merced, Mariposa, Fresno, Tulare and Kern counties—Stockton, Sept. 21st to 25th.

Ninth District—Del Norte and Humboldt counties—Rohnerville, Sept. 21st to 24th.

Fifth District—San Mateo and Santa Clara counties—San Jose, Sept. 27th to Oct. 2d.

Seventh District—Monterey, Santa Cruz, San Benito and San Luis Obispo counties—Salinas City, Sept. 28th to Oct. 2d.

Tenth District—Siskiyou, Trinity and Shasta counties—Yreka, Sept. 29th to Oct. 2d.

Nevada State Fair, Reno, Oct. 4th to 9th.

Santa Barbara Agricultural, October 5th to 8th.

Twelfth District—Lake and Mendocino counties—Lakeport, Oct. 5th to 8th.

San Diego Horticultural Society, Oct. 6th to 8th.

Sixth District—Los Angeles, Santa Barbara, Ventura, San Diego, San Bernardino and Inyo counties—Los Angeles, Oct. 11th to 16th.

Ukiah Park Association, Ukiah, Oct. 14th to 16th.



## AGRICULTURAL NOTES.

## CALIFORNIA.

## Alameda.

**PRUNES AND PLUMS PLENTY.**—San Lorenzo correspondent *Haywards Journal*, August 14: Telegram received last Monday evening that the last carload of Hungarian prunes shipped East brought \$1.25 to \$1.50 per box of 20 pounds. Four cars of Hungarian prunes have lately been shipped from this station by the Fruit Union, and three will be shipped this week. A carload is composed of about 900 boxes. Three carloads of plums were shipped East from this place last week, and several more of plums and pears were shipped this week. How's that for insignificant little San Lorenzo?

## Butte.

**GOOSEBERRIES UP A TREE.**—*Chico Enterprise*: It is not generally the case that oak trees bear fruit, but we have before us a handful of gooseberries that grew on such a tree 20 feet above the ground. We plucked them a few days ago near Forest ranch, or rather knocked them down with a pole. From the side of the tree a branch had broken off at some time in the past, leaving a little recess where it had joined the trunk. In this recess a gooseberry seed had lodged and taken root. The bush was growing finely and bore large, fine fruit. The sight was a strange one, and it was some time before we understood how it happened.

## Fresno.

**EDITORS PRESS.**—The heat here is intense, the thermometer being at 112° in the shade, which makes it a little hard on the farmers engaged in hauling grain to market. Most everybody is selling in preference to storing, as they did last year. A disease has broken out near here which is killing a good many cattle. Some say it is the Texas fever, and was brought in with some cattle from Texas.—C. J., *Kingsboro*.

**SCALE INSECT-KILLING.**—From the report of Commissioners J. H. Braly and George E. Freeman: This commission has done considerable in the way of experiment during the past few months, especially upon the San Jose scale in its hatching, active state. Several of the washes recommended for spring and summer use have been carefully tested. Of these, some have been proved to be very efficient. This is true of the kerosene butter prepared from Professor Riley's formula, and also from the weak lye solution. There seems, however, to be a weak point in both of these washes as related to our hot, dry climate. They evaporate, or dry up, too quickly for best results. The kerosene is hardly on the tree before it has evaporated, or the lye before its caustic elements have crystallized and its power ended. The danger to the tender foliage in the use of lye is also an objection to it as a summer wash. The best results with these various washes we have found in the use of whale-oil soap and sulphur, and it may be a small quantity of lye or potash added. The sulphur is very offensive and destructive to the scale in its active stage, as is also the soap, and the latter adheres to the tree and maintains its killing power for a considerable time. We are convinced that this is one of the very best summer washes in this locality. A good formula for it may be one pound of soap to two gallons of water, with as much sulphur as can be dissolved in this mixture while boiling; one pound of American lye, or potash, may be added to 8 or 10 gallons of this; applied to the tree as hot as convenient.

## Humboldt.

**DAIRYING DEPRESSED.**—*Standard*, Aug. 14: Reports from Ryan's slough say that the bottom has fallen out of the dairy business in that vicinity. A dairyman who rented a dairy of 60 cows has been obliged to discharge all hands and cease milking. The small quantity and quality of the grass, we understand, is the cause of this unfortunate occurrence.

## Los Angeles.

**BANANAS.**—*Pasadena Union*, Aug. 13: Dr. Rigg hands us a finely-matured banana grown on his Marengo avenue place, and from the increase in this fruit here it looks as though it was coming to be a regular and successful product of the country. It used to be considered that we were too far north for bananas, but they are found to stand some frost, and we look forward to ultimately seeing the home market supplied with home production, and that, too, of a better quality than the green-plucked fruit that comes from abroad.

**SOME PUMPKINS.**—*Anaheim Gazette*, Aug. 14: On the farm of Mr. A. McDermont, of Orangethorpe, there is a pumpkin vine which bids fair to go down into history as the most prolific of its kind. Over 500 pounds of pumpkins have been picked from it already, and Mr. McDermont thinks it will yield at least 2500 pounds more. He will keep an accurate record of its product and report the result at the end of the season. The vine covers an area of 40 feet. Another instance of the fecundity of the soil of this farm is the fact that the walnut trees thereon have made, so far, a growth of eight feet this season, though they were unusually late in starting.

**SELLING THE PLUME CROP AFOOT.**—From Superintendent Reid, of the Ostrich Farm, we learn that the birds are doing well. Two nests of 12 and 8 eggs respectively are now being

hatched. The owners of the farm have given permission to the superintendent to sell the feathers, a permission which has been fully availed of by one lady who has already engaged, at a stated sum, a feather that is still growing on the bird. The price of feathers ranges from \$2 to \$8 each.

## Napa.

**BROOM CORN.**—*St. Helena Star*, Aug. 13: E. R. Wood has raised a small patch of broom corn of finest fiber and longest that has ever been grown in the county. It has been irrigated, and the hot weather has caused an exceptional fine development of the plant.

**SORGHUM FODDER.**—Parties who have a limited amount of land and cows to feed should examine a small piece of sorghum or sugar-cane grown by Mr. Mayfield. It is yielding an immense crop of very palatable feed, that turns an extra quality, as well as quantity, of milk.

## Nevada.

**PEARS FOR THE EAST.**—*Grass Valley Union*: Edwin T. Earl, of Sacramento, who is now in Grass Valley for the second season purchasing and shipping fruit for the Eastern market, made his first shipment of Bartlett pears yesterday. These go to Sacramento, where they will help to make up the 15 carlots that are sent as special trains by the Fruit Union. Mr. Earl has made contracts for the pears of a number of orchards. The pear crop of this region is less than half of that of last year, and is somewhat affected by worms, and in order to insure sound fruit it is necessary that it be picked early. The apple crop, though fair in quantity, is seriously affected by worms, and it is doubtful if any considerable quantity can be shipped. The shipments of pears will be fair as to quantity; but a light crop this year holds out the promise of a heavy one next season.

## San Benito.

**MONEY IN MUSTARD.**—*Free Lance*, Aug. 13: This plant, which is such a pest to our farmers, and has for years untold grown and flourished in the rich soil of the California valleys, and which nowhere in the State attains such gigantic proportions as in San Benito county, is a highly important article of commerce, always commanding a ready sale and a good price, and the enterprising Celestial coins many a dollar in gathering and marketing it. It is a matter of surprise to a thoughtful man that farmers should not harvest their own mustard and at least make it pay for the trouble it gives them in separating it from their grain. There can be no doubt that it would pay, and pay well. As it is now, where mustard is so high and strong as to prevent heading the grain, the rancher must do his cutting with a reaper and then pick out the heaviest of the mustard therefrom, in order that it may be thrashed. In some fields that have come under our observation this year, the mustard will make more and larger stacks than the grain. Here is the Chinaman's opportunity. Following up the stackers, he straightens out the piles of mustard, turns the heads all one way, repiles the stalks on a large canvas, and then, with a rudely-constructed flail (a regular man-killer), proceeds to pound out the seed. Taking this year as a sample, there is money in it. One Chinaman will thrash out and clean an average of 100 pounds per day, and not work more than half his time at that.

**GRAIN AND HAY.**—*Independent*, Aug. 10: Wheat is coming in in vast quantities. Yesterday morning 13 wagons were unloading at one time. The heavy losses by fire recently have frightened our farmers considerably, as well they might. But little is being sold, however, the price being only \$1.06½. The hay crop is coming in more slowly, the teams being all at work on the wheat crop. Hay is quoted at from \$4 to \$7.50 in Hollister. Mr. Lathrop has 600 tons in his barn and 200 tons in his yard, and ships two carloads per week.

## San Joaquin.

**COTTON.**—*Lodi Cyclone*: Charley Neal, living some four miles northeast of Lodi, has been experimenting in the growth of cotton seed the present season, and is satisfied from the result that cotton can be grown in the Live Oaks almost as successfully as in the cotton States. In the yard of Mrs. S. J. Riggs, near the Methodist church of this place, may be seen several plants in full bloom and well supplied with branches, which have never been irrigated.

## San Luis Obispo.

**GOOD GRAIN GROUNDS.**—*Tribune*, Aug. 13: A gentleman who has been traveling through the northeastern part of the county, heretofore so utterly condemned by the sheep and cattle-grazers as too dry for cultivation, says there is corn growing in different places without irrigation, now bright and green, and promising as good a yield as corn in the Eastern States. He also reports a field of five acres of Propo wheat on the top of the Palo Prieto hills, having a growth of about eight feet in height, and promising a yield of 50 bushels per acre. Those settlers who arrived last fall in time to get in a crop are now harvesting from 18 to 20 sacks, or 35 to 40 bushels of wheat per acre. Many wells have been sunk, obtaining water at from 15 to 40 feet in depth. No failures have been reported. Settlers are elated over their possessions and prospects of comfortable homes in the future.

## Santa Barbara.

**LOMPOC APPLES.**—*Record*, August 7: In no

portion of the coast do deciduous fruits do better than here. The apples grown in Lompoc valley took the first prize at the late New Orleans Exposition for the best varieties produced in the Pacific States and Territories; and at the Mechanics' Fair, held in San Francisco last year, the first premium was awarded to apples from Lompoc over those exhibited from all other portions of the State. The climate is too cool in the valley to grow semi-tropical fruits; but at various points in the canyons they are growing and fruiting with good results. We do not claim success in this latter experiment, as the temperature is generally too low, while this condition conduces to the perfect growth of most other varieties of fruit.

**HONEY CROP.**—The yield of honey this year in this section will not fall much short of 150 tons—about one-half of what was anticipated when the season opened. The time is not far distant when in a favorable year 400 or 500 tons will be extracted. The samples sent from Laughlin & Merritt's apiaries, under the management of J. A. Bailey, to San Francisco, were considered the best from all parts of the State.

**MUSTARD.**—Few people have any idea of the amount of labor required to thrash and sack the 2500 acres of mustard estimated to have been sown the present year. It is calculated three men can, on an average, thrash, clean and sack two acres per day. If this be the correct estimate it would take one man 3750 days to do the work, or 75 men 50 days, the time in which the crop must be housed in order to avoid the danger of early rains.

## Santa Clara.

**CHEESE HOOP PATENT.**—*Gilroy Record*, Aug. 14: The cheese manufacturers have this week been confronted with a claim that in the present stage of business is anything but pleasant and agreeable. It appears that in 1870 a patent was issued for a cheese hoop, and after some litigation the patentee's right was in every way confirmed. These hoops have been sold in the East at \$7.50 each, while here in Gilroy they have been made and furnished for \$1.75. The manufacturer here, Mr. A. Robinson, was not aware that in the manufacture he was infringing upon any patent, and the parties to whom he supplied them were in the same state of blissful ignorance as to their infraction of the law. The demand now made by the agent representing the patentee is one dollar for each hoop for every year of its use. As some of the parties have used these hoops for a long period, the claim is rather an onerous one, but apparently legal, and will have to be met by payment or compromise. The amount involved is probably upward of \$3000, Reeves Bros. being probably more interested than others, although Messrs. Furlong, Davison, Rea, Mason, and many others suffer to a considerable extent. Probably if it is conclusively proved that the patent is a valid one and the claimant's right justly equitable, the issue will be met by payment of the amount demanded, as by litigation the demand would be largely increased, not only in royalty but the expenses of suit would make the costs much greater.

**THE VITICULTURAL SOCIETY.**—*Herald*, Aug. 16: The regular annual meeting of the Santa Clara County Viticultural Society was held last Saturday at G. A. R. hall. The principal business transacted was the election of officers for the ensuing year, as follows: President, D. C. Feeley; Vice-President, Daniel Wright; Treasurer, Frank Dunn; Secretary, L. D. Combe; Steward, Julius Portal, Jr. The Secretary presented his report for the year, which showed the balance on hand to be \$94.45; number of members on the roll, 72.

## Solano.

**VACAVILLE FRUIT NOTES.**—*EDITORS PRESS*: The weather is rather warm but not uncommonly so. The main business here now is the disposal of the peach and grape crops, which are being gathered and sold for good prices. F. H. Buck has contracted 150 tons of peaches at 4½ cents per pound, delivered in Vacaville; the peaches to be 2½ inches in size. J. W. Gates has contracted about 5000 boxes to the Napa cannery at four cents per pound, the peaches to be delivered at Suisun, and to be two inches in size. These peaches are put in 60-pound boxes, and all expense of paper, packing, commission, drayage and steelage is saved, which makes a large difference in the net proceeds of the crop. H. Bassford has bought the grapes of several vineyards, paying from \$35 to \$40 per ton, purchaser to take the grapes on the vines. J. Collins sold his crop of grapes for 65 cents per crate, delivered in Vacaville, crates found by purchaser. Last year the grapes from the same vines sold in San Francisco for from 40 to 60 cents per box, and all expense to come out of that, which amounts to from 15 to 25 cents per box. From three to six cars are loaded daily at Vacaville to go East. Several men have loaded cars with fruit raised by themselves. There is more fruit going East from Vacaville now than is sent to San Francisco; probably more than half is shipped through the Fruit Union. There is some complaint made about the sales made by the Union, but I notice that the men who have a large amount of fruit to ship, employ experienced packers and see that none but first-class fruit is put up, complain but little, and show large profits returned. Poor fruit well packed will bring a better price and look better than good fruit poorly packed. Help is quite scarce just now. Many of the Chinamen have gone off to pick hops (it would be a good thing for Vacaville if they never re-

turned) and some of the fruit-raisers have been forced to employ white help. H. and J. Bassford employ none but white packers, and they have found out that white help is much the cheapest in the end. The main topic of the day in town is the coming election. The Prohibition party seems to be gaining strength and several old whisky-drinkers are in favor of the party. If the party could form some plan to start free reading-rooms in town, so that men and boys could pass away their idle time without going to the saloons, it would help the party more than anything else. Vacaville is making preparations for a grand barbecue on Admission Day. The Suisun Pioneers will attend.—G., *Vacaville*.

**PERILOUS PAVING.**—*Dixon Tribune*, Aug. 14: T. N. Buckles, of Batavia, who lives near the public road, had straw to the depth of two feet scattered in the road before his residence, to prevent annoyance from the dust of passing teams. Last Saturday the straw caught fire from the cigar of a traveler, and but for the prompt assistance of the warehouse men and others in the vicinity, his house would certainly have been destroyed. As it was, he escaped with only badly scorched pickets, damaged shrubbery, and a few yards of fence burned.

## Sonoma.

**CHINESE WATERMELON.**—*Cloverdale Reveille*, Aug. 14: H. W. Barham raised one of the finest watermelons in his garden we have seen this year. The seed was brought from China by Dr. Burdell. It was of a nice even shape. The pulp was of a creamish color, and most delicious.

**A USEFUL SNAKE.**—*Petaluma Courier*, Aug. 11: F. M. McGrew, who lives in this township, killed a blow snake 15 inches in length. Upon cutting it open he found three full-grown mice. It is said the larger blow snakes are very destructive to rats and gophers, which they first crush by a twist of their bodies, and after sliming them over swallow even the largest of them with ease. Blow snakes are not poisonous, and as they help destroy mice, rats, gophers and other farm pests, they should be protected when found. They sometimes grow to the length of three and a half feet.

## Sutter.

**GOOD BARLEY.**—*Farmer*, Aug. 13: Conrad Schuler thrashed for Conrad and George Gottwalls, whose grain turned out the largest reported this year. From nine acres they secured 207 sacks of barley—about 45 bushels per acre. On Wednesday of last week Mr. Schuler thrashed on the same place 1040 sacks of barley before noon. Mr. Gottwalls informs us that from his 80 acres of barley he secured 1600 sacks.

## Yolo.

**SWINE DYING BY HUNDREDS.**—*Yolo Mail*, August 14: A hog epizootic, supposed by some to be the hog cholera, is raging with fatal effect in the farms west of Woodland and along Cache creek. Among the heavy losers thus far is Mr. Reynolds, who has lost 150 head since the epidemic began, Mr. Lowe about 150 head, Mr. Eakles 130 and Mr. Hiller 20 head.

**ORANGE PLANTING.**—*Democrat*, August 12: Drs. Parramore and Clarke have turned their attention to the cultivation of orange trees. They have nurseries of several thousand seedlings now 12 or 14 inches in height. It is their intention to have them budded by an experienced horticulturist at the proper season of the year.

**WHEAT-HAULING.**—The storehouse conducted by Bidwell & Wright will be filled to its fullest capacity—about 3000 tons—by next Monday. At Hunt's there are several still hauling, this warehouse being much larger than the other. No wheat is being shipped at the present time, as the price is ranging very low, being about \$1.17 or \$1.18 per cental.

## NEVADA.

**STATE LANDS IN DEMAND.**—*The Free Lance* says: The present sales of State lands are unprecedented in the history of Nevada. Last month there were sold by General Preble and Deputy Noteware over 40,000 acres. The receipts from these sales amount to \$50,000, thus swelling the school fund to this extent. The selections of land are made principally from Humboldt, Elko and Washoe counties.

## OREGON.

**BEEVES FOR THE EAST.**—W. B. Todhunter and L. Godchaux, two prominent stockmen, were lately interviewed by a *Silver State* reporter relative to the extent of the cattle-shipping business of Southeastern Oregon and Southwestern Idaho to Chicago and other Eastern markets, and gave it as their opinion that at least 25,000 head of cattle, from sections which until last year found a market for their beeves on this coast, would this year be shipped East. Todhunter & Devine will ship about 9000 head; Peter French about 4500; Hock Mason, from the Overfelt ranch, about 4500; Stauffer & Sweetser 1000, and T. R. Davidson and Smith Bros. several hundred each. Besides those mentioned, all of whom have their ranges in Grant and Baker counties, Oregon, W. F. Somercamp, John Shrode, David Hyde, H. Myers and others, in Southwestern Idaho, will ship East. Heretofore nearly all the beeves from the localities mentioned were driven to the Central Pacific Railroad at this and other points and shipped to San Francisco.





### The Nurse's Poem.

[By JOHN E. McCANN.]

She told it to me in a sweet, low tone,  
In the hospital ward to-day;  
We two were standing together alone,  
Near by where the sufferers lay,  
And a nameless thrill shot into my heart—  
From my heart to my brain it rose—  
When she said, 'twas worthy the poet's art,  
And should never be told in prose.

An orphan was he, about three years old,  
When they carried him senseless in,  
With starry blue eyes and tresses of gold,  
And soft dimples in cheeks and chin.  
His poor little back was broken in two,  
And he moaned far into the night;  
Till he saw the nurse's eyes moist with dew,  
Then he said: "I'll be soon all right."

"Don't cry," said he, "for I'm going to sleep,  
And I guess I want to be kissed—  
But not on the mouth! right there—to keep,"  
And he put up a tiny fist.  
So she kissed the fist, and he went to sleep,  
With the fist 'neath his dreaming head;  
And they found it there, 'neath his golden  
hair,  
When the dear little fellow was dead.

—John Swinton's Paper.

### Milly's Marriage Contract.

"Well, for my part, I don't see why folks call Milly Morrison a strong-minded girl," quoth to himself the stalwart young farmer, John Armstrong, as he strode homeward in the sunset glory after a charming Sunday afternoon with the said Milly on the river. "It appears to me a good deal like jealousy, because there ain't a girl in these parts that can hold a candle to her. The little daisy! She knows well enough how much I think of her, and if I'm not mightily mistaken, she likes me pretty well, too. And, confound it all, I'm not going to take anybody's word for it. I'm just a-going to go in and win, and let her strong-mindedness go to the dickens. I guess it will never hurt me." And whistling blithe, "Ye Banks and Praes o' Bonnie Doon," valiant John cleared the fence at a bound and disappeared in the gloom of the woods beyond.

Yes, everybody said Milly Morrison was strong-minded; but however it got about, or who first said it, Mrs. Grundy didn't know. Pretty Milly, with her rose-leaf cheek and her tender brown eyes and her golden braids, strong-minded! Preposterous! Surely no girl in the county or town of Glenville had half as many beaux nor half as many offers, as everybody knew. But certain it was that, no matter how bold and confident the swain might be who tried his fate with Milly, he was always known to come away wonderfully disconcerted, with never a word as to why and wherefore.

"What could it mean?" wagged the gossip tongues. "Why, maybe she's strong-minded; yes, to be sure, Milly must be strong-minded, else why did she let so many good chances slip?"

And thus it came to the ear of John Armstrong, the most energetic, the most enterprising young farmer in Glenville, as was commonly agreed. At first he gave credence to the story, and cultivated her acquaintance out of curiosity, merely to see what manner of human kind a strong-minded woman might be, but Milly put forth no startling ideas in his presence; and, finally, when he found himself subdued by her maidenly charms after sitting opposite those innocent brown eyes and watching the fluttering bloom of that lovely face for one long delicious summer afternoon, he settled in his mind that it was a malicious falsehood about her. And now the die was cast. He, John Armstrong, would ask Milly for her love, and in his heart of hearts he had no doubt that he should win the prize.

"Just to think of her going around the country speechifying and proclaiming woman's rights!" he exclaimed to himself, as he drove home the cows. "Why—ha! ha!—she's as innocent as a gentle lamb. And as for having a will of her own, or standing up and fighting it out on her own account, stuff and nonsense! I'd as soon expect Brindle here to kick over the milk-pail. Nobody need talk to me about Milly Morrison's being a woman's righter. I never see anything of it."

Time sped as time has a way of doing, until nearly a week had elapsed. It was a summer night, and John and Milly stood by the river bank. All things were propitious. The wind sighed softly through the tree-tops. The young moon gazed at her image in the sparkling water. John felt that the time had come for him to unburden his heart.

"Milly," he said softly, as he caught her hand, "I have something to tell you to-night.

I think you have guessed how much I love you, Milly darling, because it was something I couldn't conceal. But I want to know—do you think—I mean, do you love me a little, Milly?"

"Yes, John," faltered she of the downcast eyes and rosy cheeks.

"My little Mayflower! And (ecstatically) will you marry me, dear, and help me make a home—a little home to ourselves?"

A pause. Then slowly, "I don't know, John. I love you dearly, but—but—it seems like a great undertaking—a great responsibility. I don't believe I am fitted for it."

"Fitted for it!" he laughed gleefully; "why, Milly, you know, as well as I do, that there isn't a smarter girl in the whole country than you are," and he helped himself to a kiss from the rosy lips.

"You said help to make a home. I don't think I quite understand. Won't you explain, John, what you expect of me—that is, what would I have to do?" she said hesitatingly.

"Why," a little impatiently, "strange you don't understand, Milly. Make a home as other people do who get married and live together. You run the house and I run the farm. Of course you would be willing to do your share of the work, wouldn't you? You know I am not rich."

"Oh, I see," answered Milly; "you would raise the crops and sell them, and take care of the stock."

"And," put in John, "you would do the cooking, the dairy work and the laundry work, and the rest."

"Yes, to be sure; I quite understand you now," she replied.

"Well, then," he said fondly, "will you marry me, Milly? You haven't said yet that you would."

The long lashes drooped upon the rose-leaf cheek for an instant, and then a pair of innocent eyes were raised to his face, and she asked timidly:

"But you haven't said yet what you would give me for doing my share of the work, John."

"Give you!" he cried in amazement; "why, Milly Morrison, what do you mean?"

"Why, just this. Don't you see, John, that your work brings you in a fair profit; so much money every year? But mine would bring me in nothing."

"Why, Milly," he answered reproachfully, "you would have a home and enough for your needs."

"That is," she replied with dignity, "I should have my board and clothes! But bear in mind, John, I can earn more than that any day. Deacon Jones has wanted me to keep house for him ever since his wife died, and I could have my board and clothes there and money in the bank every month."

"But, darling," protested John, "do you think I would be so mean as to ever deny you money when you asked me for it?"

"But that's just what I would not do," she answered. "If I do half the work, why shouldn't I have half the profits?"

Half the profits! John was dazed at her audacity.

"I should do the work that you would have to pay some one else to do," she continued, "and if I work as many hours a day as you do, and do my work as faithfully as you do yours, why should you have all the profits and I nothing?"

John's amazement culminated in a white heat of passion.

"Well, Miss Morrison," he said with superb scorn, "if you are not willing to marry me as other folks marry and do like other folks do, you can wait till some fellow comes along who is willing to take you on your terms."

"I suppose you think me very mercenary, John," said Milly, gently; "but truly I don't care half so much for the money as I do for the principle of the thing."

Seething with rage and disappointment, he led her home across the dewy meadows. At the gate she held out her hand and said, sadly: "Good-by, John. Remember I still love you dearly, and if you had been disposed to treat me justly, you would have found in me a good wife."

John muttered something between his teeth, jammed his hat down over his eyes and strode off in the darkness. But he said to himself when he had stilled the tumult in his soul, that after all, folks were right. Milly Morrison was most decidedly strong-minded.

Somewhat it got noised about that Milly had refused John, and all Glenville was agog as to the reason for it. Many a professional gossip declared that "sure's she lives, Milly Morrison'll repent the day she ever gave such a proper young man as John Armstrong the go-by." But through it all, though perfectly aware that she was the theme of every tongue, Milly bore herself with smiling unconcern. Not so John. In a moody and unhappy frame of mind, he shunned his young friends, and carried about an expression so severe that there were none so brave as to test his good-humor with a jest.

On a large farm on the outskirts of Glenville lived Milly Morrison, youngest child of Rufus and Martha Morrison. The elder son and daughter having married and set up homes for themselves, only Milly was left at home to help "mother" with the farm work.

One midsummer afternoon, as the two sat busily sewing, Mrs. Morrison looked up and said: "Everybody is saying, Milly, that you have refused John Armstrong. Is it true, dear?"

"No, mother," said Milly, with a smile; "he refused me."

"Why, what do you mean, child? Of course

you didn't propose to him?" questioned her mother.

"Oh, no. He asked me first, but when I mentioned my terms he refused me or my terms, I don't know which."

"You talk in riddles, Milly. I really can't see any reason why you should not marry John; you know he thinks a deal of you."

"Why, mother mine, it wasn't my fault. I just asked John what he was going to give me for my share of the farm work. I told him if I did half the work I thought I ought to have half the profits, and he got mad, that's all. Oh, I never shall forget his face," and she ended with a peal of laughter.

"Milly, Milly!" cried her mother in surprise, "where did you get such ideas?"

"Mother," said Milly, seriously, laying aside her work and seating herself at her mother's knee, "I got them here in our everyday experience. Think of how you have slaved all your life, think of how you and I have slaved every day of our lives, and then tell me what compensation we have. Look at this house. Are there a dozen articles of luxury in it? Look at the clothes we wear. Are they much better than the poorest people in town wear? Do we ever have any money to spend for our own pleasure? Is there a book or magazine or picture that we are ever able to buy? Now, mother, don't stop me. I am not going to say a word against father. I've no doubt he's as good as most men. But if you think it's right to slave day in and day out for your board and clothes (and poor ones at that), I don't. I've heard you say many times you'd sooner go with barely clothes enough to keep you warm rather than ask father to give you the money. And you know, mother, it takes me a week to get up my courage to ask him for a new dress. I feel as if I were facing the judge of a criminal court. Now, mother, confess that you think these things are not right."

"Yes, Milly," answered her mother, wiping away the persistent tears, "I have felt this injustice all my life. Your father seems to think that, hard as we work to help him make his money, we have no right to any of it."

"No, I shan't soon forget the day, mother, when you asked him for a dollar and a half to buy your winter flannels, when he wanted to know if you expect to spend all the money that was made on the farm in a year!" added Milly, indignantly.

"Hush, Milly, hush! Remember he is your father."

"I didn't forget that; but I've said nothing that isn't true. And now, mother, do you blame me for not wanting to put myself in such a position as that for the rest of my life? No," clenching her hand, "I'd rather live an old maid all my days with a little hard-earned money in my pocket and my sense of independence, than be the wife of the richest farmer in the country, if I had to go to him like a trembling beggar for every little necessity."

And burning with indignation, Milly sprang from the room and "had it out" in the old cherry tree in the orchard.

The summer days waned. The September haze hung upon the hills. The autumn leaves were falling, when late one afternoon as Milly was walking home from town, following the old familiar path by the river's bank, she came suddenly face to face with John Armstrong. She smiled and bowed, and would have passed on, but he put out a detaining hand.

"Aren't you going to stop and speak to me, Milly?" he asked humbly, as the color surged over his face.

"Why, John," she answered, gently, "I have always been willing to speak to you. You know it is you who haven't wanted to speak to me since—"

"Since I made a fool of myself," blurted out John. Then he added: "Come and sit down here a moment, won't you? I want to set myself right with you."

When they were seated on the trunk of a fallen tree, he continued:

"I've thought it all over what you said to me that night, Milly, and I have come to see that there is a good deal of justice on your side. At first, I couldn't see it, because, you know, I was blinded by prejudice and custom, and—tradition. But I finally came to look at it like this: You see, marriages between folks like you and me is a kind of partnership. Now, says I to myself, John Armstrong, you wouldn't go into partnership with any man, agree to do half the work, or work as many hours a day as he does, and expect to get nothing for it except your board and clothes. You'd expect to get half the profits, wouldn't you? Well, then, says I to myself, let's put the shoe on the other foot. Now, if I was a woman, would I go into partnership with a man, and agree to do half the work and not get half the profits? Of course I wouldn't. Then, thinks I, a woman has just as much right to what she earns as a man. There ain't any difference except in the kind of work. And so at last it came to me what a blamed fool I had been, and—why, Milly, what's the matter? Oh, don't cry, darling! Don't you see that it was all along of loving you so much that made me come to look at it just as you do? And if you'll only take me, Milly, love, I'll promise to give it all to you. I'll promise you anything if you'll only take me, Milly. Will you, dear?"

And who wonders that she did take him then and there into her tender, womanly heart?

The church bells were pealing one rare, sunny morning in late October, and there was a holiday look to the passers-by in Glenville town,

for everybody was crowding into the little church to see John and Milly married. Speculation was rife. An air of mystery pervaded the usually slumberous community. An indefinable something was going to happen. At last suspense was ended, and down the aisle, proudly stepping, came bride and groom, with sunshine in their faces and sunshine in their hearts. But what are they doing? Where's the minister? What's the table for? And, for mercy's sake, what are Lawyer Cobb and those other men doing with that paper? It looks like a will.

But all agitation was summarily quelled when Lawyer Cobb, in his most diffusive oratorical style, read the following remarkable document:

Know all men by these presents, I, John P. Armstrong, being of sound body and mind, do this day, in the year of our Lord 18—, and in this month of October, and 25th day of the same, enter into a civil contract of marriage with Millicent H. Morrison. And I do hereby declare that our civil union shall be governed by strictly business principles, to wit: All money, personal and landed property, accruing to me after this date, as financier or business manager of the same, shall become the joint property of both parties to this contract, on condition that said Millicent H. Morrison faithfully performs a share of the labor necessary for the acquiring of said property. An equitable division of the same to be made yearly, reckoning from the date of this instrument.

In case of separation or divorce, this contract shall be literally adhered to. In case of death, the property shall revert to the remaining partner to the contract, or to his heirs at law, unless otherwise decreed. In witness whereof I hereby affix my hand and seal, this 25th of October, 18—.

(Signed) JOHN ARMSTRONG,  
MILICENT H. MORRISON.

Witnesses: Thomas Wiggins, William Brown,  
John Pettengill.

In breathless silence waited the wedding guests while the signatures were made. The civil service then being complete by the presentation of a copy of the document to both bride and groom, they turned to the altar to be made one by the man of God.

At last it was all over, and as Milly walked down the aisle she realized the consternation she had caused. A bombshell exploded in the midst of the sacred edifice could scarce have created a greater excitement than this. The telling of it spread like a prairie fire. One good mother in Israel was heard to declare to an eager crowd of listeners: "Wa'l, I allus thought Milly Morrison was queer, but now I'm certain on it, and (sententiously) if Bedlam don't reign in that house afore five years, then I don't know nothing about human natur'!"

And so it came to pass that just as tourists abroad are pointed out the place famous in legend or history, strangers in Glenville are shown the little church where Milly Morrison signed her marriage contract.

### Fields, Brown and Bare.

[Written for the RURAL PRESS by ETHEL B.]

June, July and August! June came with cloudless skies, red, glowing sunsets and hazy twilights, lingering long after the stars were out; with yellow fields, some patched with brown, striped with long windrows, or dotted with yellow haycocks that cast longer and longer shadows as the day departed—shadows that stretched farther and farther across the fields until they melted into the night.

Then came July and August. All the fields are brown now, shorn of their golden, waving beauty. There is nothing but tawny stubble as far as the eye can reach, acre after acre, thousands of them, across the broad valley and covering the hills beyond, until they meet the blue of the distant mountains. It is a harmony of browns—soft, velvety browns, shading and blending into each other, with here and there a deeper band or stretch of tan. There is a quiet, mysterious beauty in the vast expanse of stubble, while it leads the thoughts far away, and leaves them on the calm, blue heights.

A close inspection of the brown, bare fields reveals beauties little guessed. See, along the edges is a narrow strip left untouched by the sharp blades. The tall wheat heads still wave and bend in the wind; the empty oat husks quiver and rustle; the grasses have taken on reds and russets, and the long stem and calyx of a fluffy dandelion head are blotched and mottled with the same colors. Between the stubby tufts are dry, brown things that flourished months ago, perhaps; a bunch of skeleton leaves, the musky odors still lingering in the frail tracery of vein and stem. Here is a dry flower pod or seed vessel, or perhaps a pitiful little blossom, that has just escaped having its head cut off, looking up to the cloudless sky.

Struggling up through the sun-baked soil are bits of greenery that are not to be cheated of their share of life, although the days of growing and blooming are long past. A new crop succeeds the one just gone; fine oats and grasses, tiny and far between, and an abundant one of small, bright, yellow thistles, promising a harvest of thorns at least.

Oh, fields, bare and brown, are there not lives that, like you, seem shorn of all that makes life beautiful, yet keeping alive the bits of green that grow in spite of the lack of tender nurture?

The red glow in the west tells of the day just departed, and we stand in that dim medium between daylight and dark—twilight—the earth still warm and flushed, still alive and quiver-



ing with the day's pulsations, and yet her great nerves and pulses slowly relaxing, sinking to rest like a tired child.

Below and far away stretches a dusky hillside field. There is the shrill sound of crickets in the air, making the stillness more intense. At a little distance a sparrow-hawk flutters a few feet from the ground, now poised motionless with outstretched wings, and now again steadying himself for a new attempt. The oaks that lie below in the near foreground look black and grim in the fading daylight, they and their shadows melting into one; the dun haycocks stretch their shadows far out to meet the coming night, and over all that indescribable something that fills the heart with awe and wonder—is it not the presence of the Creator of all?—making the soul feel its utter helplessness and dependence upon a mightier will.

There are no harsh lines, no abrupt meeting of hill and sky, no flaring contrast of form and color. Departing day left behind a misty veil to cover the earth, softening but at the same time adding loveliness to the charms she seeks to dim—making them all the more beautiful because of their indistinctness.

The hazy twilight has taken on a faint rose color from the light yet bright in the west; and the beauty of the dim hayfield, stretching far away, with its grim oaks, its mounds of hay and their long shadows, enters deep into the heart. It forgets its vain longings and repinings, and only the best comes surging into it, filling it to overflowing. It remembers how much it has had, instead of how little. And if the thoughts go out toward the future, it is not in blind conceit of the great deeds it has hoped to accomplish, but with tears and a prayer that its life may be worthy of what is given.

The crickets suddenly cease their chirping, and the big round moon springs into sight over a hilltop. Close by, a lark lifts its head and pours forth a liquid note, then sinks into silence. Deluded bird! he awoke too soon. Did he think the dawn had come? A gentle wind comes up over the valley and lodges, with a sigh, among the oak leaves. Give one long, lingering look at the scene before you, now so weird in the moonlight, belonging neither to this earth nor yet of heaven. Truly, this is an enchanted land, subject to the spells of a magician's wand. The long shadows have almost disappeared, or huddled themselves in small compass at the foot of the oaks and hay-mounds, and over the dim, brown field the silvery sheen of the moonlight, still tinged with the light in the west, rests like a benediction.

Pleasanton, Alameda Co.

### Studies at Home.

The purpose of this society, which was founded in Boston in 1873, is to induce ladies to form the habit of devoting some part of every day to study of a systematic and thorough kind. Even if the time devoted daily to this use is short, much can be accomplished by perseverance, and the habit soon becomes a delightful one.

Nearly 200 ladies give their services in the instruction by correspondence, each one attaching herself to one department. There are six special courses: History, science, art, German, French and English literature.

A branch of Associate Correspondents was established in San Francisco in 1876. Since that time many students have availed themselves of this favorable opportunity for home study. The term for correspondence will be from October 1st to June 1st. Any further information as to the work of the society can be obtained by addressing the Secretary of the Associates for the Pacific Coast, Mrs. E. B. Barker, 14 Stanley place, San Francisco.

**HOW TO ARRANGE A BOUQUET.**—There is much skill and taste to be used in arranging a bouquet, which any one may learn by attending to a few simple rules which may be given as follows: Arrangement of color is the principal item of success in a bouquet. The best known primary colors are red, blue and yellow, and among the compounds are orange, green and violet. To combine all these well we must turn to the artist, and he will tell us that good contrasts are orange and blue, yellow and green, yellow and purple, red and blue, red and violet, red and green, etc. White may be termed a dead color, and can come in almost anywhere, except between a very dark and bright color, where gray is better. Black does well to divide conspicuous colors like red and orange, for it does not produce such a violent contrast as white would do. If the bouquet is to be entirely shades of one color, red is valuable; commencing with deep scarlet in the center, and putting round it rings of brick-red, deep carmine, pink, pale red, rose, and a boundary of white or green. Care has to be taken to choose flowers that will keep their petals, and for this, flowers in bud or just opened are the best. It is bad to see a bouquet of flowers like full-blown geraniums or primulas, for in a very short time the bouquet will be a mass of vacancies. In putting the flowers together, it is better to start with a substantial central flower, like a rose or camellia, and bind the others round it, keeping the size, shape and arrangement well in view. If the stalks are short, lengthen them with wire, and never put on a fresh flower till the last is well secured, or often, just as the bouquet is finished, the center will fall out.

## YOUNG FOLKS' COLUMN.

### Wings.

[Written for the RURAL PRESS by DORCAS KINGSBURY.]

While traveling across the overflowed lands of the Sacramento valley, I was struck by the variety and beauty of the birds that inhabit this watery country. As we advanced farther into the marshy lands I noticed cranes, storks, swans, curlews, divers, hawks, buzzards, and wild ducks and geese. There were several other varieties, but here my ornithology failed me, so I cannot give their names.

The first ponds we passed were peopled by ducks floating contentedly and leaving V-shaped silver wakes in the blue waters. Suddenly one would shoot under and come up several yards distant. The length of time they can stay under is really surprising. The pleasantest part of our ride was an avenue more than a mile in length, bordered on each side by a row of willow trees. The road is raised, and beyond each bank lie quiet little lakes. Passing over the road one has a good opportunity of seeing the water fowls at home.

Splash! a crane seizes a fish and, slowly flapping its huge wings, rises with it to the trees. The wings of these birds are very noticeable from their size and strength. A dead crane that a hunter gave me measured over five feet from tip to tip. This leads me to notice the wings of other birds.

Those of the curlew excel in beauty, being a most brilliant green. Geese wings are plain gray, while those of the ducks are often beautiful.

"How happy the life of a bird must be  
Skimming about from tree to tree."

The verses in the old reader come back to me, and I feel an unexpressed wish to try the wings of a bird for an hour or a day. One quotation usually brings another, and a sentiment from our beloved Longfellow comes to me:

"We have not wings, we cannot soar;  
But we have feet to scale and climb,  
By slow degrees, by more and more,  
The cloudy summits of our time."

If we all made use of the wings we have, there would be fewer failures in the world. I have read of a little boy who said: "I sing 'I want to be an angel' when the others do, but I don't want to be one, for their pictures look as though they had turkey wings." Though not many admire turkey wings, few would disdain a pair of swan pinions.

There are wings more desirable than those of feathers, and surely those which have borne our great poets in their "flights of fancy" are among the most valuable. The conclusion reached by our greatest American poet is that those who would rise must climb, and not depend on the wings of fortune.

"The heights by great men reached and kept  
Were not attained by sudden flight,  
But they, while their companions slept,  
Were toiling upward in the night."

The "Ladder of St. Augustine" should be to us as a poem what "Home, Sweet Home" is as a song. For should we not build our homes on the highest rounds of the ladder? Holland's lines show that he climbed toward the heaven which we feel sure he has reached.

"Heaven is not reached at a single bound,  
But we build the ladder by which we rise  
From the lowly earth to the vaulted skies,  
And we mount to the summit round by round.  
Marysville, Cal.

### G. A. R. Procession.

[Written for the RURAL PRESS.]

MY DEAR BOYS AND GIRLS:—In reading last week's RURAL PRESS I did not see one word about the procession of the G. A. R. which took place in San Francisco some two weeks ago, and I think it is a shame that you little country folks should have been so neglected. I don't know who is to blame, but I do think some one deserves a good scolding. However, "it is never too late to mend," so I am going to tell you all about the procession as well as I can.

The city looked magnificent; the stars and stripes floated from every building, and from the depot at the foot of Market street to the other end festoons of flags and bunting were thrown from window to window, forming sort of arches. But the masterpiece was a grand arch erected in the center of the city. Although only of wood, it was massive looking, being covered with canvas painted to represent stone. At the four corners were life-size statues of Washington, Lincoln, Garfield and Grant. It really looked very imposing, especially when the soldiers were passing under it. All the buildings, public and private, were draped in our national colors. Some even had paintings of different battle scenes. At intervals along the streets were shields bearing the words, "Welcome," "Honor to the brave," and dozens of other pretty greetings. Even the millinery establishments had taken out their fashionable bonnets and made their windows gay with streamers of red, white and blue. In one place there was a miniature tent arranged just as all the tents were during the war. There was a narrow,

hard-looking bed, one three-legged stool (company was supposed to sit on the bed), a table, on which was placed a bottle of water and somehardtack, and a couple of muskets in one corner. It did not look very inviting or comfortable, I assure you.

The city was crowded with people, and every available place was taken; stoops, windows, and even the house-tops were thronged. Enterprising men built raised platforms and sold seats from one dollar and a half to two dollars. But all this is not the procession, and I know that is what you are most anxious to hear about.

Well, like all other processions, it was to begin at half-past 10, which, of course, meant 11 o'clock, and, precisely at that hour, it did commence. First came the mounted police with their silver stars glittering in the morning sun, then bands of music playing patriotic airs. When the carriage containing Generals Sherman and Logan passed, all the spectators burst into prolonged cheers, and some enthusiastic people flung bouquets into their laps. The two generals bowed and smiled very pleasantly from side to side. The different delegations next passed in rapid succession, each wearing a different badge. Iowa carried a Grand Army badge of brass, with the portraits of the different officers placed in the rays of the star. Indiana had a magnificent banner of navy-blue silk, the coat of arms embroidered in gold and silver. In the department of Maine there was a little girl, not over 12 years old, dressed in red, white and blue, carrying a pennant of some color. She did not belong to the G. A. R., but hearing so much about it, she became so enthusiastic over it that her parents allowed her to join the encampment. The six-year-old son of one of the generals also marched in the parade. At the head of the New York delegation six men bore a handsome banner; one side was of yellow silk, the other red.

But the most interesting feature of all the procession were the old, tattered flags. How the people cheered and shouted as they saw them. Some were so old that only a few, ragged shreds remained; others were full of bullet holes, and again others were so torn that they could not be unfurled. But what did the people care for that? all they saw were the flags around which their forefathers fought, the real flags which had been borne through the fire and smoke of the battle. The veterans were greeted with hearty cheers and the waving of hats and handkerchiefs.

Of course, a great many amusing incidents occurred. At one time, during a halt in the procession, people in the windows threw candy and fruits to the soldiers in the line. The procession went on like this for over two hours and a half and then disbanded. If I wanted I could tell you a great deal more about everything, but if my letter is too long I am afraid it will be thrown into the waste-basket and you will not see it at all, and then you will be just as badly off as before; so good-by.

Alameda.

REIS SAMSON.

## GOOD HEALTH.

### Sleep Habits of Children.

Many habits and customs, the deleterious effects of which are recognized, would become things of the past if a practical and simple remedy could be devised. I have never met with any plainly written advisory articles on the training of children in proper sleep habits, except as to time. A recent experience has led me to "study up" on the subject, in the most practical way, by asking questions of mothers and nurses. My little patient, whose habits and conditions led to this investigation, is 10 years old. A serious and chronic affection of the kidneys has resulted from excessive use of sweets, and consequently lack of appetite for, and assimilation of, nutritious food. She persistently sleeps prone on the back with the arms flexed above her head. Watching results in seeing her turn on one side from eight to ten times every night, but, of course, a further result is diminished sleep, although it is not more restless than usual. Whether the habit can be permanently broken up is difficult to say. From her birth she exhibited a preference for that position, and had been indulged in it, with the inevitable results of catarrhal affections, dry throat, enervating, restless sleep, and aggravation of the kidney difficulty, as the spine was unduly heated by constant contact with the bed.

From the hour of birth a babe should be laid down to sleep with great care; never should it be permitted to lie on the back while sleeping. After it begins to play, the restless limbs are very beneficially exercised while lying so; but so soon as sleep comes the little one should be gently lifted and placed on the side, with the head raised only sufficiently to insure the spine from any curvature, seeing that there are no folds in the clothing to torture the tender flesh, especial care being taken to lay the ear smoothly back. Alternate the sides, or there will be an unnecessary unevenness of contour when the child is grown. Do not permit the knees to be so flexed as to crowd the viscera. Lying on the stomach occasionally is not injurious if the arms lie at the side and the face is free to the air. Frequently that proves to be a very restful position to a play-weary child.

It is not a difficult matter to teach a child to

sleep with the mouth closed and without snoring or "gritting the teeth." A lady of 35, who had habitually gritted her teeth from their first possession, was cured of the habit in a fortnight by persistent waking at the first indication of the sound. The habit has not been resumed during the five years since passed.

If mothers could realize how many people suffer from bad sleep habits contracted in childhood, they would pay a little attention to their children at night-time, beyond the "hustling off to bed, out of the way," and the "keeping covered," which is a sort of "dim religious duty" kept sight of out of fear of the doctor's bill rather than of any other consideration.—*Exchange.*

**REMEDY FOR COLD FEET.**—The following remedy for cold feet is recommended for sedentary sufferers, as well as policemen, car-drivers and others who are exposed to the cold: All that is necessary is to stand erect and very gradually lift one's self up upon the tips of the toes, so as to pull all the tendons of the foot at full strain. This is not to hop or jump up and down, but simply to rise—the slower the better—upon tiptoe, and to remain standing on the point of the toes as long as possible, then gradually coming to the natural position. Repeat this several times, and, by the amount of the work the tips of the toes are made to do in sustaining the body's weight, a sufficient and lively circulation is set up. A heavy pair of woolen stockings drawn over thin cotton ones is also recommended for keeping the feet warm.

## DOMESTIC ECONOMY.

**SPOTS** in varnished furniture are often removed by rubbing them with essence of peppermint or spirits of camphor, and afterward using furniture polish or cold linseed oil.

**TO KEEP INSECTS OUT OF BIRD-CAGES,** tie up a little sulphur in a bag and suspend it in the cage. Red ants, it is said, will never be found in a closet or drawer if a small bag of sulphur be kept in these places.

**TO REMOVE CLINKERS.**—To remove clinkers from the stove, sprinkle common table salt on the linings when the stove is cold. Use plenty of it. Build a moderate fire—wood and coal—and in a day or two the clinkers will be gone.

**CUSTARD AND RASPBERRIES.**—Put ripe raspberries, slightly crushed, into a granite or porcelain stewpan, and cover them lightly with powdered sugar. Set the pan on the back of the stove where there is only enough heat to cause the juice to flow freely. When all the juice is extracted strain it and measure it. For each pint of juice allow three well-beaten eggs, one gill of rich cream and one tablespoonful of lemon juice. Add the beaten eggs gradually to the raspberry juice and set the mixture on a gentle fire, stirring constantly for seven minutes. Then turn it in a dish and when cool add the lemon juice and the cream, mixing well together. Serve cold in custard cups or glasses.

**PEACH VINEGAR.**—A correspondent of the *Home and Farm* says a good, healthy vinegar, made from peaches, can always be kept on hand for table use. Procure a large stone jar, which must be kept for that purpose alone. During the peach season fill it with good clingstone peaches; do not peel them, but wash thoroughly. Make up sweetened water (rain-water is best) of good molasses or brown sugar and pour over the peaches till they are well covered; tie a single thickness of cloth over the jar, and soon it will be vinegar. Draw off, and fill again with sweetened water, as before, which will be ready by the time the first is used up, and so on until the next peach season, when fresh peaches may be put up for another year.

**TO RESTORE INJURED MEAT.**—When the brine sours or taints the meat, pour it off, boil it, skim it well, then pour it back again on the meat, boiling hot; this will restore it even when much injured. If tainted meat is immersed in the solution of chloride of lime prescribed for rancid butter, it will restore it. Flyblown meat can be completely restored by immersing it a few hours in a vessel containing a small quantity of beer, but it will taint and impart a putrid smell to the liquor. Fresh meat, hams, fish, etc., can be preserved for an indefinite length of time without salt, by a light application of pyroligneous acid applied with a brush; it imparts a fine, smoky flavor to the meat, and is an effectual preservative against its loss.

**SUBSTITUTES FOR TEA.**—The dangerous adulterations of teas in China and in this country have induced much experiment in search of a substitute for the tea leaf from some of our native leaves. Each of the following is said to possess the merit of being cheaper and more healthy than common tea, while the appearance is nearly the same. The young leaves of the pea plant, or the young leaves and flowers of the strawberry, or the first leaves of the currant bush, or the hard spring grass (anthoxanthum odoratum), or the leaves of speedwell, wild germander, syringia or mock orange, purple spiked willow herb, sweet brier, cherry tree, sloe, etc. The above should be dried on tin in the shade, and afterward rounced up with a little calcined magnesia to impart a bloom. Black currant leaves similarly treated make a good tea.





A. T. DEWEY.

W. B. EWER.

Published by DEWEY &amp; CO.

Office, 252 Market St., N. E. cor. Front St., S. F.  
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Drafts for this paper in the name of the firm.

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Registered at S. F. Post Office as second-class mail matter.

SCIENTIFIC PRESS PATENT AGENCY.  
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A. T. DEWEY.

W. B. EWER.

G. H. STRONG

SAN FRANCISCO:

Saturday, Aug. 21, 1886.

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## Business Announcements.

Agricultural Implements—Baker & Hamilton.  
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Agricultural Implements—Arthur W. Bull.  
Agricultural Implements—Truman, Isham & Hooker.  
Machine Tools—San Francisco Tool Co.  
Hay Cutters—G. G. Wickson & Co.  
Roller Mills—Joseph Wagner & Co.  
Steam Washer—J. Worth, St. Louis, Mo.  
Land—International Immigrant Union.  
Scientific Tools—G. G. Wickson & Co.  
Orange Trees—J. H. & J. G. Herndon, Leesburg, Fla.  
Books—National Bazar, New York.  
Poultry—R. G. Head, Napa, Cal.  
Corn Sheller—Newark Machine Co., Columbus, O.

See Advertising Columns.

## The Week.

We are fairly launched upon fair times. What though the legislators are doing nothing but filling their own pockets; what though the politicians are doing nothing but emptying theirs—for the time, the buoyant spirit of the people rises above legislatures and political conventions, and revels in the social delights which the fairs bestow. Nor are the fairs only a relief from public ills; they drive from the mind the too frequent clouds of individual ills or apprehensions. Who can don his best clothes and go among the fruits and flowers and lovely women in the pavilion and remember that the wind shelled out the wheat, or that the worms ate the apples, or the brindle heifer may possibly get blown in the alfalfa? And if the tender delights of the pavilion are so engrossing, what shall we say of the races which make a man forget the whole world, including milking time? It is well to enjoy such rests and respites from toil and care, which come too seldom in the farmer's life. We are glad to see in our goings about that our fairs are continually improving. Objectionable features are not being subdued as rapidly as we could wish, but the desirable

features are becoming more prominent. Greater interest, larger displays, new pavilions, more music, song, and a fuller participation of the ladies (God bless 'em), are vastly improving our fairs, and we are glad of it.

## The World's Wheat Surplus and Requirements.

The telegraph is a great promoter of business enterprise, for by it the large operator or merchant can ascertain within a few hours the requirements of and also the surplus of any article in all civilized countries, and having this knowledge, from trusted agents, act accordingly. That which takes a few hours to learn took, a quarter of a century ago, fully as many weeks, and then it was not as trustworthy as now. Every year certain large wheat-operating firms in England make a virtue of necessity, in finding out, at as early a date as possible, the world's probable wheat requirements, and also the probable exportable surplus, and on this knowledge act more intelligently. Last year's estimates, made in August, turned out quite correct, excepting with Australasia, where a drouth set in during the most critical period for crops, thus causing an almost total failure. This year they have made their estimates as usual, which, for the sake of comparisons, we give with last year's estimates:

PROBABLE EXPORT AVAILABLE FOR SURPLUS.		
	1885. Bushels.	1886. Bushels.
United States.....	88,000,000	.....
India.....	52,000,000	40,000,000
Austria-Hungary.....	8,000,000	8,000,000
Russia and Roumania.....	40,000,000	40,000,000
Australia.....	8,000,000	*12,000,000
Chili and La Plata.....	8,000,000	8,000,000
Sundries.....	4,000,000	4,000,000
Totals.....	214,000,000	112,000,000

\*After January 1, 1887.

PROBABLE REQUIREMENTS.		
	1885. Bushels.	1886. Bushels.
United Kingdom.....	132,000,000	*145,000,000
France.....	12,000,000	*55,000,000
Belgium and Holland.....	20,000,000	24,000,000
Germany.....	16,000,000	13,000,000
Switzerland.....	8,000,000	10,000,000
Italy.....	12,000,000	12,000,000
Spain and Portugal.....	8,000,000	8,000,000
Greece.....	4,000,000	4,000,000
West Indies, China, etc.	16,000,000	17,000,000
Totals.....	228,000,000	288,000,000

\*It is claimed by well-informed parties that France and the United Kingdom will require more than given in this estimate for 1886-87.

The estimated surplus and requirements were made so as to allow each country to carry over at the end of the season the usual normal stocks, but it appears that while the visible stocks are about the same, the invisible in each and every country is reduced to a lower point than known for over a decade; so that this season is entered by all nations with a smaller supply than at the commencement of last season. In this season's estimate of the probable exported surplus, the United States is left blank, owing to the continued uncertainty at this time of the yield on the Pacific Coast, and also in the large wheat-growing belt at the West visited by the drouth. The estimate shows a shortage of 176,000,000 bushels, to be made good by the United States, and allow stocks in each country at the end of the season of 1886-7 to be only a fraction less than they were at the close of the season of 1885-6. The best way to arrive at the probable exportable surplus of the United States is by the following estimated production and stocks in bushels on July 1st compared with the like time in 1885:

	1885.	1886.
Visible supply.....	45,000,000	36,000,000
Crop.....	357,000,000	*399,000,000
Invisible supply.....	80,000,000	45,000,000
Totals.....	482,000,000	471,000,000

\*Prime, of Illinois, and several other good authorities estimate.

For the season of 1885-86 the exports from the United States, in wheat and flour (flour reduced to wheat) did not aggregate 100,000,000 bushels—going very little above 90,000,000 bushels—but the exact quantity we cannot give, as the Government's official statement of exports is not at hand. In exporting say 100,000,000 bushels last season, the visible and invisible supply was reduced 50,000,000 bushels, so that, with a shortage of 11,000,000 bushels to start with, to export the like quantity this season will reduce the stock to a point barely equal to the demand of speculators on the various call-boards of the country. Saying that the United

States is able to export 100,000,000 bushels, which appears impossible without sending values to very high figures, still there is a shortage in the world's supply of 76,000,000 bushels, so as to leave a fair carry-over into the next season, and to meet this the world's stock will be extremely light. Another thing must be taken into consideration, viz., that the corn crop of the United States is estimated at 364,000,000 bushels short of last year's crop. With a lessened production of corn the consumption of wheat with us is larger, which, if the case this season, will still further lessen our exportable surplus.

## Viticultural Legislation.

C. A. Wetmore, Chief Executive Officer of the Viticultural Commission, made an interesting verbal report at the meeting of the Grape-growers' Association on Tuesday, concerning the progress of viticultural legislation in Washington. Although there were no enactments actually secured, there was progress made which promises results next winter. The bill which the makers of sweet wines most desire, Mr. Wetmore said, was nearly as good as secured and can be had soon after the Senate reassembles in December. The spurious wine bill, which served as a model for the drafting of the oleomargarine bill, will require more work, but the outlook looks promising, especially as the President has approved the principles involved in it by his indorsement of the oleomargarine bill.

There is, however, a great power to fight, as all those engaged in manufacturing bogus wines are doing their best to preserve their nefarious industry. Mr. Wetmore found that the producers of pure wines could count upon the aid of all those engaged in legitimate liquor manufacture, but must fight to the end all kinds of adulterators. This fight, he said, would be long and constant. The chief reason why the desired enactments were not secured was that the genuine wine interest lacked concert of action and influence. He thought great steps had been taken in securing this, and upon this fact he trusted in accomplishing the work in future. There was a unanimity of sentiment in the meeting that Mr. Wetmore must continue his work in Washington, and a committee will be appointed to devise ways and means toward that end.

**HOP LEAVES AS FODDER.**—Hop vines are plentiful in some parts of the State and we would like to know if the growers have tried using them as fodder for stock. If not, will some one make some experiments and report? We read in a foreign exchange that from analyses of the foliage of hops, Wein finds that this material closely approximates to the composition of meadow and clover hay and rye, and as regards the percentage of protein it is not far behind wheat and rye bran. As compared with the ordinary green fodders, green hop leaves appear to be a better food. The coefficients of digestion are: Albuminoids 60 to 70 per cent; fat, 70 to 80; non-nitrogenous matter, 60 to 75. By the coefficient of digestion is meant the percentage proportion of the food which is actually digested; the remainder passes through the intestine and escapes digestion.

**WILLOW-GROWING IN GERMANY.**—Now that osier willow-growing is obtaining a foothold in this State, and the basket-makers are drawing their supplies from home-grown stocks, it will be interesting to know the way the basket industry is being encouraged abroad. In order to encourage the culture of willows, the Government President of Frankfort-on-der-Oder has been requested by the Minister for Trade and Industry to procure information as to the number of basket-makers, and the number of hands and apprentices employed by them; also as to the quantity of material used by them, and where they procure it. A basket-weaving school, to be built on the estate Kriescht, has been proposed as one means of improving this branch of industry. It will be built by the Government.

**ADDRESS AT SAN JOSE FAIR.**—The address by Mr. A. C. Bane at the reception to the G. A. R., at the San Jose fair, was briefly mentioned last week. It was a masterly speech, of which we have received a correct copy, and we shall seek early opportunity to give it to our readers.

## Sonoma County.

The holding of the county fair this week at Santa Rosa, and the district fair next week at Petaluma, turns the mind to thoughts of Sonoma county, one of the grandest in resources, most eligible in situation and delightful in climate of the counties of California. Less than a year ago we gave an excellent map of the county and quite a full description of its valleys and towns, its forests and mountains, and a moderate estimation of its material and climatic resources. It will not be necessary to go over that ground again so soon. And yet we would like to impress upon our readers the eminent desirability of the county, both for the satisfaction of those who are resident within its borders and for the information of those who may be scanning California with a view to settlement. We have many applicants coming to us to know whether such and such a county is desirable. We always try to give a fair outline of the claims of the county inquired about, but invariably end with the injunction, "Go and see for yourself; do not decide until you see if the county commends itself to your own taste and judgment, and is adapted for the special work which you desire to do." We give the advice with the fullest confidence when a man comes to ask about Sonoma county, because Sonoma by her great variety of resources and adaptations can hardly fail to interest and to please, and offers the fullest satisfaction to any one who brings skill, energy, and sufficient means for the effort contemplated.

Sonoma is an old county. The State of California may almost be said to have found birth within her borders, and her age seemed to work against her until new life was infused a few years ago. Her people seemed to have settled down to a very serene and comfortable, but not a very progressive, state of existence. The result was that new counties came into notice, were heralded with the blare of trumpets, and into their ranks rushed streams of wide-awake and energetic newcomers, drawn from the uttermost parts of the earth by the accounts sent out of peculiar resources and advantages. Now and then a few would stray almost uninvited into Sonoma. The result was that for many years the growth of Sonoma was exceedingly slow, while many other counties advanced rapidly. If Sonoma had had the advertising and promotion which other counties had, we doubt not she could measure progress and development and advance in values with any of them.

The last few years have brought most gratifying development to Sonoma county. Her towns are models of thrift, energy and beauty. Her farms will compare with any in the State. Her transportation facilities are continually improving and extending, and it is but fair to presume that her progress from this time forward will compare with any area of the State. The fact that there is apparently such good opportunity for investment, because of the outlook for growth ahead, will of itself draw in the elements most needed for the achievement of that growth. An exponent of the progressive spirit now strong in the county may be seen in the work which Sonoma has done at the fairs, not in this State alone but in distant parts, by the grand displays of her products which have been prepared and sent out under the auspices of her Pomona Grange. These should go on. There should be a far more generous use of printers' ink. Where Sonoma has spent a dollar in these efforts some other counties have spent thousands, and the results have appeared in increased population and taxable wealth.

Sonoma has a most excellent foundation; now let her proceed to build upon it. Mr. R. A. Thompson, one of the best-informed writers on the industrial matters of the county, recently wrote in *Groose's Land Register*, of Santa Rosa, as follows:

Sonoma county has about forty millions of dollars taxable wealth, upon which there are not more than three million dollars of mortgages, which shows a most favorable financial condition of the people. The public debt is less than \$300,000, and the annual tax-rate not much over \$1 on the \$100 of property valuation. The county has about 1,000,000 acres of land and is capable of supporting three times its present population, which does not now exceed 33,000.

There is the opportunity; now let us see what will be done with it during the next few years.



## California Fruit for the Conclave at St. Louis.

A profusion of California fruit was one of the pleasing features of the Triennial Conclave of Knights Templar held in San Francisco in 1883. Aside from its service as expressive of our hospitality, this fruit made impressions upon the visiting fraters and did much to spread abroad our pomological fame at the East. There now appears an opportunity to repeat, to a certain extent, the good work of three years ago, and to do it with much advantage to our reputation and our interests. There will be a good representation of the California Sir Knights at the Conclave which will open in St. Louis on September 21st. They will have commodious headquarters at which they will dispense generous hospitality to their guests. They greatly desire to make a creditable display of California fruits, hoping to send one or two carloads for this purpose. It would seem quite proper that this fruit should be donated for such a purpose by the fruit-growers. To bring this subject to the attention of the growers, a circular has been issued by Sir Knights R. Beverly Cole, S. F. Black, J. P. Allen, and a copy sent us, from which we make the following extract:

In view of the approaching Triennial Conclave of Knights Templar, to be held at St. Louis September 21, 1886, the Order in California, as represented by the Grand Commandery of the State, through their Purveying Committee, beg to state, for the information of fruit and vine growers, that we consider this a golden opportunity for a proper and effective exhibition of their products, and announce that we shall take great and special pleasure in making a proper display of all fruits and grapes donated to us for that occasion. One car, and possibly two, will be dispatched from San Francisco on or about the 14th of September, and such as propose to utilize the opportunity for introducing their products to the attention of the multitude of representatives from every State of the Union who will be assembled at St. Louis, as well as to contribute to the reputation of the State for its liberality and hospitality, are cordially invited to communicate with the undersigned at once (or as early as possible), stating the character, variety and amount proposed to be donated, when specific instructions will be forwarded as to when, how and to whom they are to be shipped. Full credit and public announcement will be given to and of such as respond to this appeal.

We commend the matter to the generous consideration of our fruit-growing readers. A few boxes of choice selected fruit from such as are disposed to send would make a fine collection, which would do the State much credit at the coming meeting in St. Louis. As we understand the announcement, transportation will be provided for, and all that is asked from the growers is the fruit. All interested are invited to correspond with the Chairman of the Committee of the California Grand Commandery, Dr. R. Beverly Cole, 218 Post St., S. F.

**FRUIT AT THE SACRAMENTO RECEPTION.**—At the reception and banquet given to the G. A. R. and their guests at Sacramento there was an extensive and artistic display of fruits and California products. It was placed in the north wing of the pavilion on tables, with a pyramid in the center 16 feet high, tastefully arranged. These offerings were made by the fruit-growers and farmers in and around Sacramento. Mrs. Sol. Runyon contributed the fruit for two tables, each over 30 feet long, and in variety and quality was worthy of special mention, as it was the best display made.

**BRAIN POWER AND MACHINE WORK.**—The day of brute force in the industries has gone by. The entire operations to-day are more of the brain than of the muscle, and since some one must furnish the brain work, it is a pertinent question for the individual producer whether he shall educate himself to supply the larger part of it, and get paid for it, or whether, on the other hand, he shall put himself nearer the level of the machine he operates and allow some one else to get paid for thinking. This is a matter the worker has to settle for himself.

**DEATH OF H. H. BERGER.**—We regret to hear of the death of Mr. Berger, of the firm of H. H. Berger & Co., well-known importers of Japanese trees and plants. Mr. Berger has been in delicate health for some time, and died aboard ship on his homeward journey from Europe. We are informed that the business will be henceforth carried on under the same firm name by his widow and her associates. A representative of the firm is now in Japan selecting stock for importation for the coming season's trade.

## Horticultural Fair at San Jose.

Last week we gave a few notes of the opening of the Second Annual Exhibit of Santa Clara Fruit and Vine Products, which began August 9th, in the new Horticultural Hall, San Jose. The occasion specially mentioned last week was the visit of the G. A. R. and the reception tendered them. After the throng which filled the pavilion upon that occasion had scattered, there was a better chance for a longer look at the chief features of the horticultural display, and they well rewarded the study. It is quite true that it was a little too early for the best show of Santa Clara valley fruit, but the opportunity to show some of the products to the thousands from abroad had to be embraced when it offered itself.

### The New Pavilion.

We have mentioned from time to time the commendable co-operative enterprise which has given the rich fruit district in and adjacent to San Jose a proper structure in which to display its produce. It has taken much effort to marshal the forces and secure the building, and the result is the greater credit to those concerned in it. The "Horticultural Hall Association" was organized April 17, 1886, by the election of a board of nine directors from the 94 stockholders, a majority of whom are farmers and fruit-raisers, and the remainder citizens of San Jose. The Board of Directors are Cyrus Jones, Frank Dunn, A. R. Woodams, I. A. Wilcox, Sylvester Newhall, H. G. Keesling, G. W. Tarleton, Mrs. Sarah T. Ingalls and Mrs. Nannie A. Sanders. The officers are Cyrus Jones, president; Frank Dunn, secretary; Hon. C. T. Settle, treasurer. The capital stock has been placed at \$12,000, divided into 480 shares of \$25 each. Under the auspices of the Building Committee, consisting of Cyrus Jones, chairman, G. W. Tarleton and Mrs. Nannie A. Sanders, and Messrs. Jacob Lenzen & Son, the architects, the erection of the structure was begun on May 15th last. It has a frontage of 80 feet, a depth of 166, and is a single story in height, 26 feet in the clear. The materials used principally in its construction are redwood and Oregon pine, and the roof is of corrugated iron. In the rear of the hall is a large stage, 21x36 feet, with spacious dressing-rooms, toilets and other necessary appendages on each side. There is also a kitchen at the rear end of the building to cook and serve refreshments during the fairs.

### The Decorations.

The opening of the new pavilion, the coming of the distinguished visitors, and the special buoyancy which now seems to characterize the industries of the neighborhood, seemed to fill the hearts of the people with sentiments which must find some form of expression, and the most natural one was the adornment of the pavilion with masterpieces of decorative art, expressive of cordial welcome, patriotic sentiment and loyalty, to the splendid industries which lie at the foundation of the prosperity of the region. We are sorry that we have not space for a detailed description of the various "pieces" which won the admiration of all. Several days of earnest work from at least a score of enthusiastic ladies were needed to complete the undertaking. We dare not try to name them lest some unfortunate omissions should condemn us. As one entered the hall and turned to the right to receive the kindly greeting of Capt. Frank Dunn, the secretary, he was brought face to face with "Ceres." In a chariot of classic design stands a beautiful lady, clad in a white tunic, her head garlanded with ears of grain and a bouquet of the same upon her bosom. Behind her, in the chariot, is a shock of grain of different kinds just cut with the sickle, which hangs upon the prow of the chariot. Upon the front of the chariot there is a wreath of grain ears most artistically arranged. As one looks closer he sees that the body and wheels and pole of the chariot are all thickly covered with various grains and seeds, more than 25 kinds being used in the adornment of the chariot, the wood of which the vehicle is made, being entirely concealed. There was also lettering, key patterns, etc., put on the different colored seeds. The designer was Mrs. E. O. Smith, who also planned a beautiful "Flora" which occupied a place upon the right of the stage. There was an altar of flowers and foliage, surmounted by a bust of Flora, garlanded. The whole design was at least 6x12 feet, and was a mosaic of bloom and verdure.

Occupying the place of honor in the center

of the wall at the back of the stage was a colossal G. A. R. badge, made, all save the eagle, with the feather spikelets of pampas grass, dyed to suit the colors of the badge, gold, red, white, blue, etc. The coloring was perfect, and the fabric wrought of the plumes rich and uniform. The eagle was made of beautiful feathery grass from the Santa Cruz mountains, of an ashy-gray color and excellently imitating the plumage of a bird. Under the trying electric lights the badge was most beautiful. It was designed by Mrs. N. A. Sanders, who also had upon the left of the stage another masterpiece in a different style. It was "Ruth the Gleaner," a girlish figure with an armful of grain, mounted upon a lofty pedestal, covered with red fabric, paneled and garlanded with grain-heads.

In the rear of the hall was another of the decorative triumphs of the occasion, called "The Golden Gate." It was a gate of the style which lovers hang upon, made of golden marigolds, supported by gate-posts of green. Toward this gate a ship laden to the yards with ripe fruit was sailing in a green sea. The foreground was filled with interesting articles, and the background, done in oil, was quite effective. The piece was very elaborate and gave much satisfaction. It was the work of Mrs. Morgan Niles and daughter.

Properly belonging to the decorative department were some very handsome floral pieces by Emile Bourguignon, the San Jose florist. One which attracted most attention was a sitting bear, done in white blooms.

### Plants and Flowers.

Through the center of the main floor of the pavilion were three grand groups of flowering and foliage plants as handsome as any we ever saw in the State. They were from the well-known establishments of John Rock, R. D. Fox and E. Bourguignon, of San Jose. There were well-grown plants of kinds enough to keep a plant-lover entranced all day, and some rarities seldom brought to public view. There were also creditable displays of cut flowers here and there, adding much to the general beauty of the exhibition.

### The Largest Fruit Exhibit

Was by John Rock, and it was almost a fruit fair in itself. There were 100 varieties of apples, 24 varieties of pears, mostly new; 40 varieties of plums, including some promising seedlings, one of which—No. 9—is a very prolific fruit, resembling in color the so-called Hungarian prune, but far sweeter than that variety and quite free in parting from the pit. It would seem to be very promising for drying as a pitted plum. There were 20 varieties of peaches. A Persian mulberry, very large and of excellent flavor, was shown, packed in trays and on branches. There were a number of new olives, some bearing at two feet high in pots. A display of apricots in gallon glass jars included many new varieties, especially the Mongamet, a fine, firm fruit, said to stand shipment well after being fully colored—a beautiful, large fruit. There were also the Large Early Rivers and the St. Ambrose apricots—the latter the largest apricot of the lot and excellent for home or near-by use.

### Jellies.

The largest display of jellies was the work of Mrs. Newhall, which included nearly 300 glasses of jelly from 15 kinds of fruit, and all showing high art in their construction. Their beautiful, sparkling, prismatic clearness was charming to the eye.

Mrs. L. J. Watkins exhibited a few of her trophies, tantalizing us because of the many more that she held concealed from view.

Mrs. S. P. Sanders showed conclusively that her talent was not all executive, but vied with her sisters in a display of beautiful jellies arranged in a most unique manner upon a sort of conch-shell whirl in the way of a standard, glass following glass up the spiral until at the top one gleamed in glory upon the others. Such triumphs in this branch of domestic art are worthy of especial notice, and we fancy that not a few of San Jose's fair ones have an impetus now to press forward and show themselves competitors.

### Silk.

A very excellent exhibit of silk and silk goods was made by the Pacific factory of H. X. Van de Castele. The factory is located at the corner of Delmas avenue and San Salvador street, San Jose, and was established four years ago. There are now seven hands em-

ployed and about 50 yards of silk woven daily. About three-fourths of the silk is California grown and the other fourth imported. The fabrics shown were of exquisite quality and generally admired. M. Van de Castele wishes very much to encourage the industry of silk culture in our State. The process is so simple, if one could keep cool-headed and not be too ambitious, until experience has taught him sufficiently to be a guide, that the results would be all encouraging. To our fair women of California, what a distraction from our homely cares! To our azure-minded sisters, what an awakening that life is worth the living, and our mother Earth, where California lies, a joyous place to live. It seems a precious thought for consideration.

### The Inner Man.

We have no room for proper notice of the many handsome booths and other apartments for dispensing delicious viands. Ice cream seemed to nestle behind every bouquet, and square meals would be encountered at nearly every doorway. When one remembers that about 6000 strangers, with two-ply appetites, had descended upon the neighborhood the preceding day, the abundance still in sight spoke well for the resources of the region. There was a small army of beautiful girls and dames engaged in the refreshing work, under the general leadership, we were informed, of Mrs. L. J. Watkins.

### Other Exhibits.

Besides the special features of the fair to which we have alluded there was the grand rank and file of exhibits which constituted the strength of the display. We regret that we have not space to characterize each exhibit more at length and as its merit would make proper. We must content ourselves with such running notes as we were able to make as we strolled along. We did not attempt to note anything but the agricultural material; the fine art, the fancy work, the curios, etc., all of which was fine and abundant, we are not able to include in our review. In the notes those exhibitors who have no locality named have their habitations in San Jose and immediate vicinity.

J. G. Clendenning, Milliken—Wheat and barley in grain and sheaf.  
D. B. Fuller, Evergreen—Exhibit of cereals.  
A. R. Woodhams—Large collection of grains and grasses and several varieties of fruit.  
Alex. Hildebrand—Display of dried fruits.  
Powell Bros.—Good samples of various grains, also display of vegetables and fruits.  
L. W. Parsons, Los Gatos—Fine display of dried fruits made with Parsons' dryer.  
C. D. Gladewitz, Berryessa—Grain and fruits.  
B. Schultz—Good display of fruits and vegetables.  
M. C. Park, Saratoga—Orchard fruits and grapes.  
F. D. Ballard, Guberville—Beurre Clairgeau pears.  
A. N. Van Vleet—Fine display of fresh and dried fruits.  
James McWilliams, Saratoga—Excellent oranges and lemons, and orchard fruits in variety.  
H. Shadinger—General display of fruits.  
D. M. Ross—Pears and plums.  
Mrs. E. A. Willett—Canned fruits and jellies in large variety, also vegetables and fresh fruits; a fine exhibit.  
C. Schofield—Peaches and fine sack of barley.  
H. L. Stevens, Evergreen—Excellent chevalier barley.  
Wm. Boots, Alviso—Apricots and plums.  
Ludovico Gaddi, Guberville—Beautiful display of olive oil.  
M. M. Shaner, Los Gatos—Orchard fruits, nuts and Japanese lemons.  
Daniel Wright—Well-grown fruits of different kinds.  
P. Miller and F. Tartan, Santa Clara—Beautiful wheat in sheaf.  
G. W. Stewart, Santa Clara—French prunes.  
C. J. Gibson, Santa Clara—Exhibit of plums.  
Evans Dent and R. E. Dent—Prunes and plums.  
E. A. White—Splendid onions, result of 10 years' selection of seed.  
Mrs. Statler—Eight bottles jellies.  
A. M. Ogan, Berryessa—Display of orchard fruits.  
J. A. Statler, Campbells Station—Fruits and vegetables.  
Mary A. Scott—Greenhouse plants, nuts and various fruits.  
W. C. Kerr, Los Gatos—Fruits in variety.  
Mrs. A. M. Ross—Currant jelly.  
Blake & Ross, Santa Clara—Squash grown in 1885, in excellent condition.  
Capt. J. Aram, San Jose—General display of fruits and nuts.  
W. A. More, Los Gatos—Field crops and vegetables; good display.  
Wm. Ross—Orchard fruits.  
J. H. Kelly—Pears, plums and grapes.  
W. M. Statler—Fruits, and a fine specimen of Russian sunflower.  
C. C. Smith, Evergreen—Fine lemons.  
Mrs. Henry Sillick—Five varieties (27 glasses) jelly, also jams and canned fruits; a creditable exhibit.  
C. R. Williams—Silver and French prunes, and other fruits.  
J. C. Day—Orchard fruits.  
A. Dennis—Pears and peaches.  
W. L. Northern—Good display of apples in variety.  
H. A. Boysen, Saratoga—Orchard fruits.  
G. W. Tarleton, San Jose—General display of fruit, including new Wager peach; Crawford peach-



es from tree 28 years old and still vigorous and healthy.

Wm. Cox, Saratoga—Pears, apples and peaches.  
John Morse—General exhibit of fruits.  
Ernest Conant—Peaches and almonds.  
G. Casella, Milpitas—Early Crawford peaches.  
Wm. Ginty—Fine wheat and barley in sack.  
Dr. Lewis—Fine cluster Yucca blossoms.  
A. L. Chapman, Santa Clara—Fine corn in variety, also fruits and vegetables.  
Mrs. M. Elder—Grapes in variety, and prunes.  
John Calker, Los Gatos—Plums and almonds.  
I. A. Wilcox, Santa Clara—Fine general display of fruit, also forage plants in bundles; very interesting.  
L. Conant—Good exhibit of best varieties of orchard fruits.  
E. C. Halm, Guadalupe—Grapes and pears and apples in variety.  
J. Cunningham, Saratoga—Fine display of fruits, including excellent citrus fruits.  
S. H. Leach—Fruits and vegetables.  
Jesus Fathers—Fine branch of egg plums.  
S. S. Paul—Apricots, plums and peaches.  
Mrs. C. D. Horne, Santa Clara—General display of fruit.  
E. M. Cunningham, Saratoga—Excellent corn in variety, and vegetables.  
W. Pfeiffer, Guberville—Fine collection of best wine grapes.  
Z. A. Riggs—Sack of excellent white Australian wheat.  
E. M. Thomas—General display of fruits and nuts.  
B. L. Bartlett, Los Gatos—Orchard fruits.  
Perry Curtis, Santa Clara—Fruits and vegetables.  
Wm. Brundage—Good citrus fruits, also deciduous fruits and other products.  
Wm. Beauchamp—General display of fruit, including some very excellent samples.  
E. B. Pierce—Peaches and plums.  
Joseph Bohnett—Grapes in variety and fine wheat.  
S. P. Stockton—Wine and table grapes; good samples.  
Waldo Allen—Peaches and prunes.  
A. E. Gish, Los Gatos—Display of nuts and fruits.  
J. G. Withey, Los Gatos—Zinfandel and Corinth grapes.  
B. Griswold—Pears and apples.  
Ben. Shuter, Santa Clara—Orchard fruit in variety and large sunflower.  
H. Davidson, Guberville—General display of fruits and vegetables, including fine grapes.  
Santa Clara Cheese Factory—Good samples of this year's cheese.  
J. W. Easton, Santa Clara—General display of fruits and vegetables.  
Miss Lida Shadinger—Canned Foster peaches; fine specimen.  
C. W. Cutter—Peaches and prunes.  
Mrs. Keeler—Pampas grass.  
Mrs. W. D. McCash—Display of jellies, fruits and nuts.  
F. H. Babb—Excellent general display of citrus and deciduous fruits.  
D. E. Gish—Fine specimens of pears.  
Mrs. G. W. Snyder—Early Crawford peaches.  
H. Tilloston, Berryessa—Display of fruits and grains.  
E. M. Weaver—Fruits in variety.  
D. G. Brewer, Coyote—Prunes and Jefferson corn on stalk; very fine.  
W. D. Pollard, Saratoga—Fruits and nuts, canned apricots of 1885, well preserved.  
G. W. Gardner—Dried peaches and fresh fruits in variety.  
W. B. Sanders, Gilroy—Cumberland Triumph strawberries and peaches.  
W. H. Swope—Fine Marblehead squashes.  
Mrs. Swope—Display of canned fruit and jellies.  
F. M. Richter—Apricots.  
S. G. Rodeck—Peaches and apricots.  
Mrs. Ben. Campbell—Jellies and canned fruit in variety.  
Thos. Osborn—Three varieties of rhubarb.  
Ellsworth Bros., Saratoga—Grapes in variety and silver prunes.  
W. H. Stewart, Saratoga—Yellow egg plums.  
H. L. Stevens, Evergreen—Plums, prunes and grapes.  
W. D. Reed—Fruits and nuts.  
S. P. Hagman—Apricots and silver prunes.  
A. Agnew, Agnews—Strawberries and pears.  
J. F. Kennedy, Los Gatos—Promising seedling peaches and pears, silver and Bulgarian prunes.  
R. A. Thomas—Fruits in variety.  
Hugh Cameron—Prunes and plums.  
Johnson Kerr, Los Gatos—Silver prunes.  
James Kerr, Los Gatos—Plums and peaches.  
Roy Bicknell and Clyde Bicknell, Los Gatos—Plums and grapes.  
James Canney—Dried apricots and prunes.  
J. W. Zuver—Red nectarines.  
P. G. Keith, Santa Clara—Display of fruits, including seedling peach.  
L. D. Woodruff—Peaches, pears and apricots.  
G. F. McLoughlin—Peaches and Hines seedling apricots.  
J. S. Lynch—Orchard fruits in variety.  
Mr. Oliver Farnsworth—Cream cheese, excellent quality.  
L. D. Combe—Fine and large display of grapes.  
C. H. Worthington, Santa Clara—Fine sack of Nepal barley.  
M. S. Bowdish, Los Gatos—Good display of orchard fruits and grapes.  
Mrs. Bowdish—Excellent exhibit of canned fruits.  
C. E. Stevens, Evergreen—Fruits and nuts in variety, also capers.  
J. H. Cornthwaite—Pears and strawberries in variety; an interesting display.  
R. W. McLellan, Los Gatos—Plums, peaches and grapes.  
O. F. Alley—General display of fruits and vegetables.  
Childs & Mosher—Fine corn and vegetables, branches of strawberry tree from the University, also excellent fruits.  
C. F. Holcomb—Wine grapes in variety.  
Rush McComis, Santa Clara—Strawberry plants and fruit in variety; very interesting.  
Mrs. G. McNeal, Berryessa—Vegetables and heavily laden branch of French prunes.  
S. P. Lunt, Santa Clara—General display of fruits.  
F. B. Kesling—Orchard fruits in variety.  
Mrs. E. F. Duncan, Campbells—Good display of fruit, fresh and preserved.

Wm. Bucknell, Guberville—Grapes and plums.  
Mrs. E. B. Conklin, Campbells—Canned fruit in variety.  
Nellie Sylvester—Cut flowers artistically arranged.  
Wm. Deno, Los Gatos—Prunes and plums and fine corn.  
Mrs. Elizabeth Americh—Branch of carob tree with fruit; very interesting and novel.  
S. Kirk—Fine wheat and barley.  
Mrs. W. W. Reid—Fruit in variety and summer squash.  
H. Fairfield—Several kinds of fruit.  
Mrs. H. A. Leigh—General display of orchard fruits and nuts.  
Daniel Farrell—Apricots and prunes.  
Louis Borksin—Large exhibit of orchard fruits.  
Dr. J. F. Sullivan, Mt. View—Orchard fruits and grapes.  
G. W. Hansen—Peaches and Japanese plums.  
Mrs. W. Cameron, Milpitas—Lemons and peaches.  
A. C. Penniman—Excellent display of dried fruits.  
J. R. Johns, Saratoga—Fruits and grapes in variety; good samples.  
Isaiah Shaw, Berryessa—Lemons, peaches and evergreen corn on the stalk; fine growth.  
Pomeroy & Wagner, Milpitas—Large display of fruits in variety.  
O. J. Albee, Lawrence—Good exhibit of fruits in variety.  
Mrs. C. Loveland—Display of English walnuts.  
G. G. Badger—Peaches and silver prunes.  
G. S. Norcross, Lawrence—Fine yellow globe beets.  
Frank Dentra—Grapes in variety.  
C. A. Pitkin—Good display of fruits, well arranged.  
Mrs. Pitkin—Interesting specimen of cactus in fruit.  
Lottie and Carrie Pitkin—Art work in flowers and fine display of canned fruit.  
George Pardee—French and German prunes.  
Wm. Rice, Saratoga—Prunes and plums in variety.  
Mrs. F. H. Baker, Los Gatos—Early Crawford peaches.  
W. B. Harrub, Los Gatos—Fine display of vegetables.  
W. A. More, Los Gatos—Barley and wheat; good samples.  
Capt. W. Warren, Saratoga—Plums in variety.  
Harvey Wilcox, Los Gatos—Fine yellow egg-plums.  
J. S. Conner, Santa Clara—Apricots and peaches.  
Robert Dodge, Saratoga—Early Crawford peaches.  
John Auzeais—Grapes in variety and wine of several vintages.  
Frank Cottle—Immense rhubarb and good raspberries.  
N. J. Haines—Grapes, nuts and fruits in variety.  
Mrs. Georgia McBride—General display of fruits.  
O. F. Alley—Large exhibit of fruit, including most best varieties.  
R. V. Deidrich—Display of fruits in variety.  
Capt. Frank Dunn, Santa Clara—General display of fruit, Allegretti cherries, and Cabernet grapes grown on a graft put in March, 1886; a very interesting display.  
F. M. Tenny—Fine general exhibit of fruits and vegetables.  
J. H. Flickinger—Splendid general exhibit of fruit in glass and tin, also display of fresh fruit.  
D. C. Feeley, Patchin—Excellent display of plums and wine grapes.  
A. Loomis, Wrights—Apples, pears and peaches, including Loomis' seedling apple, a very promising new fruit.  
Volney Averill, Wrights—Plums and apples.  
Lewis Hebard, Alma—General exhibit of fruit of good quality.  
Geo. A. Fleming & Co.—Fine display of dried fruit in variety.  
A. J. Fowler, Evergreen—Large display of orchard fruits, including citrus fruit.  
T. W. Mitchell—Comprehensive exhibit of fruit in variety, also dried fruit and nuts.  
Carrie E. Worthington, San Tomas—Large assortment of fruit in glass.  
Mrs. Rolla Butcher, Lawrence—Dried and preserved fruit in variety; very fine.  
G. W. Briggs—General display of orchard fruits.  
Chas. Worthington—Large growth of wild oats; Nepal barley.  
George Peirano—Sample of beans.  
J. W. Johnson, San Clara—Display of sweet-wine grapes.  
Jas. Glendenning, Santa Clara—Washington plums.  
Glendenning Brothers—Fruits in variety.  
J. B. Hanson—Orchard fruit in variety.  
Woolsey Shaw, Berryessa—Fruits and yellow corn.  
P. H. Blanchard—Display of fruits.  
M. L. Grewell, Santa Clara—Display of grapes in variety.  
J. P. Bubb, Guberville—Improved wine grapes and orchard fruits.  
J. Shiner, Saratoga—French and Hungarian prunes; fine specimens.  
K. S. Klinkinbeard—Plums and pears in variety.  
G. M. Brown, Jefferson—Apples and fine yellow Danver onions.  
Mrs. Hutton, Santa Clara—General display of fruits and nuts.  
J. J. Fenton, Agnews—Orchard fruits and berries.  
Norris Plummer—Excellent sun-dried apricots, orchard fruits in variety, and watermelons.  
Mrs. J. W. Hines—General display of orchard fruits and berries.  
Bradley Smith—Fresh and dried apricots.  
A. Block, Santa Clara—Excellent display of pears, including a Bartlett 15½ x 12 inches in circumference (borne on an old tree), also fine samples of the new pears, Block's "Acme" and "Superb," also plums and prunes in variety; an excellent display of well-grown, clean fruit.  
R. D. Fox—Excellent display of the famous "B. S. Fox Seedling Pears," an interesting exhibit of varieties which are fast demonstrating their value.

Such items we gain from our hurried notes of individual displays. It is more than likely that in the profusion of material some good things, even of the agricultural class, to which we restricted ourselves, may have been passed over. We may find room for other matter relating to the fair upon a subsequent page.

Among the many valuable uses to which paper can be put, none equals that of advertising. If properly utilized in this respect it will increase its value beyond calculation.

## San Diego County.

Interesting Lecture by Wendell Easton, Esq., on the Soil and Products of that County.

The meeting was held on the evening of Aug. 11th, at the office of Easton & Eldridge, 618 Market street, under the auspices of the Pacific Coast Land Bureau, being the continuation of a series of lectures on the different counties of California which was inaugurated about eight years ago. The subject-matter of the evening was San Diego county and its advantages for settlement. The meeting was called to order by Mr. George W. Frink, vice-president and general manager of the Pacific Coast Land Bureau, who made a few introductory remarks concerning Southern California, with particular reference to San Diego county, and then introduced Mr. Wendell Easton, president of the Land Bureau, who held the attention of the audience for over an hour, expressing his opinions with regard to this section of the State in the following words:

### San Diego County.

San Diego county comprises the most southern portion of the State of California and extends along the border separating it from the peninsula of Lower California on the south, the Pacific ocean on the west and the Colorado on the east, a distance of 150 miles, and with a length of the county from north to south of 150 miles, will make a total area of nearly 15,000 square miles or very nearly 9,000,000 acres, with certainly a fair portion of one-third of the area of level plains and valleys along the Coast Range and in the mountains, suitable for farming in its different phases and grazing.

Two branches of the Coast Range, passing through the county from north to south, separate it into three divisions, which differ as much in soil, climate and topographical features as if they were in different portions of the globe. The division bordering along the coast line forms a part very nearly 25 miles wide, a considerable portion of which consists of level land and gentle sloping valleys, watered by the San Bernardino, San Diego, San Luis Rey, Margarita, Sweetwater and other rivers, the greater portion of this division being suitable for agriculture and grazing. The central, or, as we term it, the mountain division, is very irregular in outline, averaging nearly 40 miles in width, the higher hills being covered with forests of oak, cedar, pine and fir, and contains gold, silver, copper and other minerals. Valuable gold mines are now being worked in the county and to considerable profit to the owners. Between the ranges one meets with continual surprises, for here and there in these secluded spots one will find the most fertile sections of the State of California, with a delightful climate and soil unsurpassed for fertility, which will produce the various cereals and citrus fruits in great abundance and perfection. The eastern division of the county is composed of a treeless, barren desert, part of which is below the level of the sea, which is very dry and hot. About its only recommendations are the many natural curiosities which there abound, among which is a lake of boiling mud about a half-mile in length and about 500 yards wide.

### Soil.

The greater portion of the soil of San Diego county is of decomposed granite, and not alone the best fruit land, but for general agriculture and for richness, combined with easy working, irrigation, drying and retention of moisture, cannot be excelled anywhere. The superior grade of the soil has generally a reddish tinge, and where of coarser nature, it will favor the color of granite with every shade of color between the two. The soil of this section of the State, like other portions of California, cannot be judged by the eye, and in portions of the county, at a careless glance, what appears to be almost pure sand is fine flakes of loam surprisingly rich; the reason being that there is scarcely any decay of vegetation to mix with the other elements, and to give it the appearance of the rich land in the East. Vegetation dries up and disappears in pulverized soil, so that in a handful of soil it can scarcely be noticed without a magnifying glass. Irrigate this same soil, and any seed planted in it will show a growth which is surprising. The sand in the river beds is very rich, but outside of the river beds and bottoms there is little that has any sandy character, having more of an alluvial pulverized appearance, and is extremely fertile. The stranger cannot judge of even the roughest portion of San Diego county from its appearance or distance. Many of those places that seem almost inaccessible, running tier upon tier for several hundred feet, are delightful places for a siege. The boulders are much further apart than they appear from a distance, with plenty of rich soil between them, and bearing flowers, ferns and shrubs innumerable. Long bunch grass rises above the alfalfa or burr clover, often covering the ground and bleaching at the top in summer and starting out again in soft green at the bottom with the first rains. These little parks are scattered with live oaks which stand around the edges filling up the openings in the barricade of boulders, or shading the head or entrance of the little pockets that run here and there into the chaparral, like inlets from a lake. In traveling over the country one meets with continual surprises, and upon rising a hill there may lie before the view a large open space comprising a few acres up to the many thousands. Above an elevation of, say 4000 feet, timber is abundant. Along the river bottoms and low grounds the scymore is found in all its stately grandeur; the cotton-wood is very common; the willow, the ash, the native walnut and a very sweet nut like the butternut, the alder and two varieties of oak, are common; and the alder forms a fine tree on the higher water-courses. Those with the Torrey's pine, are all below the high mountains that can be called timber.

### Climate.

There are but two seasons, neither of which can be exactly defined, but which are nearly described as spring and summer. Spring is generally called winter, and with the exception of a few frosty nights, which can only be when the sky is clear and the air quite dry (in which case the

succeeding day is sure to be warm and bright), there is nothing of the greater part of the season which can correctly be called winter. It is called by many the rainy season, but this is only by way of distinction from the long, dry summer. It is not a rainy season as we term it in the Western States or New England, from the first to the last rain, a period lasting in seasons, usually wet, say six months. The number of rainy days is never equal to that of a wet spring or winter in the Eastern States, and too often does not equal the rainy season in six months seen there. This season commences with a fair rain in November after a light shower or two in October. The summer season, as we term it, commences about the 1st of May, lasting to about the 1st of November, and is a continuous series of dry weather. The peculiarity of the seasons in this county is the fact that no two seasons are alike. One summer might have a light sprinkle or two of rain or a little more intense heat than another, but there are the same regular portion of bright days month after month. In winter the fair and clear days always predominate, even in years of excessive rainfall.

The mid-day temperature of the clearer days in summer is generally from 60° to 70° on the coast, and from 65° to 80° in the interior. The mid-day temperature of the rainy days is about from 55° to 60°. The lowest mid-day temperature recorded at the United States Signal Station at San Diego during eight years is 51°, and this occurred but once. In those eight years there were but 21 days when the mid-day temperature was not above 55°. In fact, there have been but six days when the mercury fell below 36° at any time in the night, and but two when the mercury fell to 32°, the lowest point ever reached. A comfortable summer in a latitude so low and with such warm winters is the last thing which strangers expect, yet it is the greatest surprise to those who venture to remain. Should any one reflect for a moment it can be easily seen that a land so dry must be free from malaria; how a dry air must make cool nights, and be thus less perceived by keeping the skin dry; how a breeze from the sea must follow the rising of the sun. By the sea the difference between the mid-day temperature of winter and summer is hardly above 10°, and in the interior little, if any, above 15°. In the El Cajon valley, but 12 miles east of San Diego, where any given day will be warmer at mid-day than on the coast, it is always cooler at night, and blankets are always acceptable the year round. This noted valley fairly represents the temperature of the interior, there being, of course, places where it is greater and others where it is less.

### The Productions.

Southern California seems to produce, with proper care, nearly every kind of tree, shrub, grass, grain or herb that is at all common to the temperate zone, together with a greater number of those of the tropics. Most of the products of the temperate zone reach here their perfection, while many of those of the tropics do the same. Special soils, of course, as well as elevations, are adapted to special products; the best oranges cannot be grown on the strongest wheat land; the best apples, cherries, gooseberries and potatoes can rarely be grown under an elevation of 2000 feet or more, while the best land for grapes may not produce the best wine-grapes, and vice versa. The cultivation of fruit trees has met with most gratifying success, the product being superior in all that makes fruit feel luscious to the taste or beautiful to the eye. Peaches, pears, plums, prunes, apricots, cherries, apples, nectarines, oranges, almonds, lemons, bananas, figs and many others have demonstrated the productiveness, and in many instances have already proven a source of considerable financial profit. The shipment of fruits to the Eastern States promises to be one of the most profitable of California's business opportunities, and San Diego orchardists are furnishing their quota to-day of the extensive demand. The dry atmosphere is extremely favorable to the ripening of fruits, as well as to their curing, and sun-dried fruits are already among the productions of the county. It is no egotism to say that the raisins cured by solar heat are not surpassed by those of any other section of the State of California. All that has been said of the fruits already mentioned can be said of the grape, and even more, for it is to viticulture that most attention must be paid and hence larger and more satisfactory results will be obtained. Rich alluvial soil, abundantly watered, easy of cultivation and warmed by a genial sun, are the facilities here offered for the culture of the grape. More than these are not found in the most noted vine districts of Europe. To mention the general elements of the success of viticulture in San Diego county would require much more time than is allotted to this article, while an enumeration of individual successes would read more like reminiscences of Utopia than the actual experience of men toiling on San Diego lands. It has been my personal privilege to visit the several important vineyards in the State of California, and having had excellent opportunities to be familiar with the details of the workings of this industry in all its bearings, I am free to say that when I visited the well-known vineyard of George A. Cowles in the El Cajon valley, San Diego county, I was struck with wonderment and surprise to see the extraordinary growth made in his vineyard and the important results which he had obtained by the curing of his crops by solar heat, and putting forward into the commercial mart a grade of raisins that will rank the world. This statement I make is indorsed by the statements of the well-known house of Wm. T. Coleman & Co., of San Francisco, and the raisins of Geo. Cowles are now placed in this market, ranking with the well-known Malaga raisins of Spain, these grapes being grown without irrigation.

### San Diego.

The county seat of San Diego county is the city of San Diego, lying on the well-known bay of the same name. The city is constructed, commencing from the water's edge, rising up the sides of a gentle sloping hill, and is one of the oldest cities and missions in the State of California. The population at the present time is about 8000 people. There are three daily newspapers published here, of which the San Diego Union takes rank by seniority, being the oldest newspaper published in the county of San Diego; the San Diego Sun is in its ninth year, and also the San Diegoan, the youngest publication of the three. The city is well supplied with financial institutions, comprising the Consolidated National Bank and also the First National Bank. These



banks are stock companies, and owned by prominent financiers of San Diego city. The city is well supplied with hotels, and manufacturing is becoming quite a feature of San Diego, as is indicated by almost every branch of trade represented here. The shipping facilities are of the best. The elegant steamers of the Pacific Coast Steamship Company ply between San Francisco and San Diego, touching at intermediate ports. The steamer leaves San Diego every three days. This, together with her excellent railroad facilities, connecting with all through trains, fastens for San Diego her importance as a shipping point for the whole of Southern California. The harbor of San Diego is world-renowned, being one of the finest harbors in the world, and, next to the bay of San Francisco, is the finest on this coast.

#### Coronado Beach.

San Diego, in the future, will supply a great demand as a pleasure resort for Southern California. During the long dry summer the husbandman and the vineyardist, desiring a little relaxation from the continuous warm weather, turn to the seaside, and, with a few days on the ocean, go back with renewed vigor to their labor. This demand is met in the harbor of San Diego, with the well-known peninsula which is now termed Coronado Beach, which is bound to be the Coney Island not only of Southern California but of the Pacific Coast. A level tongue of land makes out from the southern portion of the bay north and to the west, lying across the channel, about four minutes from the mainland at the foot of the main streets leading from the city of San Diego. This magnificent property has been purchased by a syndicate of capitalists of San Diego county who have unlimited capital at their back, and who are now making extensive improvements and developing this important piece of property for its true purpose. A large portion of the peninsula has been set aside and subdivided into proper villa parcels, a hotel site has been set aside, on which will be constructed a second Del Monte; ferry facilities are now completed and a magnificent boat has just been completed in San Francisco, and accepted during the last month, for the purpose of transferring passengers from the San Diego side to the peninsula, where the passengers are met by a railroad, with a steam motor, to convey them to the beach facing the ocean. Ten minutes from San Diego will transfer people across the channel and across the land on to the Coronado Beach, one of the finest beaches in the world, where miles of drives can be constructed, and where the sea-bathing is certainly par excellence. This property is being developed, as I have said, by people of large resources, and with broad and liberal ideas, and will certainly be attractive to strangers from all portions of the world, in addition to the residents of Southern California, who are seeking just such a place for recreation and rest, and here is met their requirements in this direction by this prominent city, so well termed the "Naples of the Pacific."

#### The Back Country.

The city of San Diego, from a commercial standpoint, will certainly acquire great prominence through this section of the State, from the fact that it is the natural shipping point for Southern California, in addition to the wonderful back country, so prolific in resources. As an immediate suburb to the city of San Diego is the

#### El Cajon Valley.

This well-known valley is an original grant comprising 11 leagues or 48,000 acres of land, and is, without question, one of the most extensive fertile spots in the State of California. In going out from San Diego on the main road to El Cajon valley, we gradually rise over the first line of foothills, and upon reaching the brow look down into this valley which is so well known throughout the entire State. The valley is only 13 miles to the east of the city of San Diego, and at the present time has a small population, but is filling up rapidly, owing greatly to the efforts of settlers, whose success in raising grain and the raisin grapes have brought it prominently into notice. There is a town-site laid out in the center of the valley, which is the central point for the transaction of business, where now there is a hotel, store and postoffice, fine schoolhouse and church organizations, and at this point a number of important roads, leading from the city of San Diego through the important back country, cross and recross. This valley is one of the best in the county, comprising a long sweep of broad, level land, which needs no clearing and is readily broken by the plow. Of the entire 48,000 acres, very nearly one-half is valley land or low mesas, all arable, rich, smooth and clear of brush or rocks, and contains less waste land than any other plain of equal size in this county or the adjoining ones. From this main valley run out numerous branches, some of them being quite extensive. The elevation above the sea is about 300 feet, and the whole is sunk in a girdle of hills from 800 to 2000 feet above the valley. The soil throughout the main valley is a continuous sweep of the celebrated red land of this section of the State—a soil very rich in character, easily worked and retaining moisture better, therefore needing less irrigation than deep or sandy soil, and unanimously pronounced by the experts of California to be the very best of all soils for many kinds of fruit trees, and above all, the natural home of the grape. Here is found the home of the orange, the home of the raisin and the acidulous fruits of all varieties. In this beautiful valley is a nursery where every tree almost that one can name has been set out as an experiment, together with a multitude of roses comprising the entire family, and all seem to be at home, thriving and prosperous. In this valley, at the present time, everything is grown without irrigation, and success is demonstrated. The San Diego river skirts the valley its full length on one side, and the San Diego Flume Company is now constructing its important flume on the other and carrying across through this valley a volume of water equivalent to 6000 cubic inches. The soil of the valley is varied in character. On the western and southern slope of the valley it is of a stronger and stiffer character, and as we enter the valley the soil becomes lighter in color and character and more easily handled, and altogether the valley, as a whole, in my judgment, comprises one of the most remarkably productive sections of the State of California. As one rises out of the main valley on to the side foothills, surprises are continually meeting one by the little valleys and mesas that show up from time to time between the low hills. Continuing out through the Cajon, leading up the important streams, we are continually reaching these small

valleys until we get into the very highest mountains. In speaking of this section of country, it is a repetition of other valleys in the State which are of importance, and with these exceedingly fertile spots lying adjacent to the city of San Diego, it is safe to say her future is assured. With her natural commercial advantages and with the extraordinary fertile country lying to the back of the city, this "Naples of the Pacific Coast" must certainly be one of the most important cities of the State, and it is a fair presumption, that with to-day but 8,000 people, to say that within 10 years she will have 50,000 people, and maintain her growth based upon her natural resources.

#### Irrigation.

It is commonly understood that in Southern California irrigation is a very important factor to produce the best results. In fruit-growing and viticulture and in certain sections it is imperative that irrigation should be made available, as in the greater part of Southern California without it nothing can be grown; but in San Diego and in such fertile sections as I have indicated, as the El Cajon valley, irrigation is not known, although thorough cultivation is there an important factor. Major L. Chase, a prominent attorney in Southern California, whose suburban home is in the El Cajon valley, told me that he had demonstrated that thorough cultivation was more desirable in his orange grove in the El Cajon valley than irrigation, and that his trees (which I can vouch for as being the cleanest I have ever seen in California) have been grown entirely without irrigation, and he is an advocate of deep plowing, which concurs with my judgment and experience in the matter. There is quite a territory of land lying adjacent to the city of San Diego and well back to the first foothills of what is called the Mission lands—high mesa lands on which nothing will grow without water, and to meet this requirement one of the most important enterprises of the State of California has been undertaken for the purpose of furnishing water along the line of supply and to terminate in the city of San Diego. The San Diego Flume Company, a local corporation, has secured the proper rights and located water at the San Diego falls, where an unlimited supply of water can be diverted and carried from this point in a flume on a grade of four feet to the mile, down the river to the El Cajon valley. The length of the flume from the dam to San Diego is 49½ miles and the line is already surveyed to a point on the west side and going out of the El Cajon valley. From this point the water is to be taken in smaller flumes across the mesa lands east of San Diego City on a grade of 20 to 25 feet to the mile. The flume as now located runs down the San Diego river to the El Cajon valley, then skirts the edge of this valley to the point of its departure for San Diego. The storage reservoirs contemplate taking in the water of over 150 miles of watershed, and as this country has an elevation of from 4000 to 6000 feet above the level of the sea, and as the rainfall is over 40 inches in that section of the country, there can be no doubt of the fact that the reservoirs can be filled even in the dry seasons. As a result of this important enterprise a magnificent water-supply will be guaranteed to the city of San Diego as well as ample facilities for the irrigation of nearly 200,000 acres of land. With such an area of arable land, San Diego can build homes for nearly 20,000 people. I am informed that a contract is now under consideration for the construction of the dam, and one of the reservoirs will be filled this season, and it is presumed that the water will be taken through El Cajon valley next season. The organizers and the proprietors of this company have been outlining a liberal policy in offering inducements to consumers of water, and the enterprise has every appearance of good faith and stability. As an adjunct to this company, a new company has been organized, known as the Mountain Water Company (one of the leaders of the movement being Dr. Joseph Jarvis, of Riverside, a gentleman well known in Southern California, and together with L. M. Holt, the publisher of the important paper at Riverside), is taking a leading hand in purchasing a large supply of water from this San Diego Flume Company. This new company has purchased some important tracts adjacent to the city of San Diego, and are proposing to pipe them for irrigation and outlining as a portion of the program, to sell the land at so much an acre, including the water-right, and furnish the water for irrigating at the low price of \$2 per acre per annum. This second company will exert a powerful impetus to the prosecution of the Flume Company's enterprise, and in the end give the city a supply of cheap water.

#### In Conclusion.

Of a truth it may be said that the county has great natural capabilities. Touching agricultural crops or horticultural productions, they mature here a perfection which will always make them desirable in the market and guarantee to the producer a liberal return for his time and labor. San Diego has just awakened to her era of substantial prosperity, yet I would not represent it as a land of luxury and ease—a country where a touch or a glance, or even limited labor, can expect a desirable income. There never was but one Garden of Eden. To make a success of anything in San Diego county, labor and time are both necessary, while capital, though not a *sine qua non*, will prove as agreeable here as elsewhere. Our hope is in "small farms well tilled," and we have abundance of room for thousands of active and intelligent families, all of whom may here erect happy and profitable homes, combining health, pleasure and profit. The future is promising and the present is a source of great satisfaction.


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OUR FRIENDS can do much in aid of our paper and the cause of practical knowledge and science, by assisting Agents in their labors of canvassing, by lending their influence and encouraging favors. We intend to send none but worthy men.

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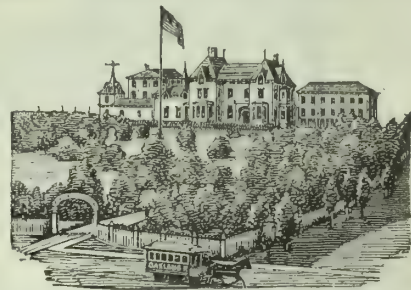
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REFERENCES—Rev. W. I. Kip, Bishop of California; Rev. C. O. Tillotson, Santa Cruz; Hon. C. H. Hartson, Napa; John D. Yost, San Francisco; F. A. Hihn, Santa Cruz; E. J. Wilson, Vallejo; Capt. A. D. Wood, San Francisco; Eugene Sherwood, San Francisco.

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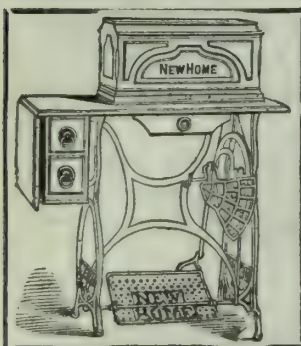
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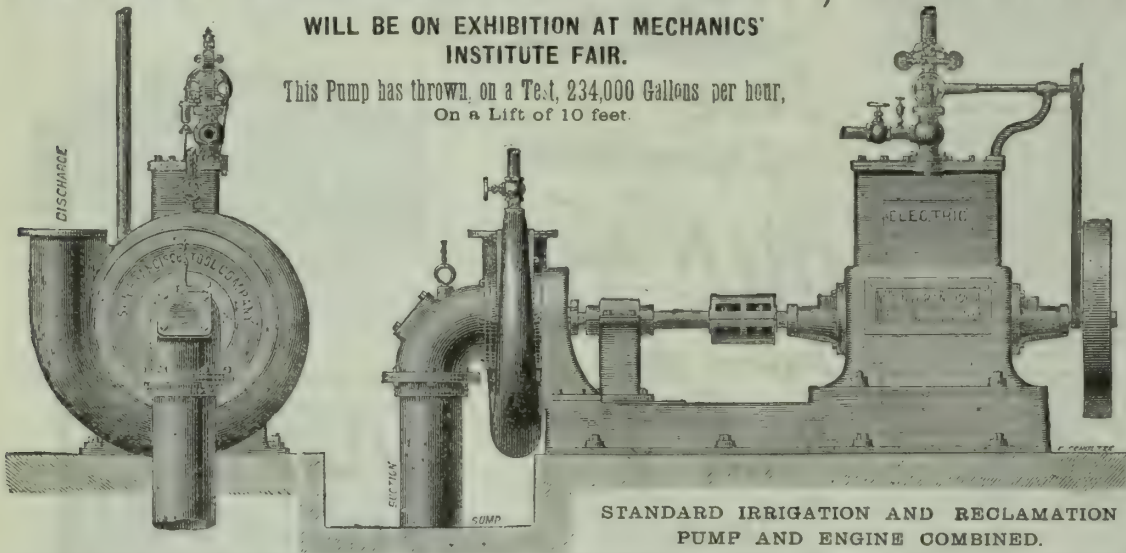
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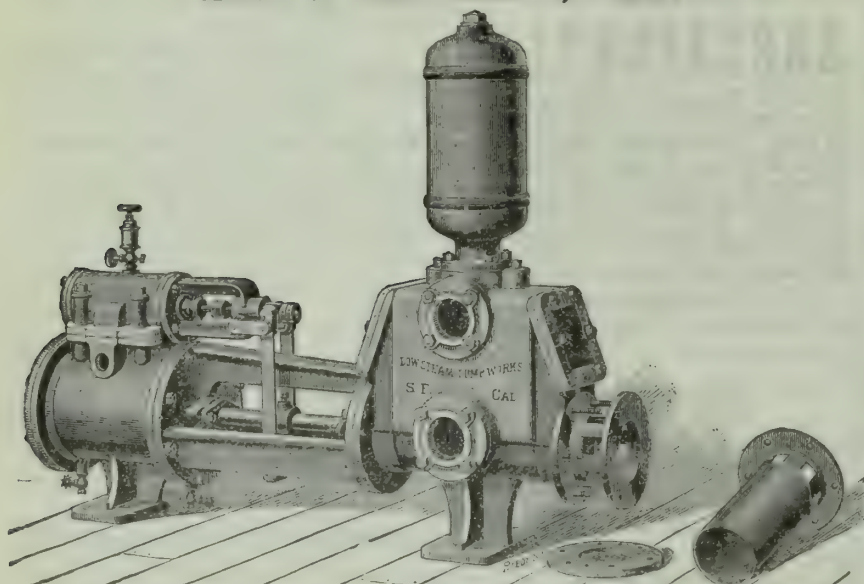
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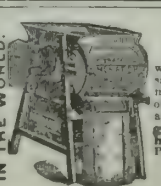
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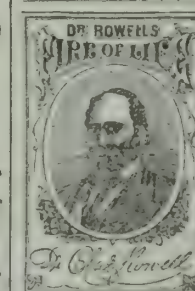
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The Legislature.

Fourteenth Day—Tuesday, August 10th.

SENATE.

Nothing accomplished as to irrigation.

ASSEMBLY.

Moffitt's bill to repeal Section 1422 of the Civil Code was ordered to be engrossed and read for the third time, by a vote of 53 to 17. Goucher's Assembly Bill No. 8 was amended, read a second time and ordered engrossed and to a third reading.

The bill as amended reads as follows:

Section 1. The water of every natural stream within the State of California is the property of the public and is dedicated to the use of the people of the State. Such water may be appropriated, diverted, and used for irrigation, or other beneficial purposes. The right to divert unappropriated waters of any natural stream to such beneficial uses shall be regulated by law. Prior appropriations of water to any such use, whether heretofore or hereafter made, so long as applied to such use or other beneficial purpose, shall give the better right to the extent of the amount of water actually diverted and applied, and the right of appropriation, diversion and use shall be exercised under legislative regulations; provided, the navigation in navigable streams under the control of the United States shall not be impaired. The English common law of riparian rights, so far as it conflicts with this act, shall not be recognized as a rule of decision in any of the courts of this State.

Sec. 2. All acts and parts of acts in conflict with this act are hereby repealed.

Sec. 3. This act shall take effect immediately.

The balance of the afternoon was devoted to the consideration on second reading of Edwards' constitutional amendment No. 7, as amended by the committee. It was slightly amended and passed to third reading by a vote of 63 to 7. The last clause, as amended, now reads:

But nothing in this section shall prevent the Legislature from passing laws having local application regulating the diversion, distribution and use of water for irrigation purposes, and for the construction and regulation of canals, ditches and other works therefor, as the same may be required in any county or counties or in any district created by law for that purpose. Provided, however, that such laws having a local application shall not grant to any private corporation or individual any special or exclusive right, privilege or immunity.

Fifteenth Day—Wednesday, Aug. 11.

SENATE.

Assembly bill repealing Section 1422 of the Civil Code to the Judiciary Committee, after some discussion, was ordered sent to the file.

A similar discussion ensued in regard to Assembly Constitutional Amendment No. 7, which was finally sent to the committee.

ASSEMBLY.

Moffitt's bill providing for the repeal of Section 1422 of the Civil Code was finally passed by a vote of 53 to 16.

Goucher's bill, No. 8, passed by a vote of 44 to 23.

Sixteenth and Seventeenth Days—Thursday, Aug. 12, and Monday, Aug. 16.

Nothing was accomplished as to irrigation in either house.

Eighteenth Day—Tuesday, Aug. 17.

SENATE.

Time occupied with discussing amendments to Del Valle's bill, No. 16.

ASSEMBLY.

Assembly Constitutional Amendment No. 2, which as amended now reads as follows:

Article XIV, Sec. 3. The waters of all natural streams within the State are the property of the public, and are dedicated to the use of the people of the State. Such waters may be diverted and used for irrigation, mining or other beneficial purposes, under regulations prescribed by law; provided, that navigation in navigable streams subject to the control of the United States shall not be impaired. The English common law of riparian rights shall not be recognized as a rule of decision in any of the courts of this State.

Was ordered to be engrossed, and will come up for final passage as a resolution on the 18th.

TWO GREAT FIRES.—Week before last the most disastrous ranch fire of the season swept its path of desolation for nearly 10 miles in San Benito county, destroying \$50,000 worth of hay and grain, besides fencing, barns, and farm implements. And now word comes that the business portion of Tulare has gone up in flame and smoke. Every hotel and restaurant was consumed; 10 or more horses perished. The total loss is roughly estimated at a quarter of a million of dollars.

THE STARR MILLS, at South Vallejo, employ 90 men regularly. The mills run night and day and convert 250 tons of wheat into flour every 24 hours.

MAJOR J. S. HAYS, of the St. Helena Times, Napa county, gave the welcome speech to the G. A. R. in that place August 12th.

PACIFIC COAST WEATHER FOR THE WEEK.

[Furnished for publication in this paper by NELSON GOROM, Sergeant Signal Service Corps, U. S. A.]

DATE.	Portland.			Red Bluff.			Sacramento.			S. Francisco.			Los Angeles.			San Diego.								
	Rain.	Temp.	Weather.	Rain.	Temp.	Weather.	Rain.	Temp.	Weather.	Rain.	Temp.	Weather.	Rain.	Temp.	Weather.	Rain.	Temp.	Weather.						
Aug. 11-18.																								
Thursday .....	.02	69	W	Cy.	.00	96	NW	Cl.	.00	55	SW	Cl.	.00	63	SW	Cl.	.00	91	SW	Cl.	.00	77	SW	Cl.
Friday .....	.30	71	SW	Cl.	.00	88	J	Cl.	.00	82	S	Cl.	.00	66	W	Fr.	.00	89	W	Cl.	.00	76	W	Cl.
Saturday .....	.00	70	NW	Cl.	.00	93	S	Cl.	.00	78	NW	Fr.	—	64	W	Cl.	.00	86	SW	Cl.	.00	74	SW	Cl.
Sunday .....	.00	71	NW	Cl.	.00	91	S	Cl.	.00	81	SW	Cl.	—	59	W	Cl.	.00	85	SW	Cl.	.00	74	W	Cl.
Monday .....	.00	73	NW	Cl.	.00	89	S	Cl.	.00	79	S	Cl.	—	58	W	Cy.	—	77	S	Cy.	.00	74	W	Cy.
Tuesday .....	.00	72	NW	Sy.	.00	91	S	Cl.	.00	82	SW	Cl.	.00	59	SW	Cl.	—	83	SW	Cl.	.00	74	W	Cl.
Wednesday .....	.00	67	S	Sy.	.00	90	S	Cl.	.00	83	S	Cl.	.00	64	W	Cl.	.00	84	W	Cl.	.00	73	W	Cl.
Totals .....	.02				.00				.00												.00			

EXPLANATION.—Cl. for clear; Cy., cloudy; Fr., fair; Fy., foggy; — indicates too small to measure. Temperature Wind and weather at 12:00 M. (Pacific Standard time), with amount of rainfall in the preceding 24 hours.

List of U. S. Patents for Pacific Coast Inventors.

Reported by Dewey & Co., Pioneer Patent Solicitors for Pacific States.

From the official report of U. S. Patents in DEWEY & Co.'s Patent Office Library, 252 Market St., S. F.

FOR WEEK ENDING AUGUST 10, 1886.

347,022.—TWO-WHEELED VEHICLE.—T. S. Bayley, Alturas, Cal.

347,041.—THROTTLE VALVE.—Hopkins & Johnson, Austin, Nev.

347,244.—TOY AIR-GUN.—P. D. Horton, S. F.

347,007.—SLIDING GRATE FOR STOVE OVENS.—M. L. Miller, Oregon City, Oregon.

347,251.—OILER.—Elijah Moat, Los Angeles, Cal.

NOTE.—Copies of U. S. and Foreign Patents furnished by DEWEY & Co., in the shortest time possible (by mail or telegraphic order). American and Foreign patents obtained, and general patent business for Pacific Coast inventors transacted with perfect security, at reasonable rates and in the shortest possible time.

Other Exhibits at San Jose Fair.

In addition to the displays mentioned on a preceding page we find the following worthy of notice:

L. D. Combe showed a promising seedling from the Howell pear.

Some French petite prunes shown by, Mr. Bowditch, of Los Gatos, were 4½ inches around, the short circumference.

The Farmers' Union showed a glass case of finest honey.

Capt. J. C. Merrithew, of Prospect vineyard, Cupertino, exhibited grape brandy and California old port, Muscatel wines and "A Bonanza," composed of brandy and wine.

The Paul O. Burns Co., of the Yerba Buena vineyard, exhibited wines and brandies of its manufacture, neatly and attractively arranged.

The Burgundy vineyard, J. B. J. Portal, proprietor, made a large and attractive display of wine and table grapes. He showed the growth of a graft of Cabernet Sauvignon imported from the famous Chateau Lafite last January and grafted in February. There were 8 or 9 canes from the graft which had grown 7 to 8 feet this season. Near Mr. Portal were meritorious exhibits of grapes by Ellis Bros., Saratoga; J. Bohnett, San Jose; and W. Pfeiffer.

One large table was devoted to a fine exhibit by Col. Younger, Miss Alice Younger and the Misses Fowler, of Evergreen. One of the attractions was a basket of blackberries of the Washington variety. Miss Alice Younger is the artist. The Misses Fowler exhibited a large sprig of Japanese persimmons, and oranges and lemons seeded and budded. The rest of the display consisted of fruits of all kinds and floral decorations.

L. A. Brooksin showed fine pears and prunes.

E. W. Harrison—Fruits, nuts, and a bunch of English walnuts that was much admired.

George Porter, Santa Clara—German prunes.

J. B. Herbert—Corn.

Dr. Mintie, ranch of Berryessa, made a fine exhibit of fruits.

Perry Curtis and W. Holborn—Fresh peaches, etc.

Wesley Shaw—French prunes, showing the growth of the wood.

J. F. Taylor, Agnews—Strawberries, raspberries and blackberries.

A. M. Van Pelt, of Saratoga, displayed fruit, fresh and dried.

A. Tilton showed some large English walnuts.

E. A. Willett—Squashes.

M. C. Park—Squashes.

Dr. Norcross—Immense beets grown without irrigation.

O. F. Alley showed his farm in miniature. There was the house, in front of it a garden, and back of it an orchard, with trees and vines, and fruits. The idea was happily conceived and admirably carried out.

The carob or St. Johns bread tree was shown by two growers, R. A. Thomas and Mrs. Arnerich. This promising tree has been imported by various parties and has been widely distributed from the University experiment station. Its growth and early fruiting lead to an expectation that much value will be found in it in California.

Complimentary Samples.

Persons receiving this paper marked are requested to examine its contents, terms of subscription, and give it their own patronage, and, as far as practicable, aid in circulating the journal, and making its value more widely known to others, and extending its influence in the cause it faithfully serves. Subscription rate, \$3 a year. Extra copies mailed for 10 cents, if ordered soon enough. If already a subscriber please show the paper to others.

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Should this paper be received by any subscriber who does not want it, or beyond the time he intends to pay for it, let him not fail to write us direct to stop it. A postal card (costing one cent only) will suffice. We will not knowingly send the paper to anyone who does not wish it, but if it is continued, through the failure of the subscriber to notify us to discontinue it, or some irresponsible party requested to stop it, we shall positively demand payment for the time it is sent. LOOK CAREFULLY AT THE LABEL ON YOUR PAPER.

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COMPOUND lenses, of every possible combination, mounted in two hours' notice. C. Muller, optician, 135 Montgomery street.

IRRIGATION.

The Law of Water for Irrigation in Colorado.

By S. W. CARPENTER.

This book is intended to present in a clear and concise way the Colorado law of this very important subject at the present time, with all the latest decisions. It also contains many suggestions of the greatest value to those interested in securing and preserving water rights in Colorado.

The information will be found of great value to those who are interested in irrigation laws for California.

We append, by permission, a notice of the book from Hon. H. P. H. Bromwell, of Denver, a member of the State Constitutional Convention, and of the General Assembly at the time much of the legislation on the subject of irrigation was framed, and later referee in the establishment of priorities in Water District No. 3, Cache la Poudre river, and a well recognized authority in such matters.

DENVER, COLO., June 2, 1886.

S. W. CARPENTER, Esq.—Dear Sir: I have examined the digest and compilation entitled "The Law of Water for Irrigation in Colorado," which you have prepared, and beg leave to say that in my opinion it will prove to be of much use and value to the community. The work so much needed has been done by you remarkably well, considering the brevity necessary in preparing a book for the use of all parties interested in irrigation, as well as of members of the bar. Respectfully and truly,

H. P. H. BROMWELL.

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TWENTY-FIRST

Mechanics' Institute Fair, SAN FRANCISCO, 1886,

Opens August 24th, Closes September 25th,

—IN THEIR—

IMMENSE PAVILION ON LARKIN ST.,

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NATURAL and MANUFACTURED PRODUCTS OF THE PACIFIC COAST, including a magnificent collection of Oil and Water Color Paintings, Art Work, and Photographs; MACHINERY in operation; a SPECIAL FLORAL EXHIBIT each week; the finest display of FRUITS, GRAINS, and VEGETABLES ever before presented to the people, and a Grand Instrumental Concert day and evening.

The San Francisco and North Pacific Railroad Company and the South Pacific Coast Railroad Company, and the steamers under the management of Messrs. Goodall, Perkins & Co. will transport perishable articles consigned to the Mechanics' Institute Exhibition free of charge, and other articles at half rates.

LIBERAL PREMIUMS of Gold, Silver and Bronze Medals, Diplomas and Cash, will be awarded. Members of the Institute entitled to Season Tickets at half rates.

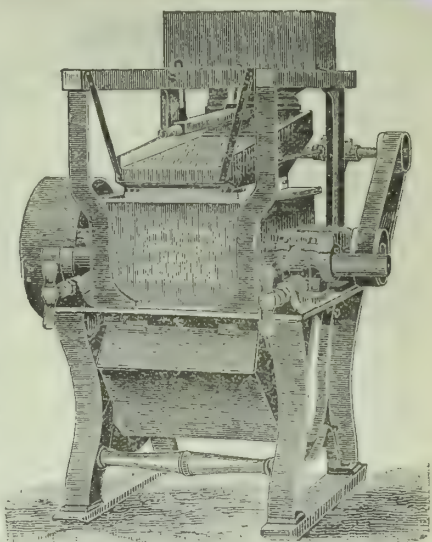
PRICES OF ADMISSION.—Double Season Ticket, \$5; Single Season Ticket, \$3; Adult's Single Admission, 50 Cents; Children's Single Admission, 25 Cents.

Full information given or sent on application to the Assistant Secretary, 31 Post St.

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WITH SHAKING SCREEN.

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CALIFORNIA STATE FAIR—1886.

At Sacramento, Sept. 6th to 18th.

TWO WEEKS.

The Attention of the Farming Community of this State is particularly called to the Liberal Awards, and advantages offered for

COUNTY EXHIBITS.

The importance of an exhibit made by separate counties, showing the productive qualities of the various sections of our State, has become more apparent each year since the system was inaugurated by this Board. Recognizing the interest made manifest in the past by both the public and the exhibitors, through whose energy and enterprise valuable agricultural lands have been brought to the notice of the world, and counties with small populations have increased in a manifold degree, by reason of the products having come forward with this products that were of such quality as to enable him to meet all competitors, the Board have deemed it proper to increase the premiums in this Department, and to that end have appropriated \$2000 to be distributed among the various counties making displays under the following provisions: To those who may have charge of the exhibits, we would call their attention to the fact that these awards will be made for the most extensive, perfect, and varied exhibit of Farm Products (exclusive of live stock) exhibited as a County Production. Thus it will be seen that it is to be wholly devoted to the products of the farms located in the county where the exhibit is made from, and does not include manufactured goods of any kind or character except those grown and raised in the county from whence the display comes.

For the best display, as per explanation above, First premium of \$500, cash. The remaining exhibits shall receive premiums in proportion to their excellence, as compared with that receiving the First Premium. Competition to be between counties only. That is to say, that the entire exhibit made by one county must compete against the entire exhibit of another county. The premium awarded to each county exhibit will be paid to the committee in charge of said exhibit.

The State Board of Agriculture earnestly desires the hearty co-operation of the various subordinate Granges throughout the State, in making this exhibition of California's products a success, whereby the varied products of different localities may be fully shown. We would ask the appointment of a committee from the Grange in each county to call upon and urge the patrons to make a display representing their respective counties.

Address the Secretary at Sacramento for Premium Lists and other information.

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EDWIN F. SMITH, Sacramento.

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July 28, 1886.

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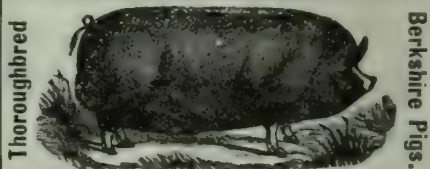
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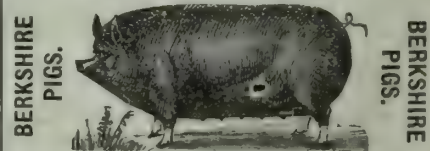
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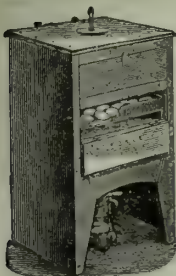
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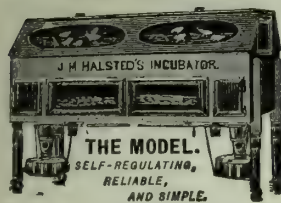


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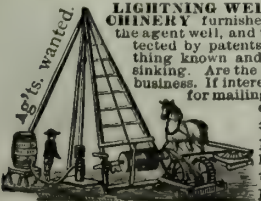
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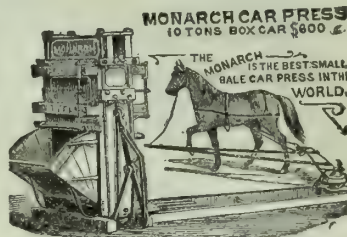
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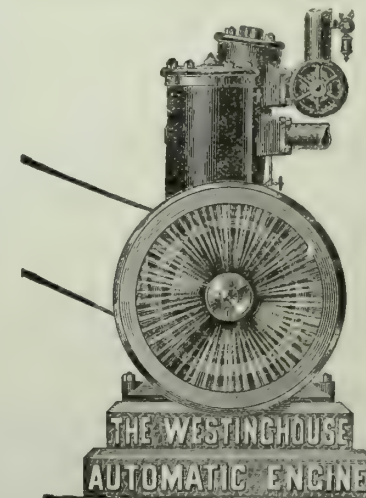
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## S. F. MARKET REPORT

NOTE.—Our quotations are for Wednesday, not Saturday, as date which the paper bears.

## Weekly Market Review.

## DOMESTIC PRODUCE, ETC.

SAN FRANCISCO, August 18, 1886.

Wheat is stronger and an advance of about 5c per cbl. all around has been gained since our last report. Shippers have more courage and the market is in much better shape. The inspiration comes directly from improved foreign cables, but the facts in the general supply situation (which we have endeavored to point out to our readers in previous articles) are no doubt exercising due influence in all the world's markets. The latest by cable is as follows:

LIVERPOOL, Aug. 18.—WHEAT—California spot lots, 6s 7d to 6s 10d; off coast, 3s 9d; just shipped, 3s 5d; nearly due, 3s 4d; cargoes off coast, firm and bidding fair; on passage, demand fair, with prices a shade higher; Mark Lane Wheat and Maize, turn easier; English and French country markets, rising; Wheat and Flour in Paris, a turn dealer; Wheat on passage to Continent, 670,000 qrs.; Wheat and Flour to U. K., 2,050,000 qrs.; weather in England, fair.

## Foreign Review.

LONDON, Aug. 16.—The *Mark Lane Express* in its review of the British grain trade for the past week says: The unsettled weather has retarded harvesting, which will now be very late. Wheat has rusted and mildewed to an extent greatly affecting the quality, and everything points to a deficient Wheat crop. English Wheat is firmer and prices are against buyers. Sales of English Wheat during the past week were 44,120 quarters at 32s 6d, against 37,610 quarters at 33s 6d, during the corresponding period of last year. The foreign Wheat trade is inanimate. Purchases are only of a retail nature. Corn on the spot is against buyers. Fourteen cargoes of Wheat arrived; three cargoes were sold, including one of California at 32s 3d; one was withdrawn and seven remained. Trade in forward is quiet. There is a desultory inquiry for California, which is momentarily against buyers. To-day's market was very firm, but quiet. English Wheat was 3d dearer, and foreign 6d dearer. Flour was 3d to 6d dearer, and Corn was 6d dearer. Beans and Peas were uneasy.

## English Wheat Markets.

LONDON, Aug. 17.—Wheat market to-day is firm. The feeling of the trade, however, is that there will be plenty of wheat to meet all requirements, even should the English crop not prove an abundant one. With this feeling we cannot look for any wide fluctuations in prices between now and the end of the year, and it looks as if operators would have to be content with two or three shillings per quarter, which may occur in the reaction which necessarily follows any undue depression. The wheat shipments from India last week were 25,000 tons.

LIVERPOOL, Aug. 17.—Wheat market is strong, but depends so much upon the action of New York and San Francisco that it is hard to predict its future. If there should be full sales both from the East and Pacific, prices will not be maintained. The present improvement in the market is likely to stimulate shipments from both Russia and India.

LONDON, Aug. 17.—Market closed strong, but buyers continue to pursue a cautious policy.

LIVERPOOL, Aug. 17.—Market steady, but to make sales a decided reduction would have to be made.

## California Products at the East.

Beans—Quiet; California limas, \$1.50 to \$1.75. California yellow mustard seed quiet at 60¢ to 12¢.

Fruits—California plums are selling for \$1.50 per box; pears, \$4.50; grapes, half cases, \$3.00; peaches, \$2.50.

Dried fruits—California raisins, London layers, \$1.90 to \$2.10; California plums, 5¢ to 6¢. Prunes sell slowly.

Canned goods—Gallon tomatoes, forward delivery, are showing an easier tendency, supplies being now offered at \$2.20 to \$2.25. Packers are commencing upon peaches of the better quality. Up to this time only early goods have been offered upon this market. California canned peaches, \$2.50 to \$2.75; pears, \$2.25 to \$2.50; plums, \$2.00; grapes, \$2.10; apricots, \$2.00 to \$2.25.

Honey—Extracted, 5¢ to 5½¢. New York, Aug. 15.

## New York Wheat Market.

NEW YORK, Aug. 15.—Wheat closed steady, down ½¢ to ¾¢; August, 86½¢; September, 87½¢; October, 88½¢; November, 90½¢; December, 92½¢; January, 93½¢; February, 95½¢; March, 95½¢.

## Eastern Wool Markets.

NEW YORK, Aug. 15.—The local movement in domestic is somewhat curtailed by the fact that dealers have ceased trading between themselves. Advances from the country continue very strong. In foreign wools business has again been quite free. Sales include 25,000 pounds Montana and Idaho, at 25¢ to 30¢; 3000 pounds spring California, at 21¢; 6000 pounds same, at 22½¢; 35,000 pounds scoured same, at 57¢ to 60¢. The Philadelphia market shows no weakness. Sales include 10,000 pounds scoured California, at 51¢; 17,000 pounds Territory fine, at 22¢; 5000 pounds California, at 20¢. The Boston market is rather quiet. California is dull and there is lots of pressure to sell Eastern Oregon. Sales include 133,000 pounds Territory, at 19¢ to 25¢; 125,000 pounds California spring and Oregon, at 19¢ to 20¢.

BOSTON, Aug. 14.—There has been a quiet wool market the past week, although the sales foot up the good average of 2,993,400 pounds. Tight money has been the means of forcing some of the holders to make concessions, but as a rule the supplies are held quite as firm as formerly. The only shading in values has been in fine wools. Medium and three-eighths wools are held firm, and if anything, higher. We see nothing in the situation at home or abroad to warrant any weakness on the part of holders, except where they are obliged to move wool in order to

obtain money. The money market is always firm at this time, when our large crops are beginning to move. This difficulty will, no doubt, be surmounted before long. The signs are as propitious as ever for a strong market. California wool has been rather quiet and sales of only 245,000 pounds have been made. The stocks, both here and at San Francisco, are much reduced. We notice sales of 50,000 pounds spring at 23¢ to 25¢; 100,000 pounds spring at 19¢ to 25¢; and the rest on private terms. There were sales of 510,000 Oregon at 22¢ to 25¢. The receipts of domestic for the week have been 14,369 bales, against 15,630 bales same time in 1885.

NEW YORK, Aug. 17.—The wool market is quiet and firm. Domestic fleeces are quotable at from 30¢ to 38¢; pulled, 14¢ to 35¢; Texas, 9¢ to 25¢.

## New York Hop Market.

NEW YORK, Aug. 15.—In hops, trading is quiet, as buyers seem indifferent. The picking of the State crop is in progress. Some sections show very poor samples, and the recent discouraging advices respecting the State crop are all borne out. Strictly good hops are held firmly, but medium to fair are not so firm, as German hops come in direct competition with them, selling down to 20¢ and 22¢. The imports are considerable, while the receipts of California are increasing. Cablegrams from London estimate the English crop at about the same as last year. A German importer, well posted, says: "The German crop may lose one-third of a full crop." State, prime to choice, 28¢ to 30¢; medium, 23¢ to 26¢; lower grades, 18¢ to 22¢; Pacific Coast, common to choice, 20¢ to 27¢.

COOPERSTOWN (N. Y.), Aug. 15.—The prospect of securing a crop of 8000 to 11,000 bales of hops in the county of Otsego was better a fortnight ago than now. Many yards that then gave promise of one-third of an average crop have since succumbed to the prevailing blight and now promise few, if any, hops. Other yards, of which the owners hopefully expected a late crop out of midsummer shoots, have disappointed this expectation, hence a crop of 5000 or 6000 bales will meet the views of the most sanguine. A very careful estimate by towns, made by competent persons, places the probable crop in Otsego county at about 5000 bales.

## California Fruit at the East.

CHICAGO, Aug. 14.—No special fruit trains have arrived from California since last report. There has been no particular change in prices noted, except in grapes, which are rather lower, with a declining tendency. Pears are somewhat firmer, but this firmness is almost entirely on account of the fact that no fruit has arrived here from California since the first part of the week. With the larger receipts which are expected next week, prices will undoubtedly decline again. It is learned in addition that dried fruits are very firm because of the limited production of apricots and peaches. Prices for dried fruits are opening decidedly higher this year than they were at the closing of last season. Some few samples of evaporated apricots have been shown here, for which offers of 20 to 22 cents per pound have been made, and it is expected that they, as well as peaches, will rule considerably higher than at present.

## (Telegram to the Fruit Union.)

CHICAGO, Aug. 17.—Weather very hot and muggy, making it hard on fruit. Bartletts arrive in good condition and sell at from \$3.50 to \$3.75 per box of 40 lbs. Muscat grapes sell at \$1.25 to \$1.50 and \$1.50 to \$1.75 per crate of 20 lbs, according to condition. Black grapes, from 75¢ to \$1.00 and \$1.25 to \$1.50. Peaches, \$1.75 to \$2.00 and \$2.00 to \$2.25. Plums, \$1.00 to \$1.25 and \$1.25 to \$1.50. PORTER BROS. CO.

## Local Markets.

BARLEY—Barley is still in good shape, and new brewing is higher than at our last report. Call sales to-day were: Buyer 1886—100 tons, 95¢. Seller season—100 tons, 88½¢. Seller 1886—200 tons, 89½¢ to cbl. Buyer season—100 tons, \$1. Buyer 1886—100 tons, 96½¢. Seller 1886—200 tons, 89½¢; 100, 89½¢; 900, 90¢; 100, 90½¢ to cbl.

BEANS—Prices have shaded off this week, and supplies are large. Limas are unchanged.

CORN—Corn is higher, and California corn scarce.

FEED—Hay is in large supply and the range is lower: Barley, \$4.07; Oat, \$—; Wheat, \$8.01 to 11¢ ton.

WHEAT—Full notes are given elsewhere. Call sales to-day were: Buyer season—700 tons, \$1.39; 3300, \$1.39½. Buyer 1886—400 tons, \$1.36. Seller 1886—100 tons, \$1.30½; 100, \$1.30½; 2900, \$1.31; 2300, \$1.31½; 1200, \$1.31½ to cbl. Buyer season—1200 tons, \$1.39½. Buyer 1886—400 tons, \$1.36½; 200, \$1.36½. Seller 1886—300 tons, \$1.31½; 800, \$1.31½; 800, \$1.31½; 500, \$1.31½; 1100, \$1.31½ to cbl.

## (COMMUNICATED.)

## Market Information.

## Bags.

The demand for bags is fair at steady prices. Considerable have been placed the past week in lots, at 6¢ to 7¢ for new importations. Offerings at auction have been made each day in 50,000 bag lots, selling at from 6¢ to 6½¢ cash.

## Cereals.

Since last Thursday the wheat market has been excited, with daily advances noted. As usual, the daily press has been lower in its quotations than actual sales made. The advance is due to our crop being much below former estimates, the Oregon crop one-third less, but particularly due to bad weather in England retarding harvest, causing damp wheat and lessening the yield. Sales by sample were made on Thursday as high as \$1.28½ for No. 1 shipping, on Friday at \$1.30, Saturday, \$1.31½, and Monday and Tuesday, \$1.32½. Sales, under strong buying competition, were run up at the Willows, Colusa county, to \$1.34, delivered at Port Costa.

Two or three firms in this city have different sections districted out—that is, they have an understanding that their buyers shall purchase in separate places and not bid against each other, but if an outside buyer comes in, then run the price up and get the wheat, but pay low prices when left alone. As they are generally left to themselves, they make money by getting wheat cheaper than if sold in this city.

The decline of freight on barley overland to Chicago of 5 cts per cental will materially increase shipments of brewing. In July last the shipments East by rail aggregated 5974 tons and by water to New York 3532 tons, while by sea to foreign ports in the Pacific, 539 tons, making a total shipment last month of 10,045 tons. This is the heaviest single month's shipment ever made from this State.

Liverpool cables received to-day quote California wheat for prompt shipment at 35s per quarter. This is an advance since Wednesday last of 1s 6d per quarter—equal to 7½ cts per cental. While the English market advanced 7½ cts ours has only gone up 5 cts for sample lots.

The barley market for sample parcels has ruled fairly steady. Under receipt of 1200 tons in one day, buyers got 2½ cts reduction in feed, but the next day it recovered. The consumptive and speculative demand is quite active.

It is now claimed by well-informed parties that the barley crop of the State will go between 400,000 and 450,000 tons.

Oats fluctuated quite lively, but generally at high prices, on Thursday, Friday and Saturday last, owing to light receipts and a good demand; but on Monday they weakened off, with freer receipts and larger supplies near at hand.

Oregon advices report the oat crop in Oregon and on Puget Sound up to last year's; but the barley crop, east of the Cascades, below last year's.

## Dairy Produce.

Cheese maintains a firm tone, with receipts light and demand fair. The advance in overland freights is against importing of Western cheese.

Eggs have a stronger tone, with an advance obtainable. Strictly choice fresh laid eggs, marketed by well-known shippers, continue in request, at higher prices. Higher overland freights, together with the poor quality of the eggs, are against Eastern eggs. Oregon eggs are coming to hand and sell at the same price that good California eggs do.

Receipts of northern country butter are increasing, and as the quality is generally first-class, the market for gilt-edged is weaker. The retail trade has opened considerable pickled, which is taken by consumers in preference to fresh rolls at the prices asked.

## Fruits.

Peaches have ruled steady and firm throughout the week, with the market cleaned up each day.

Poor pears are in overstock and very hard to sell; sales have been made as low as 40 cents per box for cooking. Choice pears are scarce and wanted with sales of Bartletts up to \$2 on Monday last, on the wharf.

Choice high-colored apples are very scarce and wanted, and when received fetch good prices, but poor to good are in oversupply and hard to place.

Plums and prunes for canners' use ruled high under light receipts up to to-day, when they were weaker but no lower. Off quality plums have been slow and hard to sell even at low figures.

Figs have been coming in quite freely, causing a shading in prices, with the market weak at the close.

Watermelons ruled weak and slow up to Tuesday, when a better demand sprung up and a slight advance obtained.

Cantaloupes advanced slightly on Thursday last, then fell back under heavy receipts with a weak, demoralized market to-day.

It is reported by good parties that \$25 per ton is bid at the Mission of San Jose for Zinfandel grapes. No sales, so far as can be ascertained, have been made.

Table grapes have gradually weakened off until it was very hard to get over 65 cts per box for choice varieties. Tokay grapes are not coming in, but if ripe and high colored would sell well, or at least it is so claimed by dealers.

Receipts of table grapes the past week have averaged about 1800 boxes per day.

Under a scarcity on Friday and Saturday, raspberries advanced to \$10 per chest for very choice; strawberries to \$5.50, and blackberries to \$3.50; poorer qualities sold lower. Yesterday they weakened off, and to-day were slow and heavy at lower prices.

## Hops.

The market is very strong with buyers not willingly allowing a grower to go out of their office without selling, provided the grower's views are not out of all proportion to the prices bid. The New York crop is virtually a failure, while the drought West has not helped the yards in that section of the country. On this coast the yield is large and of excellent quality. Continued unsettled weather in England has increased the mildew and greatly lessened the prospective yield, and without fine weather soon the unfavorable condition will be still more marked. The German crop is claimed to be about one-third less than last year's crop.

## Live-stock.

Beef cattle continue to offer in excess of the demand, causing slaughterers to be masters of the situation. Various reasons are assigned, but the principal one appears to be the disposition of several cattlemen to market their stock now at the best prices obtainable rather than to stall-feed for winter killing or else carry them over the winter for another season's killing. Mutton sheep, like beef cattle, are pressing the market, causing much difficulty in maintaining present values. Lambs are firm. For hogs there is an inactive demand except for future delivery. Packers are bidding an advance on quotations for grain or dairy fed for delivery in packing time; this they do more freely, owing to the higher market for hog product and also an advance in overland freights on Eastern product. In the horse market there is nothing of any moment doing; the demand and values are the same as reported last week.

The following are to-day's meat prices: Beef—Stall-fed, 7¢ to 7½¢ lb; grass-fed, extra, 6¢ to 6½¢ lb; first quality, 5¢ to 5½¢; second, 5¢ to 5½¢; third, 4¢ to 4½¢. Calves, small, 9¢ to 10¢; larger, 7¢ to 8¢ lb. Mutton—Ewes, 4¢ to 4½¢; wethers, 5¢. Lamb—Spring, 6½¢ to 7¢ lb. Pork—Live hogs on foot, 3¢ to 4¢ for grain and dairy fed; 2½¢ to 2¾¢ for soft; dressed, 6¢ for hard, and 5¢ for soft. Grass-fed stock sell on foot, gross weight, at one-half the price they fetch dressed; stall-fed, on foot, fetch one-third less than they sell at dressed.

## Vegetables.

Under continued free receipts of tomatoes the market continued to weaken until it is difficult to get over 40 cents a box for choice kinds, while sales of

carry-overs have been made as low as 15 cents. Canners are not large purchasers yet, but it is claimed they will be soon, for the crop West, owing to the drought, is almost a failure, causing Eastern canners to advance the price of canned for future delivery.

Green corn has ruled weak throughout the week at from 40 cents to \$1.25 a crate; the latter for very choice sweet.

Green okra, green pepper, cucumbers and summer squash have ruled in buyers' favor throughout the week, while carry-overs sold at almost any price.

Cabbages and carrots are in liberal supply, with prices favoring buyers.

Under heavy receipts Early Rose potatoes have fallen off each day until 90 cents was the top in sacks on the wharf yesterday. The lower prices ruling for Early Rose brought Peerless and Garnet Chilis down to 1 cent for choice in sacks on the wharf. The trade is well stocked, and if heavy receipts are maintained lower prices it is claimed will rule, but if light then better values will obtain.

Red onions are not worth attention, and silver-skins ruled weak up to Monday, when a better feeling manifested itself, resulting in an advance yesterday. Light receipts, light start, and a fair demand caused the advance.

## Wool.

The market for fall wool is not fully opened, although receipts are freer. Sales made the past week mark an advance for choice. Some choice, clean, light, but slightly burry, sold as high as 18 cts per lb. Owing to assortment not being large, a correct reflex of the market is hard to give. Some poor wools with clover burrs in sold at 12½ cts a lb., which is fully 4 cts more than the same grade and conditioned fetched last year.

## Miscellaneous.

The tonnage movement compares with last year at this date as follows:

	1886.	1885.
On the way.....	299,333	233,311
In port, disengaged.....	58,201	102,774
In port, engaged.....	68,652	14,572

Totals..... 416,186 350,657

The above gives a carrying capacity as follows: 1886, 665,787 short tons; 1885, 561,003 short tons; increase over last year, 104,784.

The exports by sea from this port from July 1, 1886, to date, compared with the like time in 1885, are as follows, in cents:

	1886.	1885.
Wheat.....	1,052,912	509,411
Barley.....	88,768	7,182
Oats.....	1,441	3,154
Corn.....	3,858	975

Extra choice hay is firm, but indifferent to good is in oversupply and hard to sell.

Beans are lower and weak at the decline.

Dried fruits are coming in slowly—not enough received to establish prices.

Poultry has been gaining in strength throughout the week, with young roasters and young hens scarce and wanted. The market to-day was very stiff, with buyers exceeding scarce and bidding quite lively for good stock.

Hams and bacon are very strong, with the stock light and demand good.

San Francisco, Aug. 18, 1886.

## Domestic Produce.

WEDNESDAY, August 18, 1886

BEANS AND PEAS.		PEANUTS.	
Bayo, cbl.....	1 35 to 1 40	Filberts.....	13 to 14
Butter.....	1 35 to 1 40	POTATOES.	
Castor.....	—	New cbl.....	—
Peas.....	1 75 to 1 85	Burbank.....	—
Red.....	1 10 to 1 12	Early Rose.....	50 to 85
Plum.....	1 10 to 1 12	Cuffey Cove.....	—
Large White.....	3 00 to 3 10	Jersey Blues.....	—
Small White.....	1 75 to 1 85	Redskin.....	—
Lima.....	2 00 to 2 25	Tonians.....	—
Red Peas, bly eye.....	1 10 to 1 12	River reds.....	—
do green.....	1 00 to 1 12	Humboldt.....	—
do Niles.....	1 25 to 1 30	do Kidney.....	—
BROOM CORN.		Chile.....	75 to 1 00
Southern.....	3 to 4	do Oregon.....	—
Northern.....	4 to 5	Peelings.....	50 to 85
CHICOORY.		Salt Lake.....	—
California.....	4 to 5	Sweet.....	1 to 1 1/2
German.....	6 to 7	POULTRY AND GAME.	
DAIRY PRODUCE, ETC.		Beef, doz.....	5 00 to 6 50
Cal. fresh roll, B.....	24 to 26	Roosters.....	5 00 to 7 00
do Fancy brands.....	27 to 28	Ducks, tame.....	2 50 to 4 50
Pickle roll.....	20 to 21	do Mallard.....	—
Firkin, new.....	15 to 18	do Sprig.....	—
Eastern.....	8 to 11	Geese, pair.....	1 25 to 2 00
EGGS.		do Gooslings.....	—
Cheese, Cal., B.....	7 to 9	Wild Gray, doz.....	—
Eastern style.....	10 to 15	White.....	—
EGGS.		Turkeys, B.....	12 to 15
Cal., ranch, doz.....	27 to 28	do Dressed.....	—
do store.....	20 to 26	Turkey Feathers.....	10 to 30
Ducks.....	—	tail and wing.....	—
Oregon.....	—	Snipe, Eng. doz.....	—
Eastern.....	14 to 16	Common.....	1 25 to 1 50
Pickled hens.....	—	Doves.....	1 50 to 2 75
Utah.....	20 to 21	Rabbits.....	1 25 to 1 50
FEED.		Hare.....	2 50 to 2 75
Brwn, ton.....	15 00 to 15 50	Venison.....	12 to 14
Cornmeal.....	26 00 to 27 00	PROVISIONS.	
Hay.....	5 00 to 11 50	Cal. Bacon.....	8 to 9
Middling.....	16 00 to 17 00	Mexico.....	8 to 9
Oil Cake, Mex.....	26 50 to 27 50	Light.....	10 to 11
Straw, bale.....	25 to 30	Extra Light.....	12 to 14
FLOUR.		Lard.....	7 to 9
Extra City Mills 4 00 to 4 45		Cal Smoked Beef.....	11 to 12
do City Mills 3 85 to 4 25		Hams, Cal.....	11 to 14
Superfine.....	2 85 to 3 20	do Eastern.....	14 to 15
GRAIN, ETC.		HIDES.	
Barley, fed, cbl.....	85 to 90	Alfalfa.....	11 to 11 1/2
do Brewing.....	1 50 to 1 65	Canary.....	3 to 4
do new.....	97 to 1 05	Clover red.....	4 to 15
Chevalier.....	1 35 to 1 45	do White.....	45 to 60
do Coast.....	—	Flaxseed.....	23 to 24
Buckwheat.....	1 00 to 1 10	do.....	—
Corn, White.....	1 35 to 1 47	Rump.....	5 to 6
Yellow.....	1 35 to 1 47	Italian Rye Grass.....	25 to 30
Small Round.....	1 35 to 1 47	Perennial.....	25 to 30
Nebraska.....	1 15 to 1 25	do.....	—
Oats, new.....	1 35 to 1 40	do.....	—
do No. 1.....	1 35 to 1 40	do.....	—
do No. 2.....	1 20 to 1 30	Mustard, white.....	2 50 to 3 00
do black.....	1 15 to 1 20	Brown.....	2 25 to 2 75
do Oregon.....	1 05 to 1 15	Rape.....	1 to 1 1/2
Rye.....	—	do Blue Grass.....	20 to 25



Silverkin.....	65 @	70	N'hern defective	— @	—
NUTS—JOBING.			S Joaquin short.	14 @	18
Walnuts, Cal. lb.	7 @	9	do long.....	— @	—
do Chile.....	7 @	—	Cava'y & F'th'l.	— @	—
Almonds, hdsbl.	6 @	—	Oregon Eastern.	17 @	22
Soft shell.....	10 @	12	do valley.....	23 @	25
Brazil.....	11 @	12	Southern Coast.	13 @	17
Pecans.....	10 @	12			

## Fruits and Vegetables.

WEDNESDAY, August 18, 1886.

FRUIT MARKET.					
Apples, box.....	23 @	50	do quartered..	13 @	—
do red.....	75 @	1 25	Apricots.....	9 @	10
Apricots, lb.....	3 @	4	do evaporated	— @	20
Bananas, bunch.	1 00 @	2 50	Blackberries....	9 @	10
Blackberries, ch.	2 00 @	3 00	Orion.....	28 @	30
Cant-loupes, cr.	3 @	50	Dates.....	9 @	10
Cherries blk.....	— @	—	Figs, pressed....	8 @	10
do white.....	— @	—	Figs, loose.....	4 @	5
Cherry plums....	40 @	—	Nectarines.....	6 @	—
Crabapples.....	35 @	60	Peaches.....	16 @	18
Cranberries.....	7 00 @	10 00	do pared.....	5 @	—
Currants chest..	3 90 @	3 50	Pears, sliced....	5 @	—
Figs, bx.....	25 @	50	do qrd.....	5 @	2 1/2
Grapes.....	40 @	50	do evaporated	8 @	10
do Rose Peru..	50 @	75	Plums.....	— @	—
do Murcat.....	50 @	75	Plums pitted....	— @	—
Limes, Mex.....	13 00 @	—	Prunes.....	— @	—
do Cal. box....	— @	—	do French.....	— @	—
Lemons, Cal., bx	2 50 @	4 50	Raisins, Cal. bx.	1 87 1/2 @	2 00
do Sicily, box. 10	00 @	10 50	Zante Currants.	8 @	—
do Australian.	50 @	75	VEGETABLES.		
Oranges, Cal., bx	1 50 @	1 75	Artichokes, doz.	10 @	15
do Tahiti, bx. 35	35 @	3 50	Bumagus box..	— @	—
do Mexican, M	— @	—	Beets, sk.....	1 00 @	1 25
do Panama.....	— @	—	Cabbage, 100 lbs.	60 @	75
Peaches, bx.....	50 @	75	Carrots, sk.....	35 @	50
do basket.....	50 @	75	Cauliflower, doz.	— @	1 00
Crawford, bx.	75 @	1 00	Celery, doz.....	50 @	60
do bskt.....	60 @	1 00	Cucumbers box.	10 @	25
do or'g cl'g bsk.	1 00 @	1 25	Eggplant, ...bx	1 00 @	1 50
Pears bx.....	25 @	50	Garlic, lb new..	2 @	3
do basket.....	25 @	45	Green Corn, sk.	50 @	75
do Bartlett, bx	1 00 @	2 00	do bay, box....	1 00 @	1 25
do do bskt.....	40 @	50	Green Peas, sk.	1 00 @	1 50
Persimmons.....	— @	—	Lettuce, doz....	10 @	—
Jap. bx.....	— @	—	Mushrooms, bx.	— @	—
Pineapples, doz.	4 00 @	5 00	do cultivated.	— @	—
Pomegranates, b	— @	—	Okra, dry, lb....	15 @	17
Plums lb.....	1 @	1 1/2	Asparagus box.	1 00 @	1 25
Prunes bx.....	— @	—	Paranips, chl....	1 50 @	—
Quinces bx.....	50 @	75	Peppers, dry lb.	10 @	—
Raspberries ch.	6 00 @	8 00	do green, bx....	25 @	40
Strawberries ch.	3 00 @	4 50	Rhubarb box....	40 @	60
Watermelons 100	6 00 @	10 00	Squash, Marrow	— @	—
DRIED FRUIT.					
Apples, sliced, lb	2 1/2 @	3	fat, too.....	15 00 @	20 00
do evaporated..	8 @	8 1/2	do Summer bx	10 @	25
			Tomatoes box..	25 @	50
			String beans....	15 @	2
			Turnips chl.....	75 @	1 00

## San Joaquin Valley Fair.

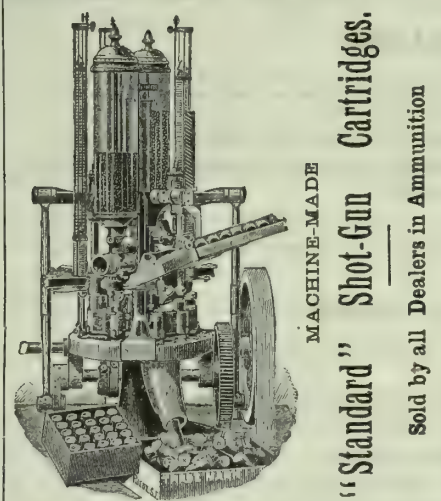
We have stated before that there were special efforts being made this year to develop the agricultural features of the Stockton fair. Secretary H. M. La Rue has just issued the following circular relating to county exhibits from the several counties embraced in the San Joaquin district:

Agricultural District No. 2, State of California, is composed of the counties of San Joaquin, Calaveras, Tuolumne, Stanislaus, Mariposa, Merced, Fresno, Tulare, Kern. The soil and climate of the various counties in the district, with careful cultivation, admit of the successful production of almost all the cereals, fruits, etc., that can be raised in any other portion of the State. With the end in view of encourag-

ing a more diversified cultivation than has heretofore been had, the board this year propose premiums for exhibits to be made by the counties above named as in competition with each other.

Premiums are offered for the most varied and perfect exhibits of the agricultural products of the separate counties, to be shown as a county exhibit, as follows: For the best exhibit as above, \$100; for the second best exhibit as above, \$50. Other county exhibits will receive such proportionate encouragement as their relative merits demand. The entire exhibit of one county to compete against the entire exhibit of each of the others. Premiums awarded will be paid to the committee in charge of the successful exhibit. The co-operation of Subordinate Granges, P. of H., is invited, and the board believes that with it this feature of the fair of 1886 can be made a grand success. Entries close September 22, 1886, at 12 M.

## CHAMBERLIN AUTOMATIC



MACHINE-MADE  
"Standard" Shot-Gun Cartridges.

Sold by all Dealers in Ammunition

## HOOPER'S SOUTH END GRAIN WAREHOUSE.

First-class Fire-proof Brick Building.  
TOWNSEND STREET, BET. FIRST AND SECOND, SAN FRANCISCO, CAL.

GEORGE H. LEMMAN, Proprietor.

Goods taken from the Dock and from the Cars at the C. P. R. R. and S. P. R. R. Free of Charge. Storage at Current Rates. Advances and Insurance at Lowest Rates. TELEPHONE No. 327. 4

## WAKELEE'S

THE BEST

IS THE

CHEAPEST.



TRADE MARK.

DON'T BUY

AN

Inferior Article

BECAUSE IT IS

More Profitable to some one else.

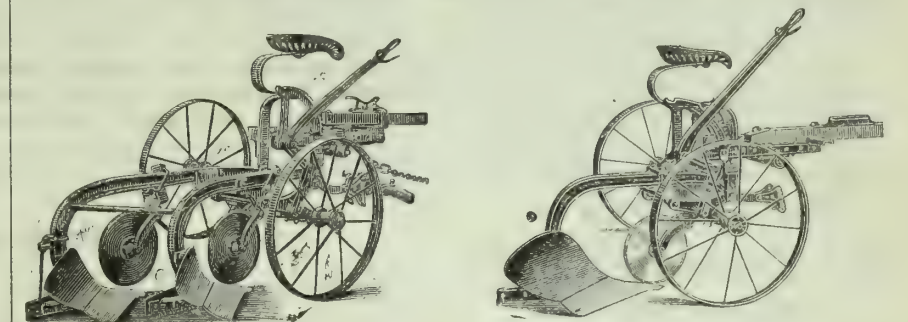
## SQUIRREL AND GOPHER EXTERMINATOR!

IN 1-LB. AND 5-LB. CANS.

## The Jay Eye See Sulky &amp; Gang Plows

KING OF THE TURF.

Steel Beams, Steel Wheels, Steel Frames,



And best of Hardened Steel Plow Bottoms, with Land Gauge Attachment.

The J. I. C. Gang with 2, 12, or 14-inch bottoms, weighs only 600 pounds. The J. I. C. Sulky, with 14 or 16-inch bottoms, only 400 pounds. It cannot be strained or broken. It is the easiest managed, because it is furnished with a Power Lift and the lowering and raising of the plows is done by the horses.

ORDER A J. I. C. ON TRIAL AND BE CONVINCED.

Prices same as for Iron Frame Plows.

ARTHUR W. BULL, Sole Agent, 123 California St., San Francisco.

## California Inventors

Should consult DEWEY & CO. AMERICAN AND FOREIGN PATENT SOLICITORS, for obtaining Patents and Caveats. Established in 1860. Their long experience as journalists and large practice as Patent attorneys enables them to offer Pacific Coast Inventors far better service than they can obtain elsewhere. Send for free circulars of information. Office of the MINING AND SCIENTIFIC PRESS and PACIFIC RURAL PRESS, No. 252 Market St., San Francisco, Elevator, 12 Front St.



## \$10.00 will buy the DAISY

New Style Corn Sheller. The Fan cleans the Corn as it comes out. The Question is Asked why we sell our Shellers so cheap. Answer: We build them in winter after our Clover Huller trade is over. All are warranted to do good work or no sale.

NEWARK MACHINE CO., COLUMBUS, OHIO.

WE WISH TO CALL SPECIAL ATTENTION TO OUR IMPROVED

## FEED MILLS, HAY CUTTERS and HORSE POWERS

For we have Improvements to offer which place our machines far in advance of all others in the market.

## THE "SCIENTIFIC" FEED MILLS, FOR GRINDING ALL KINDS OF GRAIN and EAR CORN,

Is the only Mill having the following provisions:

The Grinding Plates are a Special Metal, hard as Steel, guaranteed to Grind 5000 to 8000 Bushels before wearing out, and then easily and cheaply replaced.

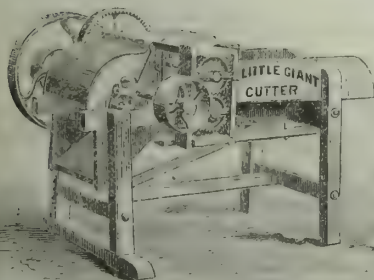
ALL THE BEARINGS are in one casting, consequently are always in line and cannot get out of true. THE JOURNALS are rabbitted with the best metal and can be adjusted to take up wear. THE MAIN AND ONLY SHAFT is of the finest cold rolled steel of large size and perfectly true. THE FLY WHEEL AND PULLEY are turned and, with the Running Plate, are balanced accurately, so run perfectly true, without any shaking. THE HIGH DISCHARGE is most convenient for delivering the feed, and as it draws a current of air through, it prevents heating, as is frequently the case with Iron Mills. THE PIN BREAKER provides against damage to mill should iron, steel or any hard substance accidentally go between the plates. THE FEEDER provides a successful means of regulating the feed when grinding small grain. THE SCIENTIFIC IS THE SIMPLEST. Can be taken apart and put together in a short time without the aid of a mechanic.

## THE "ROSS" HAY and STRAW CUTTERS, with Wonderful Cutting Capacity, have been awarded all the honors wherever exhibited.

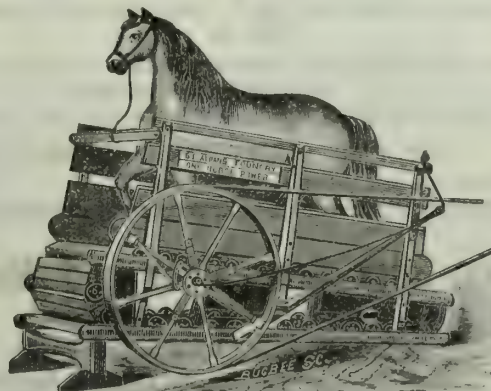
The largest Feed Cutters in use in this State to-day are the Ross, and our customers include many of the largest stock-raisers on the Coast; in fact, there are Single Ross Machines now in use here which will cut more feed in a given time than several of the largest of any other made.

THE STRONGEST. All parts are heavy and well braced and especially adapted to the work. AND THE LIGHTEST RUNNING. Having but one shaft, running in bearings, which are always in line, with Fly Wheel, Pulley and Plates accurately balanced, it follows it MUST RUN WITH LEAST POSSIBLE FRICTION. ALSO THE MOST DURABLE. Can be run in either direction by simply changing the spout and crossing the belt. This gives double wearing capacity to the plates, as they sharpen themselves each time they are reversed. AND THE BEST MILL ON EARTH, of the best material throughout, and every part made especially for its place. EACH MILL FULLY GUARANTEED TO DO ALL WE CLAIM FOR IT, and being made in a variety of sizes requiring from one to twenty-horse power, they are adapted for any sized ranch or feed mill. Send for Price List.

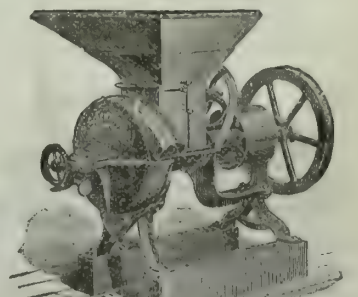
Remember that the Capacity of our Cutters is not controlled by the length of the knives, as is the case with all other makes, but we can cut from two to four times the quantity any other machine can handle, and with the same or less driving power. Send to us for our reasons why the Ross is so superior, and get our prices before you invest in any inferior machine.



ROSS HAY CUTTER.



ST. ALBANS TREAD POWER.



SCIENTIFIC FEED MILL.

THE ST. ALBANS TREAD POWERS develop more driving power with the same animal weight and exertion, than any other pattern, and simply because they are built on more scientific principles. They are also the best made and most substantial, finest finished and best governed tread powers on the market, still we sell them as low as the lowest. We have one, two, and three-horse powers, and also have a most complete line of Circular Wood Saws for using in connection with these powers. Write for particulars and prices.

MORE THOROUGH WORK, BETTER MANAGEMENT AND LESS ACRES will help many of our farmers. More work should be performed with the help regularly employed, and outside expenses reduced and annoying delays at critical times prevented. This can be accomplished to a very large extent through the medium of one of our "Individual Ranch Economy Outfits," which consist of a St. Albans Threshing and Cleaning Machine, driven with a Horse Power of the same make, Scientific Feed Mill, Ross Hay Cutter and Complete Set of Blacksmith's Tools, all of which we sell together at a remarkably low figure, or singly in proportion.

It will pay every reader to consider this proposition, send for full particulars and prices and make sure to see our Grand Exhibit at the State Fair at Sacramento.

G. G. WICKSON & CO., 38 California and 106 Davis Sts., San Francisco.



## Commission Merchants.

**WM. T. COLEMAN & CO.,**  
Shipping and Commission  
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San Francisco and New York.

Receive consignments of Produce for sale in San Francisco, New York, Boston, Philadelphia, England, Australia, etc. Make advances on approved consignments. Fill orders for staple goods in New York and other markets. Effect fire and marine insurance in best offices. Charter vessels and engage freights for all trades. Agents for line clipper ships from Philadelphia, China, etc. All business has faithful and watchful attention.

**MOORE, FERGUSON & CO.,**  
WOOL, GRAIN, FLOUR

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Personal attention given to Sales and Liberal Advances made on Consignments at low rates of interest.

GEO. MORROW. [Established 1854.] GEO. P. MORROW.

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SHIPPING ORDERS A SPECIALTY.

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**CALIFORNIA AND OREGON PRODUCE**  
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Market, S. F. All orders attended to at the  
shortest notice. Goods delivered Free of Charge to  
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BRICK STORES:  
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All Kinds of Green and Dried Fruits.  
CONSIGNMENTS SOLICITED. 324 Davis St., S. F.

**PORTER BROS. & CO.,**  
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404 and 406 Davis St., S. F.  
Special attention paid to shipping.

**EVELETH & NASH,**  
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422 Front St., and 221, 223, 225 and 227 Washington St.  
Consignors receive the benefit of our large shipping trade.

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Send for Catalogue and Price List.

**HORSE POWERS, WINDMILLS, TANKS**  
and all kinds of Pumping Machinery built to order.  
Awarded Diploma for Windmills at Mechanics' Fair, 1885. Windmills from \$65. Horse Powers from \$50. F. W. KROGH & CO., 51 Beale Street, San Francisco.

**IMPROVED RELIEF WIND-MILLS.**  
Durable, Practical, Safe, and Efficient.  
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OF ALL SIZES.

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P. O. Box 454.

## WEST COAST LAND COMP'Y.

SAN LUIS OBISPO, CAL.

Incorporated March 27, 1886.

CAPITAL, - - - - - \$500,000.

## DIRECTORS.

GEO. C. PERKINS,  
JOHN L. HOWARD,  
ISAAC GOLDTREE,  
R. E. JACK,  
C. H. PHILLIPS.

## OFFICERS.

JOHN L. HOWARD, President.  
ISAAC GOLDTREE, Vice-Pres't.  
R. E. JACK, Treasurer.  
C. H. PHILLIPS,  
Secretary and Manager.

## THE PASO ROBLES, SANTA YSABEL, and EUREKA RANCHES,

Recently purchased by the West Coast Land Company, are now offered for sale in subdivisions.

This immense body of land, including 12,000 acres unsold of the Huer Huero ranch, belonging to C. H. Phillips, comprises 61,000 acres of rich, virgin soil. It lies in a compact body, in the center of San Luis Obispo county, and is within from 9 to 20 miles of the sea coast. It is covered with white and live oak timber, is one of the most picturesque bodies of land in the State, and requires

## NO IRRIGATION.

It has an abundance of living water, and where not sufficient for domestic use, good water can be had at a depth of from 10 to 40 feet. It has an average annual rainfall of 21 inches, exceeding by 6 inches that of Santa Clara county, one of the most prosperous counties in the State.

The extension of the Southern Pacific Railway from Soledad southward traverses these lands for 15 miles throughout their entire length, placing the property within eight hours of San Francisco.

These lands are offered at from \$10 to \$30 an acre, and are all susceptible of the highest cultivation. In salubrity of climate, productiveness of soil and location as to market, they are equal to lands in Los Angeles and other counties, which readily bring from \$100 to \$200 and upward; and as to price and terms offer the best inducements to those seeking homes on any part of the Pacific Coast.

The field work of the subdivision of the famous

## PASO ROBLES RANCH

Has been completed. The maps and catalogues are now being prepared, and will be sent free on application. This ranch, containing 20,400 acres, has been subdivided into 230 lots. It is 12 miles from the sea coast, and is 20 miles north and west from San Luis Obispo city.

This ranch was one of the earliest granted by the Mexican Government and having been held by the same party for 30 years, has never before been offered for sale. It consists exclusively of land of the choicest character, and is second to none in the State for the production of wheat, wine, fruits, raisins and olives.

## TERMS OF SALE.

One-third cash; balance in 4 equal payments at 2, 3, 4 and 5 years; interest, 6 per cent per annum. The mortgage tax paid by the mortgagee makes the interest about 4 per cent net to the purchaser. A deposit of \$25 will be required in all cases to cover expenses of sale.

C. H. PHILLIPS, Manager,

West Coast Land Co., San Luis Obispo, Cal.

Send for Catalogue and Map

## San Diego County! El Cajon Rancho!

16,500 acres, known as the Jarvis Tract, situated 13 miles from San Diego, surrounded by high hills, protected from winds and fogs—the most equable climate in the world—rich soil and lovely surroundings. Will be offered as a whole or in subdivisions, from 10 acres upward, at prices according to desirability, from \$10 to \$75 per acre, part cash, balance on time. The wonderful Raisins and Olives grown in this valley command the admiration of every one. Water from 6 to 12 feet. No irrigation, and Fruit and Raisins cured by solar heat. All the Semi-Tropical Fruits raised to perfection.

Also 1000 acres, the Smith Tract, adjoining, now in grain.

G. W. FRINK, General Manager Pacific Coast Land Bureau,

618 Market St., opp. Palace Hotel, and 15 &amp; 17 Post St., San Francisco.

DR. JOSEPH JARVIS,  
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## Nevada Warehouse and Dock Comp'y

WAREHOUSES AND DOCKS, PORT COSTA, CAL.

Storage Capacity, 100,000 Tons. Regular Warehouse for S. F.  
Produce Exchange Call Board.

These Warehouses are the largest on the Pacific Coast, and are furnished with the latest improvements for the rapid handling and storing of Grain. A mill attached, supplied with the best and newest machinery for cleaning fowl and smutty wheat.

Money advanced at lowest rates of interest on Grain stored in Warehouses, Insurance effected at lowest rates in first-class companies, or Grain sold, if desired, at current rates.

**STORAGE, 25 cents per ton per month. Total Storage for Season ending June 1, 1887, \$1 per ton.**

**Grading Wheat, 50 cents per ton. Cleaning Wheat, 75 cents per ton. Cleaning and Smutting, \$1.50 per ton.**

Information regarding Storage or other business can be obtained at the office of the Company,

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GEO. L. BRANDER, President.

W. R. PRICE, Secretary.

1886.

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Mission Rock Grain Dock and Warehouses,  
SAN FRANCISCO.

Regular Warehouse for S. F. Produce Exchange Call Board.

Storage Capacity for 75,000 Tons of Grain.

THE CALIFORNIA DRY DOCK CO., Proprietors.

OLIVER ELDRIDGE, Pres.

CHAS. H. SINCLAIR, Supt.

W. C. GIBBS, Sec'y.

Freight paid, fire insurance and loans effected, and proceeds forwarded free of commissions. Money advanced at lowest rates on grain in warehouse, interest payable at end of loan. Storage season, ending June 1, 1887, at reduced rates. On all wheat shipped to Mission Rock by barge, freight rates guaranteed the same as to Port Costa. All applications for storage or other business addressed to CHAS. H. SINCLAIR, Superintendent.

OFFICE, 318 California St., Room 8.

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Elevator 12 Front St.

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## FOR LEASE AND FOR SALE,

40,000 ACRES

Of good land in Fresno, near the County Seat. Some of this land is already irrigated, and all can be easily irrigated. It is adapted not only to grain, but also to Alfalfa, Fruit and Vines.

1000 ACRES

Of the above land for sale at the low price of \$20 per acre.

Apply to

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## CHEAP LANDS FOR SALE.

**5880 Acres** of rolling adobe hills, situated in Tehama County. Well watered by numerous springs, etc. Several thousand acres suitable for cultivation. Good two-story House, Barn and other out-buildings. Seven miles of fine wire fence.

**FIRST-CLASS CATTLE OR SHEEP RANGE.** The Cheapest tract of land in Tehama County. Price, \$6.00 per acre. Fair time and interest. Apply to

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N. B.—Upon timely notice, intending purchasers will be taken from Cottonwood to the ranch and returned free.

\$500 to \$50,000.

**BARGAINS IN ORCHARDS and VINEYARDS, STOCK and Grain Ranches** in every County in the State. Send Stamp for Catalogue. We can find quick sale for your farm, large or small, if it is cheap and you will send us full description. If you want to buy, tell us what you want, and we can suit you.

GAMAN & CO.,  
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HAPPY CHILDREN  
IN MUSICAL HOMES.

A sweet voice and a good repertoire of songs are valuable aids where juvenile humanity must be entertained. How convenient and useful, then, are such collections as the following:

## MERRY-MAKING MELODIES.

BY WADSWORTH WHIPPLE.

Price in Boards, 80 cts., in Paper, 65 cts.

By a child-lover, who, in his choice of subjects and his genial treatment of them, displays a happy talent for making home cheerful. "Chubby Little Chatterbox," "Grandpa," "Three Little Loafers," "Jollity Jack," "Teeter-Tauter," "Pink-a-Pank," are songs full of kindest humor, and there are others of higher grade. Sheet Music size; Piano or Organ accompaniment; 20 Songs; 9 Pictures.

## RHYMES AND TUNES.

BY MARGARET PEARMAIN OSGOOD.

Price, \$1.50 in Cloth; \$1.00 in Boards.

A larger book than the other, and has, in many cases, German and English words. A true HOME BOOK, with such songs as "Snick Snack," "Tooreltoot," for nonsense; "London Bridge," "Perri Meri Dixi," "Lavender's Blue," etc., for Mother Goose wisdom; "Sandman," "Sleep, Darling," and other nursery songs, romantic songs, Star, May, Flower, Morning, Bird and all other varieties of song that children love. Full Piano and Organ accompaniments.

Mailed for retail price.

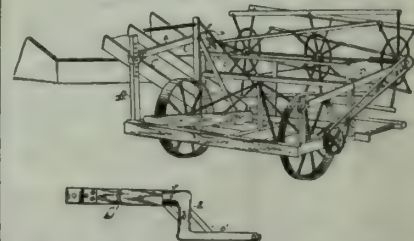
OLIVER DITSON &amp; CO., Boston.

C. H. DITSON &amp; CO., 567 Broadway, New York.

## REEL SUPPORTING ARM

—FOR—

## HARVESTERS.



ALL PERSONS ARE HEREBY NOTIFIED THAT THE device shown in the above engraving is covered by Letters Patent awarded to me by the U. S. Government, and are warned against making and using the same without my consent.

All those desiring the Angular Supporting Arms or information about them, will be furnished therewith by addressing

JOHN B. GEMMILL,  
Red Bluff, or Tehama, Cal.



Look!

Read!

\$1.00 ONLY ONE DOLLAR \$1.00

For One Quart Bottle, making full half gallon of

**Dr. Fisherman's Carbolic Alkaline Lotion.** The best remedy for Stomach and Farm yet discovered. Each bottle guaranteed to give satisfaction or money refunded.

Mr. Joel Merchant, of Petaluma, says it is the finest remedy he has ever used. J. Morton & Co., 204 Battery St., S. F., say it is superior to all other remedies that they have used, and they cannot recommend it too highly. Write and ask them.

LYNDE & HOUGH, Proprietors,  
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**Fruit Engravings.** The finest, best and cheap-est Photographs and En-  
PHOTOGRAPHS, ETC. gravings of Fruits, Vegetables, Houses, Farms, Landscapes, etc., made by S. F. PHOTOGRAPHING CO., 659 Clay St., S. F.



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**Sperm Whale, Elephant and Fish Oils.****WHALE OIL SOAP,**

STRONGEST MADE ON PACIFIC COAST.

Especially adapted for Vineyards and Fruit Orchards.

OFFICE—28 California St., San Francisco.

ESTABLISHED 1864.

INCORPORATED 1883.

**PACIFIC FRUIT COMPANY,**

(SUCCESSORS TO HOWE &amp; HALL.)

WHOLESALE AND COMMISSION DEALERS IN

**CALIFORNIA GREEN****Raisins,****NUTS, HONEY,****AND DRIED FRUITS,****Oranges,****BEANS, PRODUCE, Etc.**

Nos. 408 and 410 DAVIS STREET,

Between Washington and Jackson,

SAN FRANCISCO, CAL.

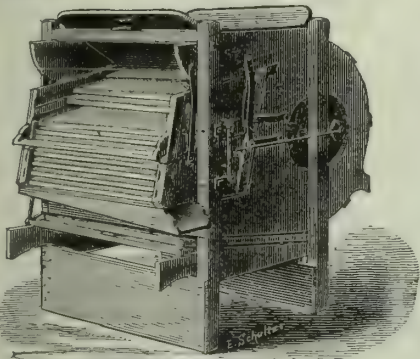
**C. D. LADD,**

Wholesale and Retail Dealer and Agent for all kinds of

**FIRE-ARMS, FIXED AMMUNITION, FISHING TACKLE,**

And Sporting Goods of all descriptions. Send for Catalogue, stating just what you want and where you saw this ad. Address,

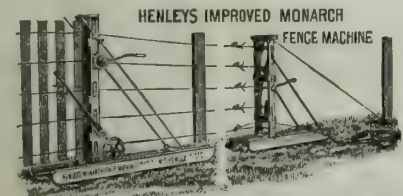
C. D. LADD, 529 &amp; 531 Kearny St., - - - San Francisco, Cal.

**DANIEL BEST'S  
HAND SEPARATOR.**

OUR IMPROVED HAND SEPARATOR is a double combined machine, possesses two shoes (instead of one, as in machines of other manufacturers), nine riddles and a large independent screen. Each shoe is equal in power and capability to the one in any other mill, and by the operation of the two, double efficiency is secured. Our 28-inch mill will clean from 400 to 600 bushels of seed grain per day, according to the condition of the grain, and we guarantee that all barley, oats, or other foul seed will be thoroughly removed with complete satisfaction.

By an ingenious set of Barley Riddles, which accompanies each mill, wild oats will be separated from barley—a feat which no other machine has yet accomplished. We ask you to give our mills a trial. We guarantee that you will find them precisely as represented.

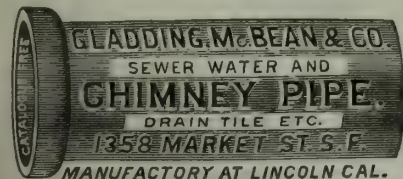
For full particulars, apply to

DANIEL BEST,  
513 Fifth Street, Oakland, Cal.

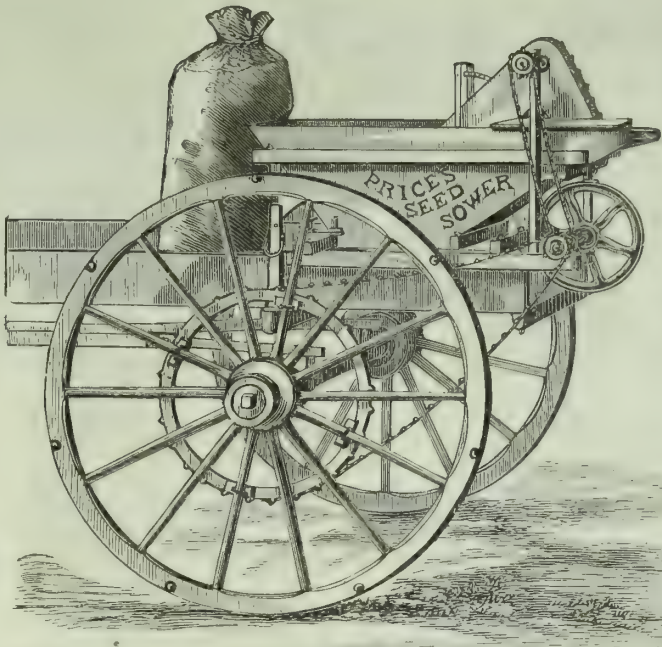
HENLEY'S

**Monarch Fence Machine,****\$40.00.**

With one of these Machines a farmer can build his own fence cheaper and better than he can buy it, or make it by hand. TRY ONE. Send for Catalogue.

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Sows a strip 100 feet wide at each passage (working width in wheat, 80 feet). Sows as evenly as a Force-feed Drill.

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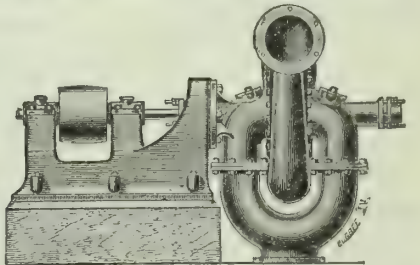
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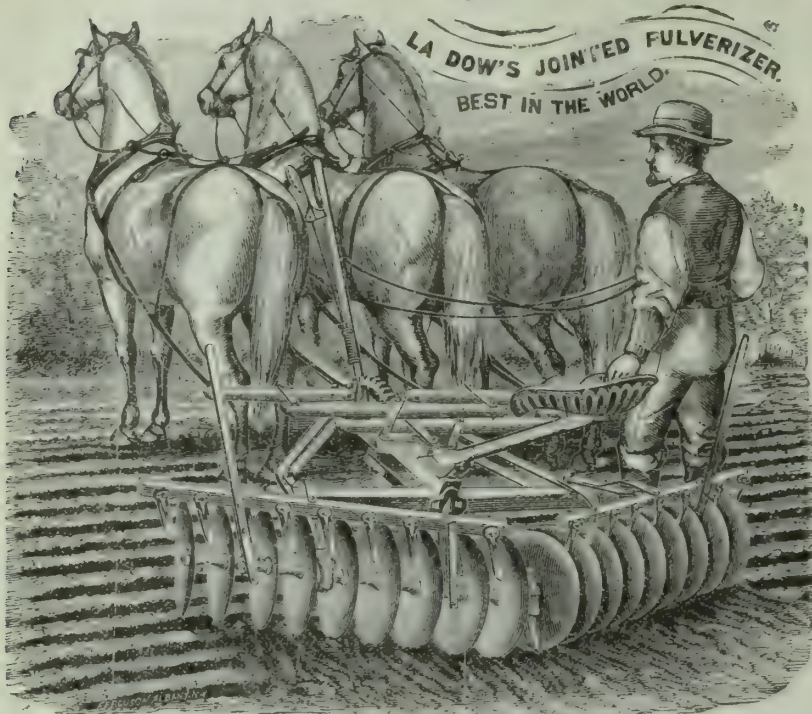
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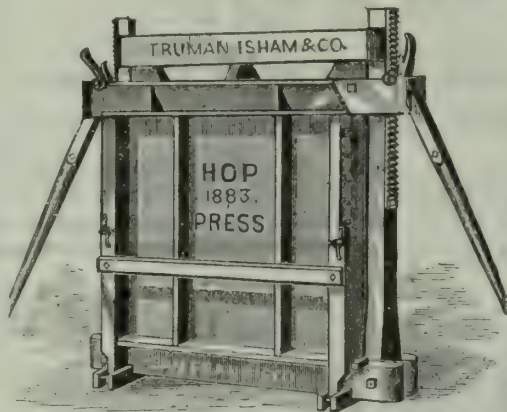


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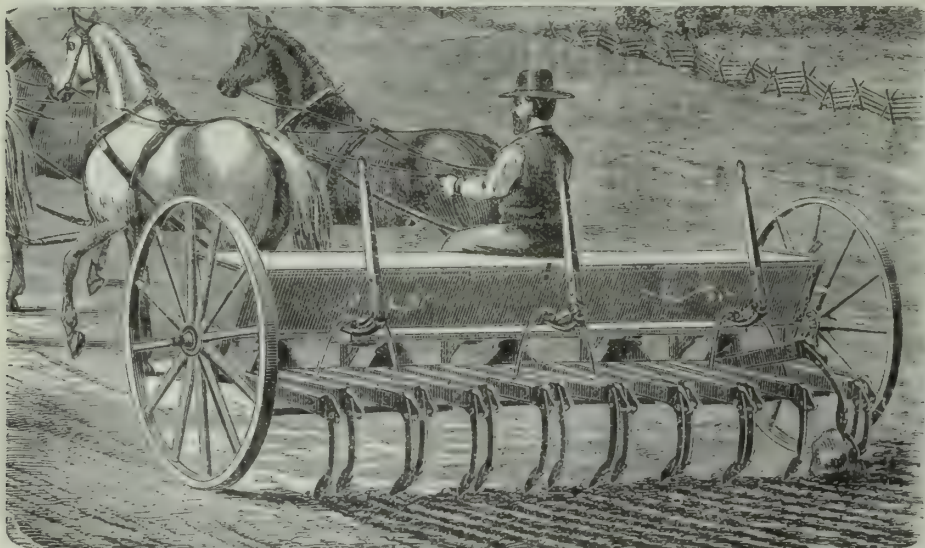
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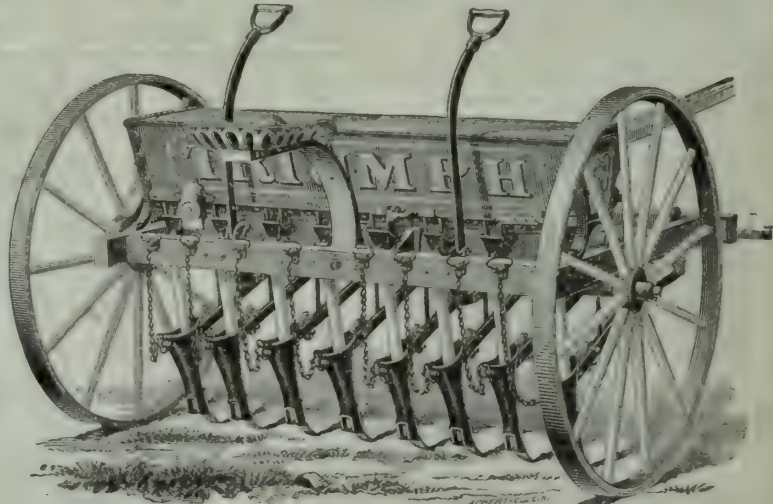
6 foot Single Gear, with 2 Horses, will seed 8 acres per day, weight 580 lbs.	\$100 00
8 " Double " " 2 " " 15 " " " 730 " "	125 00
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14 " " " " 6 " " 40 " " " 1400 " "	175 00

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This Harrow meets the wants of our farmers in an implement that weather cannot affect, that sun and rain cannot injure, that does its work of pulverization of every inch of the soil in the best possible manner, and at the same time is of light draft for the team.



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2 Sections, with 48 teeth and draft bar.	24 00
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4 Sections, with 96 teeth and draft bar.	48 00

Two Sections will cut 9 feet wide; three Sections will cut 12 feet wide; four Sections will cut 15 feet wide.





TWENTY-PAGE EDITION.

Vol. XXXII.—No. 9.]

SAN FRANCISCO, SATURDAY, AUGUST 28, 1886.

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### A New York Experiment Farm.

We are glad to give our readers an idea of what is being done in other States in the line of experimental work in agriculture. As we have previously stated, there are a number of experiment stations in the States east of the Rocky mountains, and they are doing good work in bringing the scientific method of investigation and observation to bear upon the methods and materials of the farm. Most of these institutions are supported by appropriations by the States, but some are the result of private enterprise. The most prominent and best equipped of the latter is Houghton Farm Experiment Station, at Mount-ainville, Orange county, N. Y., of which Mr. Lawson Valentine is proprietor and Major Henry E. Alvord general manager. The beautiful engraving on this page presents a scene on this farm. The most prominent feature is the splendid animal in the foreground, but we will look first at the other features of the picture.

The bull is represented in the engraving as standing near a roadway leading from the farm buildings to the railway station of Houghton farm, on the Newburgh branch of the Erie Railway. The building in the center of the picture is the large barn, known as No. 1, the basement of which accommodates the Jersey herd and has room for 20 horses, while above there is storage capacity of 250 tons of hay. In the distance, with a conical roof, is the milk-house, standing over a fine spring, with an unvarying temperature of 49 degrees. The building to the right, partly hidden by trees, contains the offices, library and work-rooms of the experiment department of the farm, together with ample storage.

The water seen to the right is a portion of a pond formed by a stream known as the Awes-sima, which traverses the entire length of the farm. On this pond are kept a flock of wild geese which have become so thoroughly domesticated that they have bred regularly on the farm for several years. Their winter quarters are in a log hut upon what is known as "Crusoe Island," in the midst of the pond, and approached by the rustic bridge shown on the right in the picture. At the left is the winter dairy, covered with vines, above which is the cottage occupied by Major Alvord, the manager of the farm.

We come now to the central figure in the engraving, the Jersey bull Ramapo, No. 4679, who for some years has been at the head of the herd of Houghton farm. This bull is noted for the high average quality of his calves as well as for the remarkable record of his dam, the cow Eurotas, No. 2454, A. J. C. C. This famous cow, owned by Mr. A. B. Darling, of New York, made, immediately after the birth of this calf, Ramapo, in October, 1879, the remarkable record of 778 pounds and 1 ounce of butter during 11 months and 6 days. She calved again in November, 1880.

This performance is more remarkable and really stands unsurpassed, because this was before the days of the abnormal feeding and forced tests. During this period Eurotas was not highly fed at any time, but simply given the treatment which every good dairy cow should have. Naturally, after this wonderful feat of butter production, the calves of Eurotas have been much sought by Jersey breeders who have been able to buy them. She has had but one heifer calf, and that died young. She has, however, six living sons, five of which have passed from the possession of Mr. Darling to become the heads of some of the most celebrated Jersey herds in the country. These

fair in Contra Costa, signed by President E. B. Smith and Secretary A. E. Dunkel. The fair will be held on the grounds near Concord, beginning September 6th and extending through the week. The managers make an appeal to the public to rally to their support and make the exhibition fitly represent the industries of the county. They have wisely decided that there shall be no gambling nor liquor-selling on the grounds during the fair. To increase the educational features of the fair there will be an address on each day, as follows: On Tuesday, an opening address by Hon. Charles Wood; on Wednesday, an address on horticulture by E. J. Wickson; on Thursday there will be ad-

### Our Sunstrokes.

The occurrence of three cases of sunstroke on a single day in July in California, where such unfortunate phenomena are exceedingly rare, has given rise to much discussion among meteorologists and physicians. The ingenious in matters of theory have done their best to explain this singular outcropping. According to the monthly circular of Dr. Tyrrell, Secretary of the State Board of Health, there was one death from "thermic fever" in Sacramento, in the person of a man who, in the army, had had a sunstroke years before. The second case occurred in Oroville, in the practice of Dr. J. H.

M. Karsner, who reports that the man, aged 36 years, had walked a mile in the sun, and on returning home lay down in the cellar, complained of great heat and thirst, became unconscious, and died in two hours after seizure.

The third case is reported by Dr. A. P. Tartar, of Tehama, in the person of a man aged 72 years, of temperate habits. He was a bridge-tender, and obliged every morning to inspect the bridge as the trains passed over. As he was making this inspection he was stricken down on the bridge, and when found conveyed to his home, where he soon became unconscious and died in about two hours. Dr. Tartar is of the opinion that the unusual moisture in the ground from the abundant and late rains of winter had produced that degree of humidity in the atmosphere which makes sunstroke possible. He remarks that sloughs and ponds usually dry at this



VIEW ON HOUGHTON FARM—THE JERSEY BULL RAMAPO, 4679.

bulls have sold, when quite young, at prices ranging from \$5000 to \$12,500.

Ramapo, the subject of this sketch, is noted for great constitution and vigor and transmits these qualities to all his calves. At the New York State Fair of 1885, he won first prize in the class of aged bulls against 12 grand competitors; then with four of his daughters he won the special large gold medal of the society offered for the best Jersey bull with specimens of his get. The noted cow, Myra 2d, No. 6289, also owned by Houghton farm, was then placed with Ramapo and three of his daughters, and these animals won the gold medal for the best Jersey herd. Mercedella, No. 19022, a three-year-old daughter of Ramapo, won the sweepstakes for Jersey cows of all ages, there being 41 entries, including many celebrated animals. A son of Ramapo also won first prize in the calf class, and others of the same family took first premiums at this fair, as well as that of the year preceding.

Ramapo is shown in the engraving as a three-year-old, although he is now seven. To match the high quality of his butter breeding, the herd of Houghton farm contains cows that represent the blood of a large number of the most noted Jerseys of America.

CONTRA COSTA COUNTY FAIR.—We have received a circular concerning the coming county

dresses on the value and advantages of the Grange by several speakers; on Friday, Chas. A. Wetmore is expected to speak on viticulture. We trust the people of the county will take earnest hold and make the fair a grand success.

THE OLEOMARGARINE STAMPS.—The telegraph announces that the Washington revenue authorities are getting ready for the oleomargarine business, which they will have to transact as soon as the new law comes into effect. It is stated that the design for the new revenue stamp for oleomargarine will be simple—it is that of a cow trampling a serpent under her foot in the center, while around the margin are the words "Oleomargarine" and "Internal revenue," the denomination of the stamp being indicated in the corner. There will be three varieties of stamps needed in order to operate under the oleomargarine law—one for retailers, another for wholesale dealers and a third for the manufacturers. These will be made of several denominations, and coupons will be attached in order to make any intermediate number required. The design of a cow trampling under foot a snake reflects the spirit of the affair more thoroughly than we expected diplomatic government officials would commit themselves to. It will serve to remind the bogus butter-makers and dealers continually of the character of work they are engaged in.

season are still holding water, and their evaporation must add something to the cause.

This idea seems reasonable enough, for the most obvious difference between our conditions and those at the East is that we have dry-heated air and they humid. It would seem, however, that if the air be so changed by heavy rainfall in winter, or large supply in sloughs, etc., it could also be thus affected by evaporation from extensive irrigated areas. Such does not, however, appear to be the case, for there are regions where the ground has become so overcharged with water that tules grow in low places, and water can be had in wells at a depth of four feet or so, and yet no case of sunstroke has been reported. In short, though there is the strongest testimony that drainage must be had to take off the surplus water or else much of the country would be swamped, there is still no dangerous humidity in the air. It seems to us that the matter must be further investigated.

SOUTHERN CALIFORNIA WINE-GROWERS.—The wine-growers of Southern California are in session at Los Angeles this week, and have formed a mutual protective association. C. A. Wetmore addressed the convention Tuesday. A full statement of their grievances was adopted and addressed to the revenue authorities of the Government.



## CORRESPONDENCE.

Correspondents are alone responsible for their opinions.

## Tulare Valley by Daylight.

EDITORS PRESS:—The traveler by the S. P. R. R., going from San Francisco southward on the through train, must necessarily pass over a large portion of the extensive plains and fields of the San Joaquin valley in the night, when the scenery, whatever it is, must be invisible.

It happens that the through trains on the up trip pass over a portion of the same country also in the night. In our frequent botanical exploring trips to Southern California and Arizona, we have passed a dozen times along this route and always totally oblivious of the nature of a certain wide stretch of country of which Tulare is the center.

Recently, by the invitation of Gen. Walter Turnbull, and accompanied by Rev. O. C. Wheeler and family, Mrs. Lemmon and I took the local train for Tulare, going out from the Oakland pier at about 9 o'clock in the morning, traversing the grain-filled plains of Turlock, Merced, Modesto, Fresno and their kindred towns by daylight, arriving through the large oak groves and the rich grain fields and orchards to Tulare long before day closed.

The revelations along the last part of the journey were something astounding. No one could have convinced us without personal knowledge of the great agricultural facilities and the natural wealth of this little-known region. Broad fields of the heaviest grain, fine orchards of thrifty trees, not one missing or diseased in a thousand, long stretches of growing vines, frequent and beautiful farmhouses, multitudes of grain stacks, or regular piles of sacks, etc., all told of the richness of the soil and its appreciation by a numerous population.

While riding next day over the fields for 50 miles in a carriage our amazement was increased by a closer examination of details than hasty glances from car windows will admit. The reason, the cause of this munificence was early revealed—*artesian water*. Boiling up from eight-inch tubes sunk to the depth of about 500 feet were streams of pure, often tepid, water, thence flowing over vast areas of the rich lands.

Even a slight examination of the Tulare valley reveals the causes for the existence of our immense artesian basin here, and hence the possibilities for an almost unparalleled fertile region. It will be seen that several quite considerable creeks and two large rivers—Tule and White—empty here their full-banked streams from the snowy Sierra. Those streams gradually sink under the surface after reaching well into the Tulare basin, except in winter, when they flow on into the large Tulare lake, which then connects by a slough to the San Joaquin river.

Since it happens that so many and so large streams sink in the declined slopes of this valley, this fact accounts for the presence of groves of field oaks over the large expanse of country, and this fact tells the story of water reservoirs held near the surface, which even shallow borings tap and bring the fluid to the surface.

Once a vast cattle range kept zealously from occupation by other than its shrewd owners, it was only four or five years ago that innovations were first made upon this rich territory by persons who had discovered its perfect adaptability to farming purposes. In a few months hundreds of farms were laid out, many of them by colonies from the East; and certainly the appearance of the Tulare farms, orchards and vineyards to-day is hardly second to those of San Jose, and but little inferior to the far-famed reclaimed regions of Riverside and Arlington.

Whatever of richness of soil, of favoring temperature, of salubrious climate, is so requisite in California to attract population and insure satisfaction, this Tulare region seems to possess, with the added feature of cheap irrigation by artesian wells.

And all this was unknown to us who have so often passed through the region—as most every one else on through trains—in the night.

We could hardly credit our senses, so conspicuous, so startling, was the revelation of Tulare by daylight. J. G. LEMMON.

Oakland, Aug. 15, 1886.

## Wagon Axles.

EDITORS PRESS:—Having read Mr. R. G. Sneath's letter to the *Carriage Journal*, copied in your issue of Aug. 7th, all of which I indorse, I would like to suggest some points which I think Mr. S. has overlooked.

First: That too many axles are put on the market made of the commonest iron, and this is usually much injured, if not ruined, by wedging when too cold. Any one who is acquainted with the working of iron knows that this treatment granulates it, destroying its strength, so that frequently it is not as good as cast iron. Let makers put in iron that is both tough and stiff, and forbid the smith to "spit his blood on it," in other words, pound it at a low heat, by which, I am sorry to say, many a forging is ruined. Let them charge what is necessary for good work; what are a few cents a pound on first cost to having a reliable article? My im-

pression is that the spindle could be formed in dies under sufficient pressure.

Second: Ninety-nine axles out of 100 break at the shoulder, the lathe tool is allowed to cut square up to the collar, or, more properly speaking, to where the iron is square, and there is where your axle gives out. The reason for this is plain to every mechanic, and yet they keep on manufacturing them all the same. I have often thought it was done to increase sales. In axles say 2 1/2 x 2 1/2 x 12, the iron next the collar for a short length should be 3" square, and the spindle in the lathe turned with a quick taper from 2 1/2" to the above sizes. There should be no square corners; the box could easily be bored to suit. With this improvement and good iron faithfully worked, an axle could be put on our market that would last twice as long as we now have. What say the Judson Co.? Will they make a start in this direction? Sales may be slow at first, but as soon as wagon-users understand the merits of this axle they will call for it, nor will so many crippled wagons be seen waiting for a new axle from the city. E. G. S.

Iowa Hill, Cal.

## Pomona Notes.

EDITORS PRESS:—I have been a subscriber and a careful reader of your grand and worthy paper for upward of two years, and it has become a necessity in the house. All this time I have seen in its pages very little about Pomona. The place is worthy of the name, and though but an infant yet, has great promise. I do not say this in the interest of any company or person having land for sale, but in order that some one desirous of a pleasant location, with a fair share of Eastern advantages of good society, with the climate left out, may come here with moderate means and enjoy this beautiful climate and such privileges as a new settlement with the best of land and water will afford.

About 30 miles almost due east of Los Angeles, in a broad valley or gently-sloping plain 8 or 10 miles wide and 12 or 15 miles long, with the grand Cucamonga mountains to the north and east and a range of undulating hills to the west and south, on the line of the S. P. R. R., nearly midway between Los Angeles and San Bernardino, is this Pomona, which will in the near future be a large and flourishing inland town. We have now a population variously estimated at from 1800 to 2500 souls. There are four large and costly schoolhouses in the settlement, eight church buildings and nine church societies, a Young Men's Christian Association, public reading-rooms and the Women's Christian Temperance Union, all doing what they can; temperance and various secret societies, well organized. The town is supplied with the best of water, piped from artesian wells lying north of town. The flow of water from the various wells is a wonder to all that behold it.

Our irrigating water is piped from the mountains and is abundant. Citrus fruits must have water, and the acreage planted this year is very great. It has been thought by many impossible to raise deciduous fruits here without plenty of water, but it now proves in very many orchards that apricots do better with good cultivation and no water but the natural rain. So, too, with peaches, prunes, nectarines, plums and pears.

Many owners of orchards of the above fruit trees, two and three years old, are becoming anxious for some means to work the fruit up at a cannery in our own village, rather than ship to a distance, as heretofore. We expect, another season, to have hundreds of acres of apricots and peaches in bearing, three years old and some much older. The crop of these fruits is light this year in this vicinity. Grain and hay have been very good—of the latter, a heavy crop and good quality. Building and improvement is going on in the village and its surroundings everywhere—no boom, but a fair, steady growth of good buildings and beautiful homes.

If you find these few notes worthy of a place in the PRESS, I shall be glad if perchance they meet the eye of some one who wants a place to live—almost a paradise. J. H. DUNN.

Pomona, Cal.

## The Great Percheron Show.

EDITORS PRESS:—The American Percheron Horse-breeders' Association is making extensive preparations for a great show to be held in Chicago, September 6th-11th, in connection with the Illinois State Fair. Large numbers of the Percheron breeders will have stock on exhibition. Suitable buildings, with beautiful decorations, will be erected, and a fac-simile of the gate at the old castle at Nogent le Rotrou, the birthplace of the breed, and the present headquarters of the Percheron Society in France, will be built at the entrance, and will make a very attractive portal.

The Minister of Agriculture of France has appointed the Inspector-General of the National Haras, Marquis de la Motte Rogne, to act as one of the Jury of Awards. Commissioner Colman has appointed Hon. Geo. B. Loring, ex-Commissioner of Agriculture, as the second member of the jury, and the third will be appointed by the Minister of Agriculture of Canada. In every way the exhibition will be one of the highest character ever attempted in this country. M. W. DUNHAM,

Ch'n Ex. Committee.

Wayne, Du Page Co., Ill.

## THE APIARY.

## Ventura Bee-keepers' Meeting.

The Bee-keepers' Association met in Union hall, San Buenaventura, August 7th. Mr. Wilkin was elected president and C. M. Drake secretary.

Mr. Richardson made a report of a warehouse for holding the honey of the county, 40x100x9 feet, with concrete floor and iron covering, with a capacity of 500 tons of honey, saying such a building would cost about \$850. Mr. Mercer said a brick one would cost double that amount.

Mr. Corey gave several good reasons why honey is low.

Mr. Blanchard thought we should organize and work together; store it and borrow upon it instead of forcing sales early in the season.

The following address was read by S. C. Gridley, of Nordhoff:

Gentlemen and Fellow apiarists:—I offer these thoughts with the hope that they may lead to financial good to ourselves. I offer them as suggestions for the bee-men to think over—to alter or amend for the good of the cause—and if anything in this paper proves to be of any benefit, I shall feel that I have been of some help.

We must combine in some form to protect ourselves against the middle-man—the speculator—and the many hands our honey passes through before it reaches the consumer. We must divert some of these profits to ourselves, or our business is ruined. The fruit-men have shown us the way and the benefits derived from union of interests. In union there is strength. Why cannot we follow in their footsteps? Surely we can, and we must do so at once.

Now, I propose the following as suggestions: First, incorporate; then build a fire-proof warehouse large enough to hold the crop of the county, with an office and a large room besides, for purposes which I will mention further on. It is not necessary to build this warehouse where land is expensive. Find out where the railroad line will run and build close to it on cheap land. The railroad will build a switch to it. Let the incorporation be called the Ventura County Honey-packing Association, or any other name that will be appropriate. Let the sole business be in honey and wax in its various forms. Let the bee-men store their honey and wax in this warehouse, and arrange so that money can be drawn from the association on the honey deposited in said warehouse. That will give every man a chance to help himself at once without waiting, and will release the honey market, form a selling pressure and tend to equalize the price of honey. Further, I would propose to have a good, reliable man—one who is used to selling goods—go over the country with samples of this honey and sell it. Go to the best markets with it. Merchants buying from such an association would be assured of getting just what was represented, and from a reliable source.

Now, use the large room I spoke of before to repack the honey as fast as the orders come in. When the salesman sells to a retailer, he wants it in a nice, attractive package—one that will strike the eye. Well, put it up so. Put up a dozen in a case, with handsome labels, the association's trade-mark, and with recipes for using honey in place of sugar for making cakes and preserving fruit, and in this way create other uses for honey, and so stimulate the demand. Also, put a handsome show card, full size of case, in each and every case, to hang up in some conspicuous place in his store. Make it handsome enough so that he will think it an ornament and preserve it, instead of throwing it away. Let it be as handsome as the art of lithographing can make it. In this way Ventura honey will make a name for itself, and will be in demand, and in the course of time orders will come of themselves—will need no salesman. Comb honey should have the stamp of the association on each and every section. Take the wax as it comes in and render it out and make it clean. Have appliances to bleach it, and thereby get a larger return for it. When our salesman strikes a brewer or tobaccoist, he will want it in bulk. Well, put it up to suit him too, and put the association's brand on it. He will be suited with the lower grades of honey.

The cost of cans and cases, as we all know, is a very large item of total loss to the apiarist. Let each and every bee-man provide himself with enough barrels lined with tin or some other material to hold his crop. The first cost would be considerable, but then they would last for years. Let him put his honey in them and store them in the warehouse, and let all the grading and packing be done at the warehouse. It might be advisable for the association to own the barrels, and rent them to the bee-men at so much the season or ton. The association could pack the honey much cheaper than the individual, for they could buy in larger quantities, at a less cost; or they might have machinery for making cans, and manufacture for themselves, and save all the profit. I bought cans and cases in San Francisco this season at 65 cents each. Here they are 85 cents—a wide difference.

Now, a very important question comes up: What will all this cost? How much money will it take? It will require considerable capital

to handle the honey crop of the county this way; but I think a finance committee appointed by this meeting might induce some capitalist to embark in the enterprise. I think we ought to be able to make a good showing for a fair rate of interest on the money—but not one per cent per month. We should be able to get the money at from 6 to 8 per cent per annum, and I think it could be done. The association would have to raise the money for building the warehouse and accessories among its members; but after that there will be no trouble in raising money on warehouse receipts. There are 600 tons of honey in this county. An assessment of one-quarter of one cent per pound would bring \$3000; one-half of one cent, \$6000, which would be ample to build the warehouse. The bee-men could pay their assessments on honey at the market price, let it be sold, and the proceeds devoted to building the warehouse, etc. Then let stock be issued to each one to the amount of his assessment.

The advantages of such an arrangement, to my mind, would be numerous. One of the greatest would be that every bee-man, big or little, when he gathered his crop could raise money on it at once, and that alone would be a great boon to most of us. Another, we would get rid of middle-men and speculators; we would save all their profits to ourselves. That would largely increase the price of honey to us at once.

Now, as to the division of the proceeds of the business. Let a certain percentage be set aside for interest and the various expenses, and for a sinking fund. Let the sinking fund be liberal, so that the corporation can soon clear itself from debt, and in the course of a few years the surplus would be large enough to enable the association to furnish all the money for every purpose. After the season's business is finished, let a dividend be declared to every one depositing honey in the warehouse in proportion to the amount and kind of honey deposited. If this can be carried out I believe the honey-producers will receive a larger return for their crops than they have ever done.

I offer these thoughts as suggestions. My only wish is to help the good cause, and get 10 cents a pound for our honey, if we can.

A committee of five, consisting of Wilkin, Barrows, Richardson, Blanchard and Grimes, was appointed to report at a future meeting, concerning a warehouse, storing and selling honey, organizing, incorporating, etc.

Adjourned to meet at Santa Paula at 1 o'clock P. M., August 21st.

C. M. DRAKE, Sec.

## THE DAIRY.

## After the Battle.

The National Agricultural and Dairy Association, under whose auspices the national oleomargarine law was secured, issues the following address, which is sent to us for publication:

Farmers and Dairymen of America:—The American Agricultural and Dairy Association, by its Board of Directors, extends its greetings to you and to the consumers of dairy products, and congratulates both upon the result of their efforts in behalf of honest industry and pure food.

After the hardest legislative battle ever fought, your contest against the monumental fraud of the 19th century has been won. Congress has passed the bill regulating and taxing bogus butter and President Cleveland has approved it, accompanied by a strong and able message in its favor. It is the greatest and most important victory ever achieved for agriculture and honest dealing, while the consumer is furnished protection from gross imposition in an important article of food.

Every method known to the unscrupulous doer of wrong was employed to defeat your cause, but success rested on your arms at the close of every engagement. Prejudice and venality were employed to inspire the constitution with attributes it did not possess and to interpret it against the interests of a majority of the people to save the fraud from destruction, but they were battered down. The great overshadowing power of the farmer has been asserted for the first time with the most useful results, and must be exerted still further in the future.

Prosperity should now return to the nation's most valuable and beneficent industry, which has seriously suffered so long from dishonest competition. The tillers of the soil in all sections of the country may take heart, since the rights and necessities of the dairymen have obtained practical recognition from the Government through legislation in their behalf.

## The Price of Victory.

Your victory has only been won, however, by herculean effort, and can only be made permanent by fortifying your position through further organization and continued watchfulness. The enemy is backed by unlimited capital and actuated by the strongest personal motives. They have done and will do all in their power to prevent the loss of their unholy and iniquitous gains. They have had the support of a large portion of the public press, and possessed sufficient power in Congress to reduce the rate of tax from 10 cents to 5 in the House, and from 5 to 2 in the Senate. Already these enemies of the public have announced their in-



tention to defeat those members of Congress who voted for your bill when they come up for renomination and re-election, as in the case of Congressman Allen, of Mass. It is all-important to counteract their efforts in this direction wherever made. They work secretly and as a unit without regard to party or expense, and unless we sustain our friends who stood by us in Congress they will strike them down.

We now have a strong majority with us, comprising the ablest and purest members of both houses of Congress, and we must retain and increase it by returning our friends and increasing our representation.

Both producer and consumer should lay aside party politics, so far as it concerns members of Congress, and give earnest, effective help to those who faithfully supported this righteous bill. Also see that members of State Legislatures are elected who will in turn elect United States Senators known to be for your interests. To this end, meet in your townships and school districts and organize. If there is a Grange in your neighborhood, join it! They are most useful and effective organizations, and should be supported everywhere. They have rendered us most valuable aid in our work.

#### The Enemy Organize.

The manufacturers of the fraudulent article have just held a meeting in Chicago, at which they discussed plans to contest the law in the courts, and they propose holding another soon to organize against us. No such effrontery was ever exhibited by evil-doers. These men are determined to follow their nefarious calling if they can, and we must resist their vile attempts at fraud and imposition.

We must be prepared in the next Congress to hold our own, and insist upon our rights. The only way to do this is to extend our organization everywhere and bring out our full strength. We must be prepared for either defensive or offensive operations, not only in this matter but in everything that concerns the agricultural and dairy interests. Proposals are now making to combine all the agricultural, dairy, live-stock and wool-growers' associations in this organization by representation for the most effective work, and we shall yet see it the most powerful institution for good the country has ever had.

#### A National Convention

Of all interested in agriculture and favorable to its protection and advancement and in sympathy with the objects of this association will be held at the Continental hotel, in the city of Philadelphia, Wednesday and Thursday, September 15 and 16, 1886, for the purpose of considering measures to forward the interests of the farmers and dairymen of America. The annual fair of the Pennsylvania State Agricultural Society will be held in Philadelphia at the same time, beginning September 6th and ending September 18th, and this with the convention will add to the interest of the occasion. Please reply stating whether or not you will attend the convention and who will be present from your section. If you cannot come yourself, see that your locality is represented by some good man. State Agricultural and Dairy Societies, State and local Granges, County Agricultural and Dairy Societies and all other organizations of farmers and dairymen, are invited and requested to send delegates. For further information and cards of admission to the convention, address the undersigned, 169 Chambers street, New York.

JOSEPH H. REALL, President.

FORREST K. MORELAND, Secretary.

## THE VINEYARD.

### Vintage Work and Instruction in the Viticultural Laboratory, 1886.

University Experiment Station Bulletin  
No. 57.

The vintage work in the Viticultural Laboratory of the University will be resumed during the first week of September next, substantially on the plan pursued during previous years, but with facilities greatly enlarged and improved. The general features of this work are outlined in the legislative act of 1880, which is here given for the information of persons interested:

#### The Provisions of the Act of 1880.

An Act for the Promotion of the Viticultural Interests of the State. (Approved April 15, 1880. Stats. of Cal., 1880, p. 53.)

Section 8. And for the further promotion of viticultural interests, it shall be the duty of the Board of Regents of the University of California to provide for special instruction to be given by the Agricultural Department of the University, in the arts and sciences pertaining to viticulture, the theory and practice of fermentation, distillation and rectification, and the management of cellars, to be illustrated by practical experiments with appropriate apparatus; also, to direct the Professor of Agriculture, or his assistant, to make personal examinations and reports upon the different sections of the State adapted to viticulture; to examine and report upon the woods of the State procurable for cooperage, and the best methods of treating the same; and to make analysis of soils, wines, brandies and grapes, at the proper request of citizens of the State; also, to prepare comprehensive analyses of the various wines and spirits produced from grapes, showing their alcoholic strength and other properties, and especially any deleterious adulterations that may be discovered. The Regents shall also cause to be prepared, printed

and distributed to the public; quarterly reports of the professor in charge of this work, relating to experiments undertaken, scientific discoveries, the progress and treatment of the phylloxera and other diseases of the vine, and such other useful information as may be given for the better instruction of viticulturists.

Under the provisions of this act, work has been carried on at the University since its passage, so far as the funds available for the purpose permitted. Heretofore, the laboratory and other working appliances and accommodations have been so limited that the vintage work has been severely cramped and under great disadvantages, especially as to the very small scale upon which everything had to be done. By the aid of the legislative appropriation made in 1885, which only became available during the present year, not only has the laboratory been so enlarged as to afford room for a number of special students, but the cellar room required for practical work has been tripled by the addition of two basement rooms and a sub-cellar, 25 by 46 feet, substantially built of brick laid in cement, with concrete floor, well drained; giving full control of temperature in the fermentation and after-treatment of wines. The larger scale and ampler means with which the experimental and illustrative work can now be carried on will render the methods and results more directly applicable to the work of wineries.

#### Plan of the Work.

Although the methods of work pursued in the viticultural laboratory, and the practical objects sought to be attained, have been set forth in previous publications, it is appropriate that a summary statement of the same, made in former bulletins, should here be repeated in substance.

The plan of work in the viticultural laboratory is based upon the obvious fact that "among the first necessities of the present situation of California wines in the world's market is the establishment of more definite qualities and brands, resulting from a definite knowledge of the qualities of each of the prominent grape varieties, and of their influence upon the kind and quality of the wine, in blending before, or as the case may be, after fermentation; of the treatment required by each in the cellar, during the time of maturing, and finally, of the differences caused by difference of location, climate, etc., as well as by different treatment of the wines themselves during the first and after-fermentation."

"In the wine-producing countries of Europe this knowledge has been acquired by long experience; and chemical investigation has subsequently in a great measure ascertained the natural conditions upon which the attainment of certain results in wine-making depends. The principles thus evolved can be applied to new conditions, such as those existing in California, and thus save to a great extent the laborious and costly experimenting which has been gone through heretofore, by formulating into generally intelligible rules the knowledge which otherwise usually remains the trade secret of a few experts."

"It should be fully understood and remembered that while peculiarities and defects shown by analysis are perfectly definite indications as to the conditions that must be fulfilled in a successful blend, yet analysis cannot as yet take cognizance of the delicate and almost intangible flavors or 'bouquets,' which must likewise be made to harmonize, in order to satisfy a cultivated palate. To that extent the determination of the proper blends must always remain with the expert wine-taster, but the work of the latter is immensely facilitated by being informed, through the analysis, of the prominent chemical peculiarities, which in any case must be taken into consideration, and which ordinarily are left to laborious and more or less blind guessing or experimenting."

In conformity with these views, in past years a number of the more prominent grape varieties already cultivated in the State have been made into both red and white wines each,\* and each thereafter subjected to the test both of chemical analysis and taste. The chemical composition of the fresh juice or must is, of course, ascertained by analysis in all cases. The results of the work done in former years have been given to the public in reports and bulletins heretofore published,† and the importance of this method of determining in advance the probable outcome of heavy pecuniary investments has seemed so obvious as to induce every season numerous applications for the examination of grapes and wines from different localities. The working and examination of 40 varieties of newly-imported grapes for the Natoma Water and Mining Company, in 1884, has been fruitful of results, in respect to the intelligent selection of varieties for new planting or grafting; yet, in consequence of the inadequate means and appliances then at command, these results have not been as full as they otherwise would have been. It is expected that during the present season at least a portion of this work will be repeated under more favorable conditions; moreover, grapes of about 40 varieties from the experimental vineyard at Cupertino, grafted in 1884, and now in good bearing, will come under treatment. Comparative experiments with different methods of fermentation under conditions rigorously controlled, as they now can be, will give students an excellent opportunity for practical observation and for the study of the causes that lead to certain definite results.

There prevails not uncommonly among vintners a prejudice to the effect that small scale experiments in wine-making can but remotely lead to a correct estimate of the results to be expected on the large scale, and that they fre-

\*In the case of white grapes, of course, "red" implies simply the mode of treatment, viz.: fermenting on the skins as in the making of red wines properly so called.

†The "Report of Viticultural Work for the years 1883-1884, with Notes on the Vintage of 1885," 210 pages, published December, 1885, can be had on application to the College of Agriculture, at Berkeley.

quently mislead to such an extent as to cause grave financial losses. Were this necessarily true, of course there would be little use for laboratory experiments on any scale practicable outside of a winery.

What is true, however, is that small scale experiments do not lead to correct results when made in large cellars alongside of the large quantities there treated. This cannot be otherwise, from precisely the same causes which have led to the almost universal abandonment of the immense tanks used in the older wineries of the State, in favor of those not exceeding much the capacity of 2000 gallons. If the 8000-gallon tank yielded poor results when placed in the same conditions as the 2000-gallon ones, it is obvious that there must be a similar difference, at least, between the 2000 gallon tank on the one hand and the 5 or 10 gallon experimental keg on the other.

These differences are due mainly to the different temperature-conditions under which the fermentation takes place. When the fermenting masses are large the temperature will rise proportionally higher—sometimes so high as to actually check fermentation, making it difficult to revive it, and leading to the ultimate setting-in of abnormal fermentation, resulting in "milk-sour" wines. When the masses are very small, on the contrary, the regular course of the fermentation is liable to be interfered with by such small variations of temperature in the fermenting-rooms as will leave masses of proper amount, say 1000 to 2000 gallons, almost unaffected. Hence a 10-gallon keg in a cellar and temperature adapted to the proper fermentation of large packages can only accidentally furnish results correctly representing large-scale operations.

It is quite otherwise in a cellar of which the temperature can be regulated at will, and with special adaptation to small packages; when the latter will furnish wines closely corresponding to those that will be produced under correct practice on a large scale. It need hardly be said that the temperature must be kept higher than would be admissible in a cellar containing 2000 gallon packages.

One advantage of considerable practical importance is, however, secured by the use of small packages, viz., that the wines mature much more quickly than in larger ones, and thus results approximating those usually attained in two years may be seen and judged at the end of one year.

#### Course of Instruction in Viticulture and Vinification.

Students taking this course, which may be extended until Christmas recess, will, during the vintage season, occupy the greater part of their time in actual work in the viticultural laboratory, under the direct instruction of Assistants Jaffa and Colby. In addition, from two to four lectures on the principles and practice of vinification and wine analysis will be given them by Professor Hilgard.

It is very desirable that students taking this course should have some general knowledge, at least, of chemistry and physics; and some preliminary experience in winery practice will be very advantageous.

Applications for this course should be addressed as soon as possible to Prof. Hilgard, at Berkeley, in order that the proper laboratory arrangements may be made before the brunt of the vintage comes. The lecture course will begin at the opening of the University session, September 17th, but, according to the season, the laboratory work may begin sooner, and students applying will be promptly notified of the fact. Instruction is gratuitous, but a charge, varying, according to actual breakage of apparatus and use of chemicals, from a minimum of one dollar per month upward, is made to laboratory students.

#### Suggestions to Senders of Grapes, Wines, etc.

Grape-growers and wine-makers are invited to send sample lots of grapes for analysis and experimental wine-making. As a rule, each grape variety will be made into wine separately; the analysis of the must is made on the day of crushing, and will, if so desired, be at once communicated to the sender. That of the wine must, of course, be delayed until the latter has acquired a reasonable degree of maturity, after several rackings. But reports on special points that may be ascertained sooner will be sent if desired.

Experimental blends will also be made either in accordance with the request of growers, or such as examination or previous experience may seem to render desirable.

Ready-made wines or brandies of which the analysis or other examination is desired will receive attention in the order of their receipt at Berkeley.

All work is, of course, done gratuitously, transportation charges being ordinarily paid by the sender. It is hardly necessary to say that, other things being equal, the larger the quantity of grapes worked, the more certainly and nearly will the result correspond to that which may be expected on the large scale. In the case of rare grapes, a few pounds, carefully treated, may be made to give fair results; but it is very desirable that the amount sent for experimental working should in no case be less than that which will yield five gallons of finished wine—say (considering the losses consequent from transportation, amounts required for analysis, frequent racking, etc.) 100 pounds; but twice that amount is preferable, and of some of the more important varieties, 20-gallon lots will be made this season.

Wine grapes, being usually very juicy and of delicate texture, should be packed with especial care in small shallow boxes holding not exceeding 20 pounds each, and preferably in layers with grape leaves between. In no case should packing paper be used, as it causes a rapid production of mold, spoiling both the grapes and the experiment. Persons not having proper boxes may have them sent to them by express from the laboratory by giving timely notice. Send promptly advice of shipment, whether by express or freight. Address University of California, care of Prof. Hilgard; if by express, to Berkeley; if by freight, to West Berkeley depot.

E. W. HILGARD.

Berkeley, Aug. 20, 1886.

## FRUIT MARKETING.

### California Fruit in Chicago.

EDITORS PRESS:—We notice in the RURAL PRESS of August 7th a dispatch from Chicago headed "California Fruit in Chicago," dated July 28th, which goes on to state that Porter Bros. Company received a shipment of ten carloads of fruit, and that they were selling pears as low as \$1.90, while other firms are trying to get from \$2 to \$2.50; and it further states that so large a shipment is more than any one house can well and judiciously handle. Now, we would like very much to have you correct this dispatch, as you have sent it out broadcast in your paper and it is not warranted in fact, but is positively untrue, and evidently is gotten up by some parties who wish to injure the firm of Porter Bros. Company. We wish to cite you the real facts in this whole matter. There is a certain crowd of people in California who are banded together for the sole purpose of breaking up the California Fruit Union, and, at the same time, do as much injury to the Union's agents, Porter Bros. Company, as possible. They went on and established their agencies here in Chicago, and established men who in their own particular line are fair business men, but their line always has been, or nearly so, butter, eggs, cheese and produce. Now, if an experience is not wanted in the handling of California fruits, as in any other class of business, then we are very much mistaken. The facts are that these men, either through ignorance or maliciousness (we do not care to say; we leave that for the people to judge when they receive their account of sales), have gone on and sold this fruit at prices that would make any respectable fruit firm ashamed, and after they had done so they get up the cry that Porter Bros. Company are breaking the market and they are unable to obtain any more money for the goods on that account, when the facts are that they have no trade and no outlet, and simply sit here on the arrival of the goods and either commission them out or sell them for whatever the buyer in this market will give.

In support of what we say, we stand ready any day and at any moment to show our books and compare prices with these gentlemen who have made such a violent howl as to who has obtained the better prices. We do not write this to you out of any malicious feeling, but wish to be put right upon the record. We do not believe that it is the intention of you or your paper to put us in a false position before the fruit-growers of California, as we have been well known to every grower of any prominence in the State for the last 15 years, and the charge that has usually been made against us is that we get too high rather than too low a price; at least that has been the charge made in former years.

WASHINGTON PORTER,

Pres. Porter Bros. Company.

Chicago, Aug. 14th.

[The article to which Mr. Porter refers was a dispatch from Chicago which we printed as a matter of current news without assuming any responsibility for the accuracy of its statements. We give Mr. Porter's statement the same publicity as the dispatch which he corrects.—EDS. PRESS.]

### A Glum Word from New York.

NEW YORK, Aug. 20.—The *Commercial Bulletin*, in a long editorial on California fruit, says: The quantity of California fruit received here this year has been somewhat less than last, though the receipts at Chicago have been somewhat greater. It is frequently the case, when an extra fine carload of fruit is received at Chicago, for the commission merchant or owner there to forward the same to this market, as he is desirous of retaining his connections here, also of keeping the fruit before the public. Competition here is not likely to show any great increase. There are to-day in this city four firms engaged in the trade. These are compelled to make heavy advances upon consignments made to them, and should the fruit, upon arrival, prove poor in quality, they are often obliged to pocket the loss, being unable to obtain a return from the shippers. The rate of commission is 10 per cent, and the incidental expenses of the run are about two per cent. The question is asked: Why is not canning done upon a more extensive scale? We, in reply, would state this ultimately will be done, and is properly the only method that can be adopted to insure a profitable return for the labor expended in raising fruit.



## PATRONS OF HUSBANDRY.

Correspondence on Grange principles and work and reports of transient and subordinate Granges are respectfully solicited for this department.

## A Tribute to George Ohleyer.

Many will be glad to see, by reports from Yuba City, that Bro. George Ohleyer was received with an ovation on his return from Washington. He deserves honors for his work on the debris question during the last few years. The Marysville Appeal gives the following interesting account of the manner in which the tribute was paid:

An ovation such as never was extended to one of this community was that given to Hon. George Ohleyer upon his arrival, accompanied by his wife, from Washington, where his labors have been solely and sincerely in the interests of the people of the valley. It was all the more extraordinary on account of being impromptu, and shows that a public sentiment exist, which can and will crush all insinuations of irresponsible parties.

Before train time yesterday the lower part of D street was filled with conveyances on which flags were flying. The Yuba City band came over, and after playing several selections headed the line of carriages, which contained the following invited guests, to the depot: Hon. F. H. Greely, Hon. I. S. Belcher, Hon. E. A. Davis, Hon. N. D. Coombs, Hon. Wm. M. Cutter, Hon. W. G. Murphy, Hon. N. D. Rideout, Hon. A. C. Bingham, Hon. Peter Decker, Hon. Edwards Woodruff, Hon. L. H. Babb, Alderman G. W. Elder, Alderman A. W. Lewis, Alderman F. D. Hudson, Alderman D. J. Kertchem, O. Sawtelle, C. E. Sexey, M. Marcuse, J. C. White, J. R. Garrett, J. Stevenson, W. T. Ellis, H. Bruce, T. Dougall, E. G. Clark, P. C. Slattery, D. E. Knight, Justus Greely.

When the train rolled in and while the music was playing, Mr. Ohleyer and wife were brought out and subjected to a severe hand-shaking, after which they stepped into the four-in-hand carriage, and seated with Mayor Greely and Col. Edwards Woodruff, drove into the middle of the street, where the former uttered the

## Words of Welcome.

He said: That on behalf of the citizens—the citizens who have the good of this valley, and especially Yuba and Sutter counties, at heart—he welcomed the champion of their cause from the battle-fields to which he had been sent and from which he had returned crowned with victory. In his speech he reviewed the history of the anti-debris cause, and during the 10 years in which the people had battled through their leaders he could find none whose work had been so devoted and conscientious as that of Mr. Ohleyer. In conclusion, he said that as long as the Yuba, the Feather and the Sacramento rivers flow oceanward, so long would the name of Ohleyer be endeared to the people and remembered by them.

## Response of Mr. Ohleyer.

Mr. Ohleyer rose amid cheering and said: Mr. Mayor and fellow citizens:—This reception takes me entirely by storm. Never at any time a good talker in public, I am now wholly unable to express my thanks for the friendly demonstration of the people of the two counties. I am overwhelmed, Mr. Mayor, with feelings of pleasure and of thankfulness to yourself and those for whom you have spoken. I will not attempt at this moment to repeat the various struggles we have gone through to the present time, as you have yourself very fully adverted to the past. You have, however, given me far too much credit for what has been accomplished. I have been but a humble instrument. I was selected because I was interested. My home and all I had in the world were at stake. My family, the members of which had grown up as Californians, had a claim upon my service, and I felt it incumbent on me to faithfully do my duty as a man, a citizen and a father, to protect my home. In doing so I have had the assistance of yourselves and that of all of the best citizens of the valley, and especially of these two counties. What has been done has been accomplished gradually. But those that have aided have never failed nor faltered. We had, as you have truly said, sir, a reverse at one time. You said, however, that decision was against our right, but it was not. It was simply a dodge to keep from passing upon the merits. I was convinced then, and ever since have been, that it required a united effort to sustain the law. The law existed then as now, but the public sentiment did not. My idea was to create that sentiment in every way possible. That was finally accomplished, and the court held that our course was just and right. It also held that it was a national as well as local question, in deciding that this nuisance was a public as well as a private one. It then occurred to me that if it was a public nuisance we should go to headquarters to have it fully and forever abated. I said so on the streets; I said so in the journal for which I wrote; and finally went to headquarters with this message: "We have done thus and so. We have spent our money, thousands upon thousands—I might say hundreds of thousands—and to do what? To save our homes and to save these rivers for you and for posterity. Your own court has decided that this is your concern as

well as ours; that it involves the saving of property that belongs to you and over what you claim control. Now, what are you going to say about it?" That question, I am pleased to say, has been answered. [Applause.]

I thank you again most cordially and heartily; I really know not how to express myself in return for this demonstration. But I am glad beyond measure that I am able to come representing a victory; for at one time there was imminent danger that I would be obliged to return representing a defeat. I thank you all for your indulgence of these few broken remarks, and for this friendly reception. [Applause.]

At the conclusion of his remarks Mr. Ohleyer was greeted with three rousing cheers and a tiger.

The procession then formed and moved to the courthouse in Yuba City, being cheered along the line. It was over two blocks long, having been augmented by numerous private carriages.

When at Yuba City and the crowd was in the courthouse yard, Mr. Phipps mounted a chair and spoke at some length, from which we quote the following:

Ladies and gentlemen, fellow-citizens of Yuba and Sutter counties:—Less than eight years ago many of the fairest homes of this God-favored country seemed absolutely involved in ruin. Many a careworn father with a family more or less dependent upon him looked forward to the near future when he should be compelled to seek a subsistence elsewhere, his productive land being ruined and its value gone and his family left with only a few half-starved beasts of burthen to bear them away. These were not exaggerated anticipations on the part of every citizen of this county at a period so recent. And all this because of that gigantic evil, hydraulic mining, which literally moves mountains down into these rivers, causing the debris therefrom to be swept over the lands of this valley. But recently a change has been brought about. Our citizens have become more hopeful of the future, real estate has doubled the market value it had six years ago, and to-day the pulse of prosperity can be felt beating in the very least of our institutions. Why this change? Is it because any material number of hydraulic miners have voluntarily ceased their operations? You know the answer. You know that in every instance the hydraulic miner is beaten to the wall ere he will yield a single point. No! It is because of the determination of the citizens of this community expressed through their leaders, who, at an enormous expense, have pushed the vexatious question to so nearly a happy solution. And we are here this evening to show our appreciation of the untiring efforts of one who has stood head and shoulders above any one else in this warfare for home, Hon. George Ohleyer. At each session of Congress more or less Federal money is appropriated for the purpose of preserving the navigable waters throughout the United States through what is known as the River and Harbor bill. We had felt the need of Federal interference in our behalf for the protection of these rivers from this debris curse; the burden of this fight being too great for any one community to bear, and the proceedings in equity too tedious. At the beginning of the recent session of Congress we had not a champion for our cause in either house, and of course, could look for nothing good. Therefore the managers of this fight wisely selected Hon. George Ohleyer as the person who could successfully educate our representatives to a proper understanding of this matter.

## Ohleyer's Response.

Mr. Ohleyer, after being greeted with three hearty cheers, responded as follows:

Fellow-citizens:—I am utterly unable to express my appreciation of this demonstration, this kindness shown toward me. It is a day and an occasion that will live with me as long as memory shall last. [Applause.] It is a surprise, something I did not for a moment anticipate and what I can hardly understand. I have, it is true, done all that I could, but I could not have done anything without the very able assistance of yourselves, your leading citizens and the gentlemen at Washington. It may seem from what has been said—and I believe the speakers who have welcomed me have been sincere—that much has been accomplished through my particular efforts, which I wish to correct somewhat. It seems to me that the pin was set to be knocked down; that public sentiment, the State and the United States, were ready to put their foot down on this destroyer, and that it was only necessary to prick the bubble or knock over the pin to accomplish what was accomplished recently. The defeat that stared us in the face a month or six weeks ago was not because of the sentiment of Congress. The sentiment of the Senate and of the Senate Committee was, as had been positively agreed upon, that hydraulic mining should go, that it should cease. They were willing to vote, and said so, that hydraulic mining was an enemy to mankind and must cease; but that other mining, harmless mining, should not be covered by a sweeping law. That was agreed to, and not, as you may have been led to believe, that it was the opinion of the Senate that nothing of the kind should exist, but by a trick it was stricken out of the bill. This repulse was awful; it was to me an indescribable stroke. It was so to our members of Congress and to all our friends. But they had not resided among us and didn't feel the blow as severely as I did. They said: "Very well; we cannot help it, but next winter we will get the bill." I then telegraphed for in-

structions about coming home, but by the time I received an answer I concluded, with our delegation, that we would see what was left. We were like a defeated army; not annihilated, but put out on the run. Ours was a Bull Run, but the enemy did not get to Washington. We pricked up our spirits and made up our minds to try it again; and then I did not come home right away. [Cheers.] The result was telegraphed you some time ago. I knew it would be, for I left such instructions, and you received it before I did. I left when I found I could be of no further use, and that the matter was likely to be inserted in the bill—the fact is, would go into it, for I had that assurance, the only question being whether the bill would pass, and, if it passed, whether the President would sign it. Contrary to almost all our expectations, especially those of the California members, they did agree upon the bill and they passed it, and the President signed it.

I have not seen the bill as it passed, and cannot tell you its tenor exactly. I would therefore prefer that the reporter I see present would not publish my ideas of what is in the bill, because they may be erroneous. But it will read like this with reference to California: "That the money heretofore appropriated shall not be used until the Secretary of War shall be satisfied that hydraulic mining has ceased, and if he be not so satisfied he shall use so much of said money as may be required to satisfy him." I think that will be about the language of the bill. There is nothing said about any other kind of mining. It is better and shorter than it was in the start, in my judgment. But I will not detain you. I am again compelled to thank you, and do so most heartily, for this demonstration. But I am glad we have met to-day to celebrate a victory. One thing more, which I had nearly forgotten—you should sustain those who have been pushed to the front in this battle. This demonstration is more in favor of your determination to secure and protect your homes than it is to honor the one that stands before you. The world should know that we have our homes more at heart than any public question, and I take it that this demonstration is to show that you mean to stand by those whom you have placed in advance, as well as those you mean to conquer in spite of every obstacle. In that sense I prefer to take this reception. [Great applause.]

## Attend the State Grange.

It is the privilege of every fourth degree member of the P. of H. in good standing to attend every meeting of the State Grange. Each, on being vouched for, and paying a small fee, is welcomed to receive the fifth degree, Pomona, and partake of the annual feast of Pomona. Attendance is a rare privilege, and one highly enjoyed by all intelligent minds who have the highest interests of the Grange and their fellow-beings at heart. Let none miss it who can attend. All who have enjoyed one or more of the previous sessions will feel it an irreparable loss to fail to attend another.

Each succeeding year the attendance of Past Masters and Matrons and fourth degree members has increased. The sessions have also been growing in interest. More literary and social entertainment and harmony have prevailed, until each annual gathering is looked forward to with more eager anticipations from year to year.

Worthy Lecturer Hayes, of Oregon, is expected to return the fraternal visit of Brother and Sister Flint, and many inspiring words concerning the work and fraternal spirit of the Patrons of our neighboring State—soon to be more closely bound to us by speedy overland connections—are surely anticipated.

There is need of council one with another from all parts of our large State. There are stirring times about us on every hand. Questions of vital importance are looming up before our nation and State. The voice of the husbandmen and matrons of the land should be more frequently and emphatically heard in their own behalf, and henceforth they will be. Let no one stay away because the meeting at Marysville is not so centrally located as it has been at other times. The brothers and sisters of the north have never faltered in attending sessions southward. They have suffered innocently and severely from the devastating floods of mining debris. But all will certainly rejoice that justice seems sure to crown with success their persevering efforts for their hard-fought rights. Members from the south and all other quarters should certainly not fail to attend for any small-sized reasons.

A generous welcome must surely await all who attend. The citizens of Marysville and Yuba and Sutter counties have evinced a generous interest with the P. of H. in their midst, from the time Marysville was selected for the annual session, to make the visit of the State Grange there an agreeable success.

Let the subject of the State Grange session be discussed in every Subordinate Grange until the 5th of October. Have as thoroughly prepared for action as possible, matters to be brought before the great gathering. See that some preparation is made by every Grange, or some members of it, to aid in making the coming annual gathering more instructive, delightful and beneficial than any of its excellent predecessors.

VALLEY GRANGE feasts at Pacheco to-day with a large class for instruction in the fourth degree.

ELECT ALTERNATES.—Only a month remains in which to elect alternate representatives to the State Grange. Although it may be confidently expected that the Master and his wife will be present throughout the session, it cannot be certain that they will. Besides, those who do attend may not be able, or wish to confine themselves to be present and act at every meeting of the session. Experience has proved that it is wise, for the welfare of each Grange and the State Grange, that alternates, two from each Grange, be elected, and a month before the session is not too early to make the selection. The delegates should be provided with certificates of election, signed by the W. M. and secretary, under seal of their Grange.

DEATH OF MRS. J. W. MACKIE.—We deeply regret to hear of the death of this estimable lady at Tulare, last week. She was a resident of Oakland and accompanied her husband to a new residence in Tulare last fall. Mr. Mackie wrote for the RURAL under the name "Novice." He is an officer of Tulare Grange and was formerly of Temescal Grange. He will have the fullest sympathy in his great bereavement. Mrs. Mackie leaves three children to mourn their loss. Her native place was West Woodstock, Conn.

TURLOCK AND CERES TO FEAST TOGETHER.—V. E. Bangs, Master of Ceres Grange, and District Lecturer, will install officers of Turlock Grange and confer the third and fourth degrees on two candidates, on Saturday, the 28th inst., at 12 o'clock M. The occasion will be taken advantage of to give a harvest feast, and a most earnest invitation is extended to Ceres Grange to be present and participate. As Turlock people are noted for their generous hospitality, all who attend may be assured of a grand social time.—Modesto News.

SOME of the Wheatland ladies, members of the Grange, recently visited Yuba City to talk over in a sisterly, informal way, matters concerning the State Grange, which meets at the latter place in October.

JUDGE BLACKWOOD, of Eden Grange, visited Temescal Grange last Saturday. A fair attendance of members were present, and interesting discussions prevailed.

## San Francisco Girls' Union.

## A Card to the Public.

The growth of this society demands new lines of work and funds for an additional building. Arrangements have been made with Mr. E. W. Steele (brother of Senator Steele), a most interested and warm supporter of the work, whereby the Union can erect and own a suitable building, in addition to the one occupied on his grounds.

This society, with very little noise and very little assistance from the public since its incorporation, has gone steadily forward and been virtually equivalent to a fraternal order for the respectable, bread-winning girls of city and State, furnishing a pleasant home (for the period desired) for over 250 strangers and homeless residents; has placed in business positions 356 within the past 18 months, and given, through its auxiliaries and correspondence, assistance to many more. Its influence has been to divert from the precarious shop-life and uncertain, purely mental and mechanical work, to the ranks of housekeepers (where skill and efficiency always find room), the many who have found neither success nor permanence in any calling hitherto—particularly the young, who can make of housekeeping in all its departments a science no less than book-keeping, securing comfort and competence and giving respectability by virtue of skill and intelligence to every industry the world needs. To this end we propose to establish

## A Training School.

Which shall include all branches of domestic work, taught in the most approved way; these classes to be open to every beneficiary member of the S. F. Girls' Union, or its branches, throughout the State, between the ages of 10 and 20 years.

From the self-supporting trained classes will be sent, with the society's indorsement, the help required by our sustaining members. To this membership we most earnestly invite all who value skill, in household and all manual work, who would see the self-dependent classes of our California girls made strong in themselves—mistress of circumstances and the environments of womanhood.

Most earnestly, too, we invite the co-operation and material aid of all labor organizations, of whatever name, who recognize in this society's work the advancement and protection of our sex; the justice and respect due efficient labor of every kind, and which it is sure in the long run to command; the helpful solution of the Chinese question, by substituting competent white help, as fast as qualified, in every house and business suited to woman; in short, the restoration of harmonious relations between capital and labor, so vital to the future prosperity and happiness of this commonwealth.

We acknowledge most gratefully the assistance of citizens who saw the necessity of this work on this coast and gave us such personal aid in the start as assured its success. Again we ask their co-operation and that of all friends of the enterprise in the wider work that opens to us, and such donations in cash, building material, scholarships and memberships, as each can contribute.

Mrs. Crocker's donation has been supplemented by scholarships from ladies and business men in this city, Petaluma and Santa Cruz. There are few who cannot at least spare a membership of \$3 in this work of philanthropy. We hope for such response as will insure the necessary \$3500 for this new departure by October 1st.

The public are invited to visit or communicate with the society at their rooms, 714 Bush St., S. F. MRS. C. E. KINNEY, Superintendent.



# AGRICULTURAL NOTES.

## CALIFORNIA.

### Alameda.

**VINE-TRAINING.**—Livermore *Herald*, Aug. 12: Vines trained on the Chaintre and Guizot systems, in this valley, are carrying their fruit almost perfectly, this season. When the vine is laid down, its laterals all grow upward, thus forming an umbrella-like protection to the bunches of grapes, which extend along the stalk, instead of being massed in the crotch of the vine, as in the ordinary stump pruning. The vines should be supported from the ground on pegs, or a light framework of laths. The same result may be obtained by extending the canes on low wires, supported at regular intervals by stout posts. A. Duvall has several acres so trained, on his Bellevue vineyard, in this valley. The following from the St. Helena *Star*, speaking of the Reislings in the Krug vineyard, shows what this system will accomplish in a year where the best St. Helena vineyards are producing but two tons of Zinfandel to the acre: "In this vineyard can be seen Reislings that will produce from 10 to 12 tons per acre. In place of the ordinary stake for these vines two wires have been stretched horizontally from post to post and the vines allowed to run along the wires, having only a space of seven feet one way between the vines and forming a solid wall of foliage and fruit along the wire. As a result the grape is protected from the sun's rays, and the yield is marvelous, the bunches are large, and in many cases, on the horizontal limbs, extended the entire length of wood, forming a solid and continuous chain of grapes. No person without ocular proof can realize the tremendous advantages of this system, and only a visit to Krug's can in any way convince one that such a yield as 10 or 12 tons is possible." Quite a number of our vine-growers are experimenting on the Chaintre and Guizot systems, among them, Chas. A. Wetmore, Clarence Wetmore, Julius P. Smith, Fowler Bros., Jos. F. Black, Howard Black, Bernard & Wente, and J. H. Wheeler. The two systems vary in this way: in the Chaintre, the rows are planted 14 feet apart, and the long pruned canes, which are raised on stakes, to allow of cultivation, are allowed to cover the entire ground during the fruiting season if they will, being supported from actual contact with the earth by forked sticks. In the Guizot system, there are two canes—one of this year's wood, trained to a stake; and another, of last season's, laid down. The following season, the old cane is pruned away, the new one laid down for bearing, and another raised to the stake, and so on. In this system, the rows may be seven feet apart, as there is never the length of cane seen in the Chaintre. The Guizot will probably be the more popular of the two, as it may be applied to all long-pruned varieties in our present vineyards, and does not require special staking. Many others contemplate putting down vines, next season. It should be borne in mind, however, that to be of value to the fruit, the canes must be laid down early—before the laterals have made much of a start. Otherwise, they will not turn upward, and form the canopy which so tends to furnish shade and an even temperature for the fruit.

**STRAW.**—Haywards *Journal*, Aug. 21: We can remember, not many years ago, when straw was looked upon as useless to the farmer, and was either burned up or given away. But this idea has been exploded long since, and straw baling is now a recognized industry in this valley and adjoining townships. It not only gives more work for the balers, but when you come to look into it, there is quite a little speculation and opportunity to double your money. The number of bales of straw in this valley this year, more especially around Mt. Eden, would no doubt go as high as 40,000 or 50,000. There seems to be a steady demand for it, the principal buyers being speculators and warehouse men. It costs to bale it about 17 cents. Where a large amount is purchased on speculation, say from 1000 to 5000 bales, the price is about 25 or 27 cents, but the retail price is between 30 and 40 cents, generally 40. There is a large local demand, and farmers have little trouble in disposing of all they can spare. A speculator can store a number of thousand bales, and along in the winter the price generally goes as high as 50 and 75 cents in retail lots. There is quite a little profit in straw storing, after all.

### Butte.

**NUT-BEARING TREES.**—Oroville *Register*, Aug. 19: It has been demonstrated that the Black and English walnut will grow in all parts of the county except the high, mountainous region. The pecan and the butternut will readily grow all through the foothills. The different variety of almonds, such as the soft and hard-shell, the silk, paper-shell and the Languedoc, can be grown in almost every section of the county. The Italian, Spanish and American chestnut are found about a score of homes, so that the planting of nut-bearing trees would be no experiment, so far as the climate is concerned. Nut-bearing trees are found at Enterprise, and also at the Foreman place, above Bidwell Bar. They thrive well at Bangor and Wyandotte. At the Central house five or six varieties of nut-bearing trees are found in a flourishing condition. Biggs and Gridley show that the same trees will do well

there. About Oroville the almond, chestnut and walnut have been bearing for years. The same is true of Chico, where all varieties of the almond, walnut, chestnut and pecan reach perfection.

### El Dorado.

**RASPBERRY-GROWING.**—Placerville *Democrat*: There is, at Dr. Smith's residence on Coloma street, a patch of raspberry bushes which is worthy of note as a sample of what can be done by man in the way of controlling nature and eccentricities of growth that develop themselves. The raspberry patch is now bearing its second crop of berries for this season, and will soon produce the third. Hearing of this fact, we this week went down to take a look at the bushes, and to see what method the doctor adopted in procuring the result obtained—a vine almost ever-bearing. This result was obtained simply by the pruning out of old canes as soon as done bearing. In the fall a single cane is left on the plant. As spring comes, this cane branches out, buds and produces fruit, forming the first crop. Beginning at the tip, the fruit sets and ripens, being then succeeded by another fruit cluster lower down the stalk, this process being repeated until reaching well toward the base, when productiveness ceases. During this period of bearing, new canes have arisen from the root of the plant, and grown to considerable size. As the old cane ceases bearing, they are cut out as low down as possible, and the young shoot left to mature, which it does rapidly, going through a process similar to that through which the first cane passed. When through bearing this is also cut out, to allow the development of a third shoot, already well grown. This produced the third crop of berries of the season, and is then cut out from the roots. The young shoot then remaining is allowed to grow until checked by cold weather, and forms the cane from which the first crop of the next season is produced. By this method of handling the vines are ever kept bearing from early in the spring until late in the fall, and from appearances at no serious inconvenience or detriment to the plant, which gives every evidence by strength of growth and quantity and quality of fruit, of being as healthy and vigorous as ever. The plants, which have been undergoing the present treatment for over two years, have received no extra manuring, but have been continuously and thoroughly irrigated. What the name of the variety of plant so treated is, has not yet been determined, but that all varieties will not produce similar results under similar treatment has been demonstrated in several instances where Dr. Smith has similarly treated different varieties of vines, and has nearly killed them out in an effort to make them ever-bearing.

### Fresno.

**RESCUED FROM A PIT.**—*Republican*: Frank Ross spilt a well, into which a valuable colt had fallen, by digging the surrounding country into it. Result: the quadruped walked out without assistance.

**DIFFERENCE IN THRASHING.**—Some thrashers will give \$1 a quart for all the grain the farmer can catch in the straw, and others have made the remark that they don't mind a little waste, as they expect to get the cream of the thrashing. Farmers are learning to discriminate between wasteful and proper thrashing. Next year they will demand decidedly better heading.

**SHEEP SHORN.**—*Republican*, Aug. 20: Miller & Lux have just completed shearing 80,000 head of sheep at Firebaugh's, in this county. The sheep averaged about three and a half pounds of wool each, of a good quality. Wool is worth about 12½ cents per pound now, so that the amount taken from the 80,000 head is worth about \$35,000.

**DOES IT PAY?**—*Republican*, Aug. 13: We have frequently heard this question asked in regard to raising wheat upon the plains of the San Joaquin valley. It has been answered as many times, but not always in a thoroughly reliable manner. Prof. Hamilton Wallace is the owner of a 20-acre lot in the West Park tract, about five miles southwest of this city. Last spring he decided to have the place seeded to wheat, it being too late to set it to fruit. He hired every bit of the labor done—plowing, seeding, heading, thrashing and hauling to warehouse, and as a result he received \$201.43 net from his crop upon the 20 acres. As no special pains were taken to secure extraordinary results, this may be taken as an average yield during a fair season, with prices of labor high and grain extremely low.

### Los Angeles.

**WATER DEVELOPMENT.**—Ontario Cor. Los Angeles *Times*, Aug. 20: The surface flow of water was officially measured at the canyon the other day, and found to be 1200 inches. This, be it remembered, is the surface flow. The tunnel has already developed several hundred inches in addition, and will undoubtedly develop a thousand or so more. San Antonio canyon contains oceans of water, and that the purest and best obtainable on the continent. Hundreds of inches are constantly running to waste, notwithstanding this is the dryest season of the year.

**GRAPES THRIVING.**—The Malaga grapes here are doing wonderfully well, surpassing every one's expectations. Vines only two years from the cuttings are loaded with large, heavy clusters. It is worthy of remark that those which are doing the best have never been irrigated. The Sultanas are also bearing well the second

year, something quite unusual. The Muscats are likewise making a good showing, but they are, of course, expected to bear the second year.

**GLANDERS.**—The Santa Ana *Standard* says that there is considerable excitement in Orange about glanders.

### Lassen.

**HAY, GRAIN AND FRUIT.**—Susanville Cor. Reno *Gazette*, Aug. 18: Haying in this valley is about over for this season, and the yield is said to be much larger than in a number of years past. The harvesting of grain has commenced, which, from inquiries from all sections of the county, promises to be a light crop—from one-half to two-thirds of an average yield. The fruit crop is also light, although there evidently will be much more than enough for home consumption.

**SHEEP LICENSE TAX.**—A second suit brought under the amended license ordinance by the county of Lassen, Cal., against J. S. Cone to collect the license for raising, grazing and pasturing sheep in that county, was recently decided in favor of the plaintiff. The judgment will be for \$500 license and \$100 penalty.

### Sacramento.

**THE HOP-PICKERS.**—*Bee*, August 23: Yesterday the hop-growers and the Chinese contractors put their heads together, but they could not agree. Some of the growers have come to the conclusion that they will have to pay 90 cents if they want their hops picked. Contracts would have been entered into yesterday were it not that the contractors wanted the hop-growers to pay the foreman who is employed by each hop-grower to see that the picking is well done. The hop men refused to do this and the Chinamen said they would not go to work. It is expected that Monday will be the day that picking will commence, which will last about five weeks. A Chinese contractor says he can get a thousand Chinamen here in a few hours, if they are needed. Some of the contractors are afraid to contract for less than 90 cents, the hop-pickers' price, as they have been threatened by highbinders that if they do their lives will be made to pay for it. For every picker hired the contractor receives 25 cents, and by furnishing the pickers with their provisions at double prices, they make more money out of it than the pickers. Notwithstanding, however, the fear of some of the contractors to attempt to furnish men at a less price than 90 cents, Quong Lin Hing says he will get plenty of them at 80 cents. Last Friday A. Menke issued orders to his son, G. H. Menke, to employ all the white labor he can get to pick hops, they to board themselves, as he is not prepared to board a large number at present.

### San Benito.

**THE GREAT FIELD FIRE.**—*Merced Express*: Gen. Bost, who has been for some days in the vicinity of Hollister surveying the great burnt district in the San Juan valley, returned on Thursday. The fire which caused such destruction there on the 5th inst. was the most disastrous that has ever taken place in this State. The area of territory burnt over amounts to some 13 square miles, or over 8000 acres of land, all of which, Gen. Bost informs us, was covered with as fine a crop of wheat as ever grew. The total loss will foot up \$75,000, covered with only about \$17,000 insurance.

### San Diego.

**LOTS OF LUCERNE.**—One of the finest sights to be enjoyed about San Jacinto is the great alfalfa meadow in the woods on the north side of Central avenue, two miles from town. There are several hundred acres of alfalfa, put in during the past spring and partially irrigated by the waters of the San Jacinto river. It extends through a part of the forest which follows the northern boundary of the valley for so many miles.

**ARTESIAN WATER.**—San Jacinto *Register*, Aug. 19: E. C. Proctor on Monday finished boring another well, making the 75th artesian well sunk in the valley. The well was put down 111 feet, and the water is flowing one and one-eighth inches over the top of the six-inch pipe. The temperature of the water is about 61 degrees. The well is on A. A. Proctor's place, and the flow is more than sufficient for all purposes. Of all the flowing artesian wells which have been sunk in this valley since the pioneer well was sunk on December 3, 1883, the Proctor Bros. have been the contractors for all but 18.

**CATTLE DISTEMPER.**—San Diego *Union*, Aug. 19: Cattle in El Cajon have suffered from a disease affecting their eyes, the victims being principally milch cows. It first appeared some six weeks ago, and was at that time believed to be pink-eye, but experts in such matters pronounced against this view of the case. The disease has spent its force and almost entirely disappeared. There were no deaths, but some of the cattle became temporarily blind.

### San Luis Obispo.

**A HANDSOME STRANGER.**—Mrs. R. W. Summerville writes the *Tribune*: A flower of royal beauty has just been sent me by Mrs. Brumley, of this city, for identification. It appeared as a volunteer in this lady's flower garden, and is well worthy of a visit by all who are lovers of flowers. The blossom is a brilliant cup, three inches across, with three very large yellow sepals, and three much smaller panduri form petals of the same rich hue. The entire cup is thickly beset with spots of bright red, and the sepals are recurved, thus forming on its outer edge three large pendant scallops. The

colors of this beautiful flower recall our familiar tiger lilies; but all true lilies have six stamens set in the bottom of the cup, while this erects a tall, yellow column from its center, bearing aloft three curved stamens, and within these, three slender, bifid styles. The leaves are fluted like Corinthian columns; that is, they are long and narrow, somewhat cylindrical, and deeply veined and plaited. Botanists call this wonderful creation of nature the *tigridia pavonia*, and its native country is Mexico. It is of the same family as the crocus, the gladiolus, the pardanthus or ixia, and the iris; and through this last is royal in connections as well as in aspect, the lilies of France being *fleur de lis*, or *irises*, and therefore cousins to our superb plant from Mexico. This appearance of the *tigridia* among us adds one more to the large list of half-tropical plants that flourish out of doors, in our incomparable climate of San Luis Obispo.

### San Joaquin.

**NEW MUSKMELON.**—Lodi *Sentinel*, Aug. 21: Mr. J. Dickey, of Lodi, has introduced into this section a rare and excellent specimen of the muskmelon tribe. It grows very large and is almost round in shape. It has a peculiar yellowish color. The meat is white and in flavor surpasses any other muskmelon we ever tasted. We have seen a number of these melons raised by Mr. Dickey, which measure fully 36 inches in circumference. It seems that there would be a good profit in raising this fruit.

### Santa Barbara.

**HOLSTEIN-FRIESIANS.**—*Press*, Aug. 21: No little admiration and comment were occasioned upon the streets to-day by the appearance of a drove of the celebrated Holstein-Friesian cattle from the Ontare ranch. Mr. W. W. Burton, of Ontare, informs us that this stock is to be shipped on the *Orizaba* to-night for the State Fair, which opens at Sacramento on the 6th of September. The drove consists of 3 bulls, 18 cows and 34 calves. The former are Strathmore, a four-year-old weighing 2300 pounds (a magnificent animal); Aggie Idaline Fourth's Roland, three years old; and Ontare Chief, a yearling. On the *Santa Rosa*, next Sunday, a band of thoroughbred and imported horses, including six stallions, 10 mares and 10 colts, will be sent to the fair. This display at the State Fair from the Ontare ranch is certain to create a favorable notice for Santa Barbara.

### Shasta.

**SUCCESS IN GRAPE-GROWING.**—*Democrat*, Aug. 18: Geo. R. Walden yesterday presented this office with a box of very fine grapes of the Black Malvoisie variety, grown by Walden & Dozier near town. They are large and showy and very palatable. These are called the best black table grapes grown in California. We desire to congratulate the proprietors on their success. They are also making good raisins out of their Muscats. Both these varieties are grown on stiff clay land south of town, without irrigation, and the vines are only three years old.

**HAPPY VALLEY FRUIT.**—Anderson *Enterprise*, Aug. 21: A. W. Hubbard placed before our admiring gaze a box of peaches and grapes on Monday morning last, grown in that fine fruit belt known as Happy valley. The peaches are the largest and best we have seen during the season. The grapes are of the Zinfandel variety, of a dark blue color, large and round, and are, no doubt, an excellent wine grape. Land that can now be bought in that section for \$25 per acre will bring \$100 within five years.

### Sutter.

**BEGINNINGS OF BUCKWHEAT.**—The Sutter County *Farmer* says that Mr. H. Bolton, now their County Coroner and Public Administrator, is the man who sent the first buckwheat to the State of Oregon. The shipment was made in 1852, from Fort Wayne, Ind., and consisted, by actual count, of 64 kernels. It was sent to Jacob Kandall, who had searched the State for buckwheat seed but could not procure it. He wrote to Mr. Bolton, then a resident of Indiana, and procured through him the first seed ever introduced in that State. From these 64 kernels, Mr. Kandall raised the first year three pints; the following year he gathered eight bushels, and now the State of Oregon produces an enormous yield of this valuable staple.

### Sonoma.

**COOKED ON THE VINES.**—Index-Tribune, Aug. 21: The hot weather continues and the green grapes on farms in the upper part of Sonoma valley continue to be burned and blighted. Samples shown us seem to be scalded, causing the juice to run out over the bunches below, when those most exposed to the sun's rays become dry and parched, rendering them utterly worthless. The percentage of damage that will result cannot be estimated.

### NEVADA.

**COULDN'T SHOW THE HIDE.**—J. F. Triplett, a detective of the Nevada Cattle Association, swore out a warrant at Eureka last week for the arrest of Henry Fenstermaker, of Fish Creek, charging him with having violated Section 3 of a law passed by the last Legislature in behalf of the stock interests of the State, which reads as follows: "It shall be unlawful for any person peddling the meat of any bovine animal, who is not the keeper of any shop or meat market, to sell such meat without having, and upon request, exhibited the hide of such animal, containing the brand and other marks thereon." The jury failed to agree and the case is to be retried.





### That Mosquito.

Familiar hum, that wakes the shades of night  
While darkness hides its cause from mortal sight,  
I fear I'll have to rise and light my lamp,  
And drive the darned imp back into its swamp.

The insect treads my cheek; I raise my paw  
And strike with vengeful force. I nearly broke my jaw,  
But missed the wretch, which, dodging in the dark,  
May try again. Then at the sucking mark,  
While he is busy, I'll take surer aim  
And put a stop to that mosquito's game.

A hole was in my curtain, and the pin  
Had fallen out; else how could he get in?  
For I was careful when I came to bed,  
And drew the net with caution o'er my head.  
I'm sure he could not through the meshes crawl,  
As each aperture is so very small;  
Although he might screw up his legs, and twist  
And use his trunk as I might use my fist,  
Or writhe and wriggle till he burst his skin;  
But even then he never could get in.

He's here again, and nearer still he comes,  
Up to my face maliciously he hums,  
Yet seems afraid and hovers near my nose  
Till, with a sudden buzz, away he goes.

I cannot see which way the critter went;  
But he must see, or is it his keen scent  
That guides him onward? For the spot he'll find  
With aim unerring where he sets his mind.  
Ah! he returns; I'll let him stick awhile,  
He'll get but little, be it blood or bile;  
My itching temple feels him probe the skin,  
And send his dart a little way within;  
I take the chance and give a sudden blow—  
'Twas death; I killed him ere that he could know  
Or feel the stroke by which his blood was shed;  
Perchance 'twas mine—the little that he bled.

—RUSTICUS, in Santa Barbara Independent.

### The Laboring World.

[Written for the RURAL PRESS by I. C. HATCH.]

Let us have social, civil, political and ecclesiastical institutions formed on these principles of recognized dependence, equality, justice, benevolence and sympathy, and we shall have no complaining, nor any just cause for complaint, either on the part of employers or employees. Let the principles of Christianity prevail, and we should never see, as we do now, especially in the Old World, the millionaire look down with contempt on him who for the scantiest subsistence must grind at the mill till the body is crushed and his soul corroded. It has been computed that if all the human beings on the globe would labor but four hours per day, the whole race might live in competence and comfort. Would God that the pulpit could utter some word that should help on that truly Christian consummation. Would that every rich man might be willing to work with his own hands, if need be, four hours each day, could he thereby release his brethren, toil-worn, from these crushing tasks and pour joy, as he often might, into the poor man's cup. As it is, the present condition of things is lamentable. Our social condition is indeed a problem. Of all ages, this is the age of progress, improvement and discovery. Never in the history of the world have there been such improvements and discoveries as those which have marked the last 50 years. And yet, after all these wonderful improvements, these amazing discoveries, these astonishing results, the poor, especially in our large cities, are still poor, and poorer still than ever. In desperate recklessness multitudes of operatives, especially those whose wages are low—whose trade is subject to frequent depressions—who have had to contend with the grasping spirit of competition, or with the appliances of machinery, are glad to seize any solution of the sad problem, and to look upon Christianity and its professors as the chief obstructions to social progress. Such is the condition of things to-day.

The Bible, say the laboring classes, is in league with the rich and the great, with the merchant who has amassed his gold, the manufacturer who has succeeded in his enterprise, and who has done so, in the estimation of many workingmen, whether right or wrong, at their expense; and thus in many instances acrid suspicion and fierce contempt are engendered in the bosoms of many of the employed toward their employers, who may be members or office-bearers in Christian churches, and through them the same feelings are directed against Christianity itself. That in many cases there is just ground for this charge is doubtless true; but there are many honorable exceptions, and true Christianity practiced will increase the number of these.

What is Christianity?

Let us discriminate between what is Christianity and what is not Christianity. Turn to the Bible, and how readest thou?

The greatest of its heroes were taken from

the humble walks of life. David was a shepherd boy upon the mountains of Judea; Moses kept the flock of Jethro in the far-stretching solitudes of Arabia; Elisha was following his oxen at the plow when Elijah, the Tishbite, who also seems to have been reared in the obscure retreats of humble life, threw his inspired mantle around him.

The prophets were not dandled upon the lap of ease, but theirs was a life of rugged poverty, struggle and toil. Jesus himself was the greatest poor man that ever lived. Born in a stable, He was brought up beside a work-shop, familiar with the ways of hard-working men. His hands must have been rough and horny with labor. The food He ate, the clothes He wore, the chair He sat upon, the bed on which He lay, must have had the stamp of humble life upon them. Nor did He seek when he became a public man to quit this poor society. His chosen companions were chiefly working fishermen. His life was the life of an itinerant preacher, and He was more poorly furnished with comforts than many of His class. His journeys over the bare wilderness of Judea and the tropical plain of the Jordan were performed on foot.

Demands would come on Him for taxes when His purse was empty. He would sit down to rest on the stone-work of a well, and be indebted to a stranger for the vessel He drank from. At His death His only property was the clothes He wore, and the only provision He could make for His nearest and dearest relative was to ask a disciple to give her a corner of his house. Did not Jesus identify Himself with the poor and the lowly?

No advocates for the rights of labor ever pleaded so earnestly as the inspired writers have done.

The Mosaic dispensation abounded in guarantees for the interests of the workingmen; it taught mercy and forbearance in the exaction of toil, and denounced oppression and parsimony as odious in the sight of God. "I will be a swift witness against those that oppress the hireling in his wages, the widow and the fatherless, and that turn aside the stranger from his right." (Malachi iii: 5.) Again: "Defend the poor and fatherless; do justice to the afflicted and needy; deliver the poor and needy, rid them out of the hand of the wicked." (Psalms, lxxii: 3, 4.) While the heaven-protected laborer of Israel enjoyed this immunity from injustice, having his rights defended and his wrongs avenged, in every other land an unmitigated despotism erased all degrees between power and slavery.

### The Working People.

These constitute a very large proportion of the community: a class which has, of late years, been making rapid progress in education, income and political power. They are bold to assert, and strong to vindicate, their due position as a great constituent of the commonwealth. Legislators, even in our national halls, could not now ignore them if they would, and should not if they could. The artisans have discovered that the nation cannot do without them, and therefore they have endeavored, in the present generation, to make better terms for themselves than their predecessors enjoyed; and in this they are not mistaken, for society owes unpayable obligations to labor. Our Creator gave us the globe as He did the ore in the mine; neither the one nor the other is of any use without a working population.

Whatever the friends of Christianity may think of the changes that have taken place during the present generation, let me assure them that this is a tide that cannot be turned back. Let them rather rejoice in the might of its volume, and set themselves to purify and rightly direct the stream. The world now believes that the religion announced by the Author and Finisher of our faith embraces humanity as well as divinity in its range. We must meet the great questions now raised in behalf of humanity, and not be overtaken by them.

Human weal and human woe cannot, as subjects, be postponed. Whatever of evil and danger may be found to lie in the present condition of things should be fairly looked in the face, in order to shake off the lethargy and send them out in a mission upon society—to cure its evils by the grace of God, and employ its vast resources on the side of mercy and truth.

Though a very large proportion of working people are estranged from the Christian church, positive unbelief has not, by any means, spread so widely among them as many would suppose. A sprinkling of intellectual infidelity may be found among them as among others, but infidelity is not, by any means, the rule in their ranks. In very large numbers the belief remains more or less dormant, indeed, but ready to be revived when the truth in love can be brought in contact with their homes and their hearts.

That we may successfully bring religion to bear upon them, there are some things it is well for us to recognize:

That it is a perfectly natural and perfectly proper thing for labor to organize for the protection and promotion of its own interests. Moral reformers, literary men and professional men, all have their clubs, associations and societies. Moreover, capital organizes. Every great commercial corporation in the land represents organized capital. These organizations are sometimes still further combined, corporation joining with corporation—offensive and defensive—until not only the aggregate of wealth which they represent, but the amount of economic power they control, is startling and even

dangerous. It is not only natural that labor should organize, but it is proper and right. Rich men are not all robbers, and corporations are not all soulless; but capital is sometimes oppressive, especially in its organized or corporate capacity. No one, however prejudiced against organized labor, but must admit that such an organization as that of the Brotherhood of Locomotive Engineers has been a good thing.

A capitalist recently said that this organization was one of the best things that had ever been done for railroads. It had not initiated a single strike, but had been able in every occurrence of difference between corporations and employees to settle matters amicably and satisfactorily.

"We must recognize the distinction between the working class and anarchists, nihilists and communists."

With them or their methods the great body of workmen have no sympathy. The anarchist is the foe of all law, all order, all morality, all religion. His law of life is the indulgence of his personal brutality. He acknowledges no right, save his own to do as he pleases.

Many of these men have emigrated to this country because they were constantly liable to arrest in Europe, while others of them have been imported by contractors in the interest of cheap labor. On the plea of freedom of speech, they have been allowed to preach, unmolested and unrebuked, their incendiary and murderous doctrines; and, for the sake of their votes, they have, in such cities as Chicago, been given police protection as they have marched through the streets, carrying aloft red and black flags and banners threatening universal destruction of property and death to all property-holders.

We must not overlook the fact that, in the long run, the laboring-man comes off second best in nearly every strike—saying nothing of the individual and national loss entailed while the strike lasts. Careful calculations made by Bradstreet show that the aggregate losses due directly to the recent strikes amount to the enormous sum of \$30,000,000. In three weeks 250,000 strikers sacrificed the sum of \$3,000,000 in wages.

While, therefore, the legal right of workmen to strike is acknowledged, the striker should ever bear in mind that when he quits work he vacates his place absolutely, and his former employer is under no obligation—legal or moral—to employ him again; nor have strikers any right—moral or legal—to require employers to discharge any good men engaged during the strike in order to make room for returning strikers; nor have they any right, because they stop work, to compel others—by force or intimidation—to stop work.

It is admitted that every workman is his own master—a free man to decide for himself, possessing the right to work or not work, according to his own free will and choice; and no man with any respect for his manhood or regard to his personal right, as a free man, could belong to an association that required him, on joining, to abdicate all freedom of action forever, or to take an oath that henceforth they should be his masters and dictate to him when and where he should work, for whom and for what he should work; that shall suddenly say to him, when he is filling a position in which he is satisfied with the work and wages, "You must leave your employment and remain idle for three or six months, even at the risk of starving your family."

The man who would do this would be no free man, but a slave.

Santa Cruz.

ANTI-PROFANITY.—The Commercial Travelers' Protective Association of the United States have issued a neat placard to be placed in the hotels, banks, depots, etc., throughout the country. It is called the anti-profanity placard. At the top are the words: "Gentlemen are Requested Not to Use Profane Language." In the center is a cut representing commercial travelers just arriving at a depot. On each side of the picture are mottoes, and below, the words: "Commercial Travelers, Attention. The Travelers' Protective Association of the United States indorses the following: Believing that the use of profane language is an unnecessary and ungentlemanly habit, not only disgusting but tending to lower our self-respect and degrade us in the minds of gentlemen belonging to other professions, and that, if the attention of traveling men who are naturally gentlemen is called to the subject, they will refrain from the use of profanity and set an example that will exert a powerful influence in favor of decency and good manners, therefore we request the hotel-keepers and others to place the above card in some conspicuous place in their establishments, and to call the attention of all that are addicted to the use of profanity to the same."

AN IRISH CUSTOM WORTH IMPORTING.—The traveler, on arriving at Dublin, finds the hackmen at the station quite indifferent about business. In London, and almost any other city in civilization—out of Ireland—you no sooner step from a railway car than you are beset by a noisy crowd of hackmen, all soliciting your patronage at the same instant. In Dublin the hackmen, or rather cabmen there, don't come near you. They are sitting or standing one side or by their cabs, talking or bandying jokes with each other, heedless of expectant customers. They evidently think that if you want their service you will step forward a few feet

and ask for it; but they never go out of their way to annoy you by vociferous or even quiet solicitation. The custom is in marked contrast with the nuisance met with at every city in this country, and might well be imported hither.

### California Names.

Many of the names of cities, towns, rivers, etc., of California are derived from Spanish and Indian words. The first Spanish settlers were Catholic missionaries; hence, the many sacred names. The male saints have "San," the females "Santa," preceding their Christian names. The missions were all named from saints or sacred dogmas. There are San Miguel, San Gabriel and San Rafael (from the three archangels, Michael, Gabriel and Raphael); San Juan Bautista and San Juan Capistrano (St. John the Baptist and St. John of Capistrano); San Luis Rey and San Luis Obispo (St. Louis the King and St. Louis the Bishop); San Fernando Rey (St. Ferdinand the King); Santa Cruz (the Holy Cross). Other Spanish sacred names, not derived from saints, are Trinidad (Trinity); Sacramento (Sacrament); Jesus Maria (Jesus, the son of Mary), etc.

The errors which Americans most frequently commit in pronouncing Spanish words are in giving to a the English sounds of a in fat and fate; giving to s the sound of z; to j and g, before e and i, the same sound in English; to qu the sounds of the English w, and on putting the accent on the first syllable—English fashion. The following, from Hittell, may serve as a guide to the proper pronunciation of some of the names. It is not a perfect guide to pronunciation, but only an approximation:

Diego—dee ay go.	Napa—nah pah.
Suisun—soo ee soon.	Jose—ho say.
Alameda—ah lah may da.	Jesus Maria—hay soos mah ree ah.
Sierra—see er ra.	Putra—poo tah.
Nevada—nay vah dah.	Lejon—tay hone.
Mateo—mah tay o.	Farallones—fah rahl yo.
Monterey—mon ta ray ee.	Luis Obispo—loo ess o nes.
Los Angeles—lohs ahn hel rahf ah ale.	Gabriel—gah bree ale.
Vallejo—val yay ho.	Miguel—mee gule.
Vallecito—val yay thee to.	Pajaro—pah har ro.
Joaquin—ho ah keen.	Pacheco—pah chay co.
Juan Bautista—whahn Cahuilla—rah oo eel ya.	Hueneme—way nay may.
Tamapais—tah mal pice.	Dos Pueblos—dohs pway blos.
Nietos—nee ay tos.	

In the pronunciation of the names of Spanish and Indian origin, the letters usually have the Spanish sounds. The following from Hittell's Resources of California is a good guide. A is like a in far; e like a in fare; i like ee in meet; o like o in go; w like oo in fool. H is silent; j and g before e and i have a sound similar to that of the English h; s never has the sound of z, but is always like as in hiss; qu before e and i is like k. Ll is like ll in William; the Spanish, or with the circumflex over it, is like ni in union. There are no diphthongs in Spanish. Every vowel is sounded separately. Words ending in a vowel in the singular have the accent on the syllable next the last; those ending in a consonant on the last.

The following list of California names with their meanings will be of interest to visitors to the State, and by what has been said above, the pronunciations can readily be made. This is compiled from various sources:

Alameda—An avenue of elms or cottonwoods.  
Alcatraz—Pelican.  
Almaden—Arabic. The mine.  
Alvarado—The white road—a proper road.  
Alviso—The view.  
Amador—The lover.  
Alta California—Upper California.  
Agua Fria—Cold water.  
Agua Caliente—Hot water or warm spring.  
Alamo—Elm.  
Baja California—Lower California.  
Calaveras—Skulls.  
Calistoga—Cup and gown.  
Chico—Small.  
Colusa—An Indian name.  
Contra Costa—Opposite coast.  
Corral—Yard or pen.  
Coyote—A kind of wolf.  
Campo Seco—Dry field.  
Corte Madera—Place where wood is cut.  
Del Norte—Of the north.  
El Dorado—The golden land.  
Esperanza—Hope.  
Farallones—Rock islands in the sea.  
Fresno—Ash.  
Hornitos—Little oven.  
Lobos—Wolves.  
Loma Prieta—Dark mountain.  
Los Angeles—The angels.  
Laguna Seco—Dry lagoon.  
Los Gatos—The cats.  
Marin—Chief of the Tomalo Indians, of the sea.  
Mariposa—The butterfly.  
Merced—Mercy.  
Modoc—Strange or hostile Indians.  
Mount Diablo—Devil mountain.  
Monterey—The king's mountain.  
Monte—The mountain or forest.  
Montecito—Little mountain.  
Nevada—Snowy.  
Pah Utes—Utahs that live near the water (Indians).  
Pajaro—The bird.  
Pescadero—The fish.  
Placer—Gold diggings.  
Plumas—The feather.  
Potrero—Pasture grounds.  
Presidio—Garrison, fortress.  
Prieta—Black.  
Rincon—Place where two corners meet.  
Rio Vista—River view.  
Sacramento—Sacred mind.



Salinas—Place of salt.  
 San Andreas—St. Andrew.  
 San Buenaventura—St. Good Ventura.  
 San Diego—St. James.  
 San Felipe—St. Philip.  
 San Francisco—St. Francis.  
 San Joaquin—St. Joachim.  
 San Jose—St. Joseph.  
 San Lorenzo—St. Lawrence.  
 San Luis Obispo—St. Louis the Bishop.  
 San Mateo—St. Matthew.  
 San Pablo—St. Paul.  
 San Pedro—St. Peter.  
 San Rafael—St. Raphael.  
 Santa Clara—St. Clara.  
 Santa Cruz—Holy Cross.  
 Saratoga—Healing waters in a rock.  
 Suelcito—Little willow.  
 Shasta—Stone house or cave.  
 Sierra—Saw, or mountain chain.  
 Solano—The potato.  
 Sonoma—Valley of the moon.  
 Sonora—Harmonious sound.  
 Tahoe—Big or deep water. Some say it means grasshopper.  
 Tamalpais—Country of the Tamal Indians.  
 Tejon—Badger.  
 Temescal—Indian sweat-house.  
 The Dalles—Stone spout for water.  
 Tomales—A tribe of Indians. A kind of food.  
 Tulare—The tule or rush.  
 Tule—Rush of a plant.  
 Utah—Mountain dwellers.  
 Vacaville—Cow town.  
 Vara—A measure about 33¾ inches.  
 Vallejo—Big valley.  
 Walla Walla—Away down.  
 Yolo—Region of rushes and tules.  
 Yosemite—Large grizzly bear.  
 Yreka—Corruption of We-e-kah-white.

The Central Light.

It cannot be denied that the Bible stands alone among all the books of the world—grand, peculiar and unique. It seems to be surely indestructible. Works of history become legendary, books of poetry turn into wild mythologies, and in time vanish as mist before the sun. Books, like their authors, grow old, wither with age and die. Many fall still-born in their author's study or in the publisher's hands. Other books look sickly, discouraged, as if they meditated suicide. Our great libraries may very aptly be called the cemeteries of dead books. But not so with the Bible. It started on its beneficent pilgrimage in the world's morning; grew under theocracy, monarchy, anarchy, democracy; it has passed through storms of fire, centuries of hate, and still lives, the marvel of time. When men began their opposition to it, all the copies of it in the world might have been carried on the shoulders of one man. To-day there is said to be 200,000,000 copies in circulation, and great Bible houses are producing tons of the Holy Scripture every day. It speaks all languages. It has gone into the graceful Greek, the stately Latin, the flowing Italian, the passionate French, the metaphysical German, and the pushing, enterprising, commercial Anglo-Saxon. It is a strangely aggressive book, and along its path blessings bud and blossom. It crossed the British Channel, lighted Wickliffe's lamp and made England the freest and thriftiest nation of the age. It crossed the Atlantic, struck Plymouth Rock, which, like another Horeb, gushed into streams of blessedness. Churches, asylums, schools of learning, spring up along its path, ringing their bells and stretching forth their hands in praise. Said Dr. Talmage in a sermon recently: "It is the lamp that kindles all other lights. It is the home of all majesties and splendors. It is the marriage ring that unites the celestial and terrestrial, while all the clustering, white-robed denizens of the sky hovering around rejoice at the nuptials. This book—it is the wreath into which are twisted all garlands; it is the song into which are struck all harmonies; it is the river into which are poured all the great tides of hallelujah; it is the firmament in which suns and moons, and stars and constellations, and universe and eternities, wheel and blaze and triumph." No book has given so much comfort to the living, so much consolation to the dying. After one of the battles before Richmond, a dead soldier was found with his hand lying on the open Bible. The summer insects had eaten the flesh from the hand, but the skeleton finger lay on these words: "Yea, though I walk through the valley of the shadow of death, I will fear no evil, for Thou art with me; Thy rod and Thy staff they comfort me." Whatever we may say of the many theories of inspiration, we must all conclude at least with Matthew Arnold, that there is no book in the world that contains so much that "makes for righteousness."—*Masonic Record.*

POLITICS.—The time may come when politics will mean all that is noble and good; when a small boy will break an apple in two and give his little sister the bigger half; when a tramp will work and a stray dog won't bite; but the day will never dawn when the fly can tickle a droway man's nose without getting itself disliked.

YOUNG FOLKS' COLUMN.

Young Folks' Club.

[Written for the RURAL PRESS by MRS. J. HILTON.]

DEAR YOUNG FOLKS:—We are all delighted with the answers sent, and all will be tried. The club would like Harry Hopkins, of Santa Rita, Santa B. Co., to tell us if his dog's foot has got well, and what cured it. You see we all feel an interest in the club birds and animals.

Polly says she will try pigeons again, and treat them as B. tells her. She had a pair once and they disappeared all at once. She thought they had flown away, but she found their dead bodies behind a log two or three months after, and she thought there was no use trying to keep them. But times are changed, so maybe she can succeed this time. She advises Mattie to feed her mocking birds hard-boiled egg and cracker soaked in milk every day, and once a week give a little cayenne pepper.

The president of the club says he has three recipes for fleas on chickens: diluted carbolic acid plentifully sprinkled about, and tansy leaves put in the nests and strewn about the hen-house, and Pyrethrum powder. Where squirrels are allowed around a place you can never get rid of fleas, for the ground around a squirrel hole is alive with them, and whatever animal passes over them is pretty sure to take some along with it. So kill off the squirrels if they are near you, and then go for the fleas.

I will ask a question this time. Please give me the name of a bird that eats up all my blackberries. It has a striped head, is of a dun color and has yellow feathers on each side of the breast, and has a bill like a canary, but much larger, although the bird is only about half as large again as a common canary. Scarecrows are of no avail; only death will stop their depredations. Lewis cooked one, but it was so bitter he could not eat it.

Billy Wise read a piece of his own composition at the last club meeting, and they want it printed if the editors think it good enough:

A Poem by Billy Wise.

While taking a walk through my yard one day,  
 I thought that I heard a queer voice say:  
 Good morning, Miss Brahma, good morning, my dear;  
 Why, what is the matter? You're looking quite queer,  
 Oh, dear, said Miss Brahma, I'm really concerned  
 About what men say—I've only just learned  
 That Mr. A. says that Miss Brown Leghorn can do  
 More egg-laying than I; but, take the year through,  
 I do not believe it—now, really, do you?  
 Well, I'm sure I can't say; but some men, you know,  
 In the letters they write, make the figures to show  
 That you are the rival (I'm sure it's quite funny),  
 And all that you do brings much more of the money  
 That people do give for our eggs and young chicks.  
 Oh, dear, said Miss Brahma, just think what a fix  
 We poor chickens are in! We never quite know  
 When we are full grown whether for dinner or show.  
 Our poor bodies are taken—  
 A thin little voice broke in with a pipe:  
 I really declare I can't, for my life,  
 See what they do with us; I know I'm so small  
 That when I am dead there can nothing at all  
 Of good from my bones be taken.  
 Oh, we know why you're kept, said poor Brahma  
 chicken;  
 You are only for show, but it makes my blood  
 thicken  
 To have those men look and comment on my size—  
 How yellow my legs and how bright are my eyes.  
 Now, dear friends, I've been thinking a petition  
 we'll write,  
 And before all those people will hold it to sight,  
 Asking mercy for all.  
 Yes, do, said the Bantam, for although we are small,  
 Even if *sufficit in quantum*  
 Our bodies would make a good stew *I can't grant*  
*em*—  
 With pride to myself, but enough eggs I will lay  
 them  
 To make it all right.  
 Now this petition, who'll write it? I will, said a  
 voice,  
 And Mr. Plymouth Rock bowed. Yes, you are my  
 choice,  
 Said Miss Langshan, then tittered and put on such  
 airs  
 That Miss Houdan quite pouted and said that at  
 fairs  
 She had gained much attention, but here it seemed  
 It was only on those who were forward there gleamed  
 A shadow of a chance to say what they wanted.  
 Well, now, said the Fighting Cock (and he looked  
 fairly enchanted),  
 Keep still, and give us a chance this petition to  
 draw,  
 I shall have to depart or show you my claw.  
 Then the Cochon so stately said, My dear friends all,  
 Let us say what each wants and give to Sir Paul  
 Our petition right now, for I see he is blinking  
 And rubbing his eyes—I am sure he is thinking  
 How fat we have grown, and that he must go—  
 Right off to the town and put a big blow  
 In the papers about us, and our friendship'll be  
 broken—  
 And we will be scattered. Now, Sir Rock, you must  
 say  
 To that man by the fence that we are all clay  
 And not fit to be eaten, but that our eggs are first-  
 rate,  
 And we will lay early and late  
 For him if he'll grant us our babies and wives—  
 Forever, ahem!—then sign with our names.  
 My name I'll indite, then yours you must write.  
 Then up stepped Plymouth Rock and in his best  
 style,  
 He wrote it all out, and then in a pile  
 The others all tumbled, so eager they were,  
 And after their names added "fighter beware!"

GOOD HEALTH.

Cold in the Head.

A cold in the head is believed by many to be "catching." In such case it must be caused by a germ which is introduced from hot, unventilated rooms, when we are weak or tired or exhausted. To break up a cold in the head it should be attended to in its earliest stages. If allowed to run two or three days it generally runs its course, in spite of all treatment. The most effectual means in the very first stages is a vigorous effort of the will. The effect of this is to establish more securely the equal circulation of the blood, which is most important. Another method is to inhale steam from boiling water, as hot as can be borne, through the nasal passages for about half an hour twice daily. This remedy is valuable in every stage of the disease. The method of applying it is as follows: Sit in an easy chair before the fire; throw a shawl loosely over the head, so that it may be folded over the head and held with one hand, leaving plenty of room for the steam. Now, with a spirit lamp boil a pint of water in an inhaling cup, with a rubber tube attached to the nozzle to convey the steam to the region about the mouth and nose. The only caution necessary is to be careful not to let the vapor escape to near the nasal passages, when there is danger of scalding them. A tinsmith will make the apparatus, or it can be bought of the instrument-makers. Still another method is to drink hot water. The Turkish bath in the first and last stages of a cold is a most excellent remedy; in the middle stage it does not do so much good. There are many drugs used to break up a cold, among them quinine, laudanum, etc., but we prefer the simple remedies before named. Most important of all is to guard against colds. This is best effected by daily cold bathing and friction, by abundant exercise, the proper ventilation of rooms and suitable clothing. To all delicate persons colds are but the beginning of lung troubles, which are dangerous in the extreme.—*Herald of Health.*

THE MULLEIN PLANT.—A good deal has been written lately about the mullein plant and its efficiency as a cure for consumption. Extracts and decoctions of this plant (*Verbascum thapsus*) were recently exhibited at the Cork Exhibition, but the judges would not pass any verdict, as the chemical and physiological properties have not yet been investigated. It is under the synonym of cow's lungwort, popularly looked upon as of value in diseases of the respiratory organs. In reference to the use of the above, Dr. Quinlan, of Dublin, writes to the *British Medical Journal* that three ounces of the green leaves should be boiled for 10 minutes in a pint of new milk. The liquid is then strained, sweetened to taste, and drank while warm. This dose can be repeated twice or three times a day. This high authority has no doubt of its efficacy as a curative in the earlier, and a palliative in the later, stages of pulmonary consumption. Care should be taken to use the leaves of the great mullein, known by its thick mucilaginous and woolly leaves.

EATING BEFORE RETIRING.—The ancient prejudice against eating just before retiring is strongly and justly condemned by modern science, experience having shown it to be unfounded. There are exceptions to the rule, but few people are injured and many positively benefited by a slight repast before retiring. A glass of milk and a biscuit or cracker is better than any hypnotic drug to put one to sleep, and in most cases may be taken without fear of "nightmare" or any other form of distress. Going to bed "on an empty stomach" is a good way to invite sleeplessness and ultimate derangement of the digestive organs and general health.

WHITE TEETH.—There are no such things as white teeth, as can be proved by contrasting those called white with snow, raw cotton or marble. Roughly, teeth can be divided, as regards color, into blue, gray and yellow, with hundreds of different shades. The apparent whiteness is due to the complexion and hue of the lips; and the "glistening ivories" of the negro are, as a rule, so exceedingly yellow that they would disfigure a white person. It is the black skin, hair and eyes that make them look white.

DYING FROM EXHAUSTION.—A leading physician says that a patient who is lying dying of exhaustion is generally dying of starvation. We give him beef tea, calf's foot jelly, seltzer and milk—that is, a small quantity of the sugar of milk and some fat; but the jelly is the poorest sort of food, and the beef tea is a mere stimulant. The popular belief that beef tea contains "the very strength of the meat" is a terrible error; it has no food value.

SCARLET FEVER.—A girl from Bath, Me., had scarlet fever while at boarding-school. She recovered and went home, and a trunk containing clothing worn while she was ill was put away in the garret. Six months afterward two little children playing in the garret opened the trunk and took out some of the clothing. In a week both were taken very sick with scarlet fever, and one died. No other persons in the neighborhood were ill.

DOMESTIC ECONOMY.

QUEEN OF PUDDINGS.—One and a half cups of sugar, one quart of milk, two cups of very dry, fine crumbs, one tablespoonful of butter, one quart of red raspberries. Rub butter and one cup of sugar to a cream; beat in the yolks. The crumbs should all this time be soaking in the milk. Beat them into eggs and buttered sugar, and when light pour the mixture into a buttered bake dish. Bake until the middle is well set; draw to the oven door; cover with berries, strew sugar thickly over and among them, and spread deftly over all a meringue of the frothed white of the eggs, stiffened with two tablespoonfuls of powdered sugar. Shut the door and brown the meringue lightly. Set away where it will cool quickly, then leave on ice till wanted. Eat with cream. This is not a new recipe, but among the many variations of the far-famed "Queen," Marion Harland regards the above as the simplest and best.

ROAST FOWL A LA GUYOT.—One tender, full-grown chicken; a sweetbread, boiled, blanched and minced; a dozen mushrooms, chopped; a tablespoonful of minced fat salt pork; pepper, salt and a pinch of mace; half a cupful of fine crumbs, slices of fat salt pork. Draw and truss the fowl as usual, and stuff with a forcemeat made of the minced sweetbread, mushrooms, pork, breadcrumbs and seasoning. Bind thin slices of pork over the breast, lay in a dripping pan, dash a cupful of boiling water over it, and roast one hour, basting often. Ten minutes before taking it up, remove the pork, baste abundantly and brown. In serving, lay the pork about the fowl. To make the gravy, mince the boiled giblets and stir them into the gravy left in the pan, with a little boiling water and a tablespoonful of browned flour wet up with cold water. Boil sharply and serve in a boat.

POTTED BEEF.—To cook beef so that any piece may be made tender: Put a piece of lard the size of an egg into an iron or a granite kettle; when it is hot enough to smoke, drop the meat in it; as soon as brown on one side turn it over, and keep turning it until well browned over the whole surface; add also salt, pepper, a pinch of ground cloves, one bay leaf, one sliced onion, a bit of garlic, and a little thyme if the last two are not liked. Simmer for four or five hours, or until the meat slips readily from the bones. It is good hot, and when cold may be sliced and used for sandwiches like beef tongue. Trimmings of beefsteaks, giblets of fowls, etc., may be cooked with this meat, and will help to make the gravy rich and of good flavor. Even choice pieces are liked by some when thus cooked better than when baked.

RASPBERRY VINEGAR.—To four pounds of crushed raspberries add half a pint of pure wine vinegar and let them stand for 24 hours. Press them through a cloth and let the juice stand for another 24 hours. At the end of this time pour off the clear juice and put it on the fire with two pounds of sugar. When it boils, remove the scum and let the syrup stand over night. Next morning put it in bottles and seal well.

WHITE LEMON CREAM.—Boil the thin peel of two lemons in one pint of cream, strain, and thicken with the well-beaten yolks of three and the whites of four eggs, into which half a tea-cupful of white sugar has been beaten. Add half a saltspoonful of salt, stir rapidly with the egg-beater until nearly cold, and pour it into glasses or cups. This quantity will fill six custard-cups.

MILK TOAST.—Wet the pan to be used with cold water, which prevents burning. Melt an ounce of floured butter; whisk into it a pint of hot milk; add a little salt; simmer. Prepare four slices of toast, put them in a deep dish one at a time, pour a little of the milk over each, and over the last one pour the remainder of the milk.

FRIED SCALLOPS.—Wipe each roll in beaten egg, then in fine crumbs, and fry in hot lard or dripping to a fine brown. Shake off the fat in a split spoon and lay in rows on a hot dish. Garnish with parsley. Pass hot crackers, mashed potato and cut lemon with them.

BOILED INDIAN PUDDING.—One cup sweet milk, part cream, sour milk or buttermilk; three tablespoonfuls of molasses, one teaspoonful of salt, one teaspoonful of saleratus, one cup of meal, one cup flour. Dried fruit if you like. Steam 1½ hours.

JUMBLES.—One cup of butter, two cups of sugar, three eggs, one teaspoonful of soda, two of cream tartar, two tablespoonfuls of warm water to dissolve the soda. No other wetting is used, but the dough is made very stiff and rolled out thin.

CHEAP TEA CAKE.—One cup of sugar, one cup of milk, three cups of flour and one-half cup of butter, two teaspoonfuls of baking powder, one teaspoonful of caraway seeds and two tablespoonfuls of currants.

CHILI SAUCE.—Six large, ripe tomatoes, four green peppers, one onion, one tablespoonful of sugar, one tablespoonful of salt, 1½ cups of strong vinegar; chop peppers and onions; boil one hour.





A. T. DEWEY.

W. B. EWER.

Published by DEWEY &amp; CO.

Office, 252 Market St., N. E. cor. Front St., S. F.  
Take the Elevator, No. 12 Front St.ADDRESS ALL literary and business correspondence and  
Drafts for this paper in the name of the firm.

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Registered at S. F. Post Office as second-class mail matter.

SCIENTIFIC PRESS PATENT AGENCY.  
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A. T. DEWEY. W. B. EWER. G. H. STROM.

SAN FRANCISCO:

Saturday, Aug. 28, 1886.

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## The Week.

Governor Stoneman has sent the legislators home to borrow, from their constituents, some wisdom on the irrigation question. They will reassemble on September 7th, and if they cannot legislate they can attend the State Fair, which will keep them out of mischief while it lasts.

The Bulgarians have given their old sovereign, Alexander, a pressing invitation to go abroad and stay, and will make a new sovereign who will lean toward the Czar and not toward the Sultan. It would seem from this distance that Russia is still pursuing a quiet aggressive policy, stealing territory in such a very diplomatic and gentlemanly manner that the Powers can find no wrong in it. If we were in the Sultan's shoes we should tremble, all the same. Mexico has decided that an American editor is too small game to fight over, after all, and the

liberated prisoner, in whom for a moment seemed to rest the peace of two countries, came over the border, in triumph to the land of the free, in a street car.

In California the leading events are fairs and political conventions. This week, the Republicans are saving the State in Los Angeles; the Democrats will do the same service in this city next week, and then the State will have to be pulled and hauled for a couple of months to choose which way it shall be saved. How fortunate it is that in politics all policies lead to public prosperity; just as in old times, all roads led to Rome. Travel, then, which way you like. This is our first stirring political editorial this campaign.

As for the fairs, the great events this week are the opening of the Mechanics' fair in this city, which is described elsewhere, and the holding of the District fair in Petaluma. Other exhibitions are noticed in our table of "fairs to come" in another column.

## Does it Pay to Ship Fruit?

We publish upon another page a paragraph telegraphed from New York, in which the *Commercial Bulletin* of that city speaks its mind very freely on shipping fresh California fruit to the East. It seems to think we ought to stick to fruit-canning, and not try to fight space and ruin the railroads by shipping the product East in perishable form. We propose to stick to canning, and to drying also; in fact, to put California fruit into every conceivable form that the consumer will accept. A part of this business will be to sell it in its natural state, and how much this trade amounts to may be shown by the fact that 1125 carloads were used last year—exclusive of citrus fruits. This year the shipments will be vastly greater. How desirable the business is, may be gained from the fact that the shippers are doing everything they can to prevent the growers' shipping organization—the Fruit Union—from handling all the fruit, by buying it eagerly and shipping it in large quantities. If it were such a poor business, we imagine these dealers would be very willing to let the growers have it all to themselves.

And then the railroads: It is too bad about the railroads. We would be very sorry to have them ruined by cheap freights on California fruit. But they have not acted as though they were suffering. On the other hand, they, too, seem to be disposed to cling to their traffic in California fruit and to increase it as much as possible. They have given much lower rates for trainloads; they seem to like it, and the more they can get of it the better they like it. The *Commercial Bulletin* thinks that canning is the only thing that will insure a profit on California fruit. It is badly mistaken. We propose to make all the money there is in canning, but we propose to make money in other ways too.

Despite the mellow disposition which the railroad managers have shown at times, they have not lost the ability to look out for themselves. A dispatch which came from Los Angeles on Monday seems to attest this fact. It is as follows:

By arrangements made in Boston between the Atchison, Topeka & Santa Fe R. R. and the Southern Pacific, freight rates on grapes to Chicago by passenger trains have been advanced to \$600 per car. The cold storage cars, by freight trains, are \$300 per car, going through in eight days.

We do not, on the moment, foresee all the effects of this advance in rates. On the face of it, it appears, however, to be a very unfortunate and uncalled-for discrimination against the grape interest. The yield of many orchard fruits has been uneven this year, but a good, large crop of fine table grapes has been expected, and an outlet was looked for at the East which would yield the grower good returns and make way with a large amount of fruit. To advance freights just at this time will work disastrously to the growers and prevent, to some extent, the offering of California grapes to Eastern consumers in large quantities at more reasonable prices than they have heretofore had. It is certainly to be deplored that the growers are met with an advance in rates just as the crop is ready and arrangements have, no doubt, been made at the East upon the basis of the old rates of freight.

Among the other indications that the railways can be trusted to take care of themselves, is the advance in freights between California and

Denver, and other Colorado points. Special rates are made on certain produce, as follows: Green fruit and oranges by the carload will be \$140; canned goods by the carload, \$125; dried fruit, raisins, etc., per carload, \$130; wine, in wood, per carload, \$130; wine, in cases, and brandy, in wood, per carload, \$190; brandy, in cases, per carload, \$210; sugar, \$120.

There is still complaint made of fruit arriving at the East in poor condition. A carload of grapes from Los Angeles county, the first one sent this year, is said to have been poorly boxed, and suffered sadly on the way. Evidently there is still much to be learned about this business, but experience will teach it.

## The Florida Fruit Exchange.

When the organization of our Fruit Union was in progress there was much said of a similar undertaking in Florida, which began its work last fall, with the beginning of the orange crop. We notice that Mr. Greenleaf, one of the directors of the Exchange, made an address recently, reviewing the operation of the Exchange during its first year. Mr. Greenleaf said that the Exchange had handled a little over 57,000 boxes of oranges, or more than 10 per cent of the entire available crop. From the most reliable data obtainable, he thought the sales had averaged over \$2.60 per box, for oranges which, at the same time last year, brought \$2 per box, and it was not too much to say that this increase of value was due to the confidence inspired among Northern buyers by the importance and efficacy of such substantial and reliable manipulation, as well as the uniformly excellent condition in which the fruit was received at the North, when handled by the Exchange.

Another advantage accruing from shipping through the Exchange could be seen from the fact that through its agency small lots could be picked up and gathered together, thereby securing car rates which is a great saving in expense to the small grower and effects a reduction of from 20 to 40 cents for freight on each box. But the greatest benefit to growers, derived from the Exchange's method of the perfect immunity from shrinkage, is secured by transportation in refrigerator cars. All fruit handled by the Exchange is shipped in cars built especially for that purpose, in which a temperature of about 50° Fahrenheit is maintained—a temperature which prevents and renders decay impossible.

Another and rather a peculiar advantage which Mr. Greenleaf found in the Exchange was in preventing the fruit from being stolen en route, and he gave this somewhat startling incident:

A case is on record where a man entered a car which had been shipped by private parties, and changed the marks on 250 boxes of oranges, causing them to be sent to another city than that for which they were intended, and thus, boldly and in open daylight, stole the whole carload, and they have yet to be heard from. If those oranges had been consigned to the Florida Fruit Exchange, the robbery would have been impossible, as a special agent accompanies each separate car.

They must have pretty sharp thieves or a pretty loose way of managing railways in the South and East if a shipper is liable to lose his fruit in that way. To make way with the fruit by simply changing the mark on the boxes leads one to ask if the railways run their cars by the marks on the boxes. If they do, it is no wonder that the growers need protection.

**INTEREST IN SILK CULTURE.**—Mrs. Rienzi, Secretary of the Silk Board, reports that at Santa Cruz some children raised cocoons to the value of \$15, which sum was paid for them by the Board in order to encourage other like efforts. A communication also has been received from Campbelltown, Tasmania, asking for information as to the Pacific method of working silk, in order that a similar school may be started in the antipodes.

**APPLES AT AN ALTITUDE.**—An exchange states that there are several apple trees at Hot Springs, Lake Tahoe, loaded with fruit. This is probably the highest point in the United States where such fruit is grown, being over 6200 feet above the level of the sea. It is nearly 500 feet higher than Truckee.

The blind beggars' holiday occurred in New York recently. According to an annual appropriation of \$20,000 which the city provides, 469 destitute blind of the city received their share, having been examined and pronounced genuinely worthy of the alms.

## The State Fair.

On Monday, September 6th, the State Fair will open in the grand pavilion at Sacramento. The entries for the [pavilion display close at 6 P. M. of that day. For the display at the park, entries remain open until 6 P. M. of Sept. 9th. There is much going on this year in political circles, and the minds of the people are more or less distracted thereby, but in spite of this we understand that the outlook for the fair is very bright. It would be unfortunate to permit the rush for office to lead to neglect of our great industrial event and the opportunity which it offers to make better known the gratifying progress and grand resources of the State. There are still vast numbers of strangers here, who have lingered since the Encampment, and the State Fair will no doubt be a rallying point with them. Probably there never was a better opportunity to show off the State to good advantage than this year.

We are glad to hear that many counties are moving in the direction of the "county exhibits," for which the State Board has liberally provided. Let this work go on vigorously and all effort and self-sacrifice will be compensated for by the gratification and profit of having one's chosen locality presented in a creditable light.

We expect an unusually complete and excellent live-stock show this year. We have heard of a number of herds not usually represented which will appear this year. There is the fine Underhill herd of Holsteins from Santa Barbara already on the ground. We hear also of others which will be on hand at the opening. The speed program, with the entries, which we will print in full in next week's *RURAL*, shows that in its racing features this year's fair will be exceptionally complete.

We plan to print next week a number of the *RURAL PRESS* especially adapted to the State Fair, of which a large extra edition will be distributed. We expect to make it an issue of much interest to the reader, and it will be of especial value to those who desire to advertise desirable goods. There is often much advantage in announcing beforehand what may be seen at the fair, for people desiring certain things will be reminded to hunt them up and examine them. We notice that our English exchanges, before one of their royal shows, have many extra pages filled with advertisements in which exhibitors give notice that their wares may be found in certain parts of the grounds or buildings. These advertisements also serve to draw popular attention to the fair itself, and thus exhibitors help themselves and the exhibition at the same time. The attention of our advertising patrons is respectfully drawn to this matter.

## Joaquin Miller and Arbor Day.

In a letter to Major-General Howard, Joaquin Miller, the poet, has asked that officer to consent to a peaceful invasion of Goat Island for a novel but decidedly praiseworthy service. Mr. Miller proposes that on some day next month yet to be fixed, himself and such friends as he can enlist for the purpose, including those better known to him in the walks of journalistic and general literary life, shall visit the island and plant shrubs which shall develop into stately trees. He proposes that this shall result in the institution of an arbor day in California, and that the example of tree planting, which it is desired shall be set upon this island, shall be copied all over the State, to the end that the birth of new forests shall at least keep pace with the destruction of existing ones.—*The Call*, Aug. 21.

The idea of covering the bare sides of Goat Island with forest trees is an excellent one, and we hope Mr. Miller and his friends may accomplish it. The establishment of an arbor day for California is an institution we have long advocated and hope to see realized, but we must decidedly object to September as a month for planting forest trees in California. Unless our literary friends should be careful to get pot-grown trees, and plant the balled roots without disturbance, and then plan a weekly pilgrimage to the island for the purpose of watering the poor things until the winter rains really set in, we imagine about all the results of the plantation would be the poetry they would write about it. We want Goat Island covered and we want trees in many other places throughout the State, and we want an arbor day with all its horticultural and literary features, but the climate of California does not want it in September if any "stately trees" are to be attained.



## A Week Away.

## Notes on an Editorial Excursion.

It was our good fortune, last month, to pass a week on an excursion arranged by the Pacific Coast Press Association, to visit Lake Tahoe and adjacent parts of Nevada. The company numbered about 50 ladies and gentlemen, well content with each other and delighted with the sights and delights of the excursion. We take it that the internal incidents of the trip would be of little interest to our readers; furthermore, we put a shade over our reportorial eye, for the excursion was for rest and recreation. The only way to get pleasure from a trip is to cherish the consciousness that it doesn't have to be "written up." We saw, however, here and there, a few things which it gives us pleasure to place upon record.

## Development of the Foothills.

It is about 10 years since the writer crossed the Sierras by the Central Pacific line. It was gratifying to see the marks of development and improvement of the foothill region which could be described from the car windows. Of course, we know that one sees very little, indeed, of this growth from the cars, and yet many thrifty orchards and vineyards came within view. There are, however, at all the stations, exponents of the increased business done in produce shipment—especially in fruit. Auburn is, undoubtedly, a busy place. Newcastle shows, by her group of fruit-shipping establishments near the railway, how large the fruit interest of the neighborhood has become. Colfax, also, shows great advancement. The same is true of the many intermediate points, which are now far more important than the ones we have named were a decade ago. Higher up the Sierra there are also signs of industrial growth, chiefly through the arts of the woodman. The summer population of the region is also increasing as the delights of the various resorts become more generally known. The grandeur of the scenery adjacent to the overland has been too widely seen and described to warrant us in expatiating upon it.

## Lake Tahoe.

Leaving the cars at Truckee, a bustling and wide-awake town, we rode by stage along the beautiful waters of the Truckee river to Lake Tahoe. This "gem of the Sierras" is also too well known to periodical literature to need words from our pen. It would require a genius to write something new about Tahoe. We steamed from Tahoe City with its hotel full of guests, past "Idlewild," the delightful summer home of Mrs. E. B. Crocker, and on southward until the southern extremity of the lake was reached, at the Tallac House, a well-kept hostelry near the base of Tallac mountain. On the afternoon of our arrival we sauntered out into the forest south of the hotel, and on the highway were so fortunate as to meet Nathan Gilmore, who will be remembered by many of our readers as prominent in Angora goat circles a few years ago. Mr. Gilmore still has herds of goats upon the mountains south of Tahoe lake. We are indebted to him for guidance to his most romantic and beautiful Glen Alpine. This gorge opens at the southern extremity of Fallen Leaf lake—a small lake lying about two miles south of Tahoe. From the highway Mr. Gilmore has, at great labor and expense, constructed an excellent wagon road along the eastern and southern shores of Fallen Leaf lake to Gilmore Glen Alpine Springs, seven miles distant from Lake Tahoe; and from the Springs a good trail to the summit of Mount Tallac, seven miles further. This road, after leaving Fallen Leaf lake, winds up the glen, now close to the base of cliffs thousands of feet high, and again amid low rocks, broken in all conceivable shapes, with now and then a cascade overlapping them in most picturesque fashion. What one sees about Tahoe is grand, but to find wild beauty one must go to Glen Alpine. High up in the glen, at the end of the wagon road, is a summer residence where Mr. Gilmore's daughters furnish excellent refreshment for the hungry tourist; and here is located Glen Alpine Spring, of which we could not hold enough to satisfy us. It seemed to us the most delicious mineral water we had ever tasted, and we have a weakness for mineral waters, too. It has a character and sprightliness which cannot be described. Above the terminus of the wagon road there are several lakes which Mr. Gilmore has

stocked with trout. The water of these lakes comes from the melted snows of the Sierra range, and from any point the silver-sided trout and speckled black trout can be seen darting hither and thither. The waters are pronounced by tourists to be clearer than even the crystal waters of the Swiss lakes.

## Crossing the Line.

After two days' delightful sojourn at the Tallac House, where we found excellent fare and care, we crossed the State line on Capt. Todman's stanch little steamer and debarked at Glenbrook in Nevada. Here is located an important lumber enterprise which will be mentioned further on. From Glenbrook over the road made famous by the rein-holding of the late Hank Monk, the traveler climbs to the summit of the mountains overlooking Tahoe from the east and then drops speedily into the Carson valley on the other side. On this road one gets a good impression or a bad impression, as the case may be, of the arid hillsides of Nevada. Along the way, too, he sees what a contrast is made by pouring water upon this arid soil. When the valley is reached, there are seen, here and there at the mouth of the canyons, little farms, orchards and garden spots, where the industrious settler has collected a little water and flumed it down upon his land. These places are gems of verdure.

## Carson City.

One approaches the Capital of Nevada from the south, through miles of desert, broken only, as we have said, by the little oases at the base of the hills. The first sight of Carson City is as inspiring as one could wish, with its masses of green trees and the cupola of the capitol rising above them. Entering the streets, one finds them lined with trees and bordered with tasteful cottages set in pretty gardens. The business streets are well built up and lively. The people are cordial and hospitable, and opened everything to the visiting excursionists—even their State's prison. In fact, much of the sojourn in the town was passed there, interviewing the prisoners, the great footprints in the quarry, and other curiosities.

## Fruit Boxes from Nevada.

While at Carson City we saw that an enterprise of that State is making quite an important contribution to the horticultural lumber supply of this State. We refer to the Carson & Tahoe Lumber Co., which has saw-mills at Glenbrook, on the shore of Lake Tahoe, a narrow-gauge railway which hauls the mill products to the summit of the mountains east of Tahoe lake, and then a fine 12-mile flume by which timber, lumber and firewood are all shot down the grade to the spacious lumber-yard, on the outskirts of Carson City. This enterprise has furnished an immense quantity of mine timber to be put underground at Virginia City, and contributes largely to the fuel supply of the State. Recently there has been established a planing-mill and box factory which is filling large orders, chiefly from Southern California. We were shown over the Carson establishment of the Carson & Tahoe Co. by Mr. W. D. Tobey, who is the resident manager, and we believe largely interested in the enterprise. We saw the flume working excellently with Mr. Tobey's arrangement for dumping at any point along the flume that may be desirable. At the box factory there were vast numbers of raisin trays and raisin boxes, in the shock, awaiting shipment to California. The company has some lumber excellently adapted to this use, and has, we understand, orders for all it can supply at present. The vigor in the orange business in the south is calling for many boxes, and growers are looking out ahead for next winter's supply. The water brought down by the flume is used to irrigate quite an area of land south of Carson. It is land from which the sagebrush has been removed and is wonderfully productive when the water is brought upon it.

## A Nevada Editor's Ranch.

We greatly enjoyed a short call at the country residence of Mr. and Mrs. Sam Davis, of the Carson Appeal. Mr. Davis is widely known throughout the journalistic world for the grandeur and peculiarity of his imaginative writing. The pursuit of the imaginative is one of the most exhausting of intellectual labors, and to maintain the freshness of his style Mr. Davis found it necessary to draw near to Nature in some of her varied forms, and so he chose that most charming masterpiece of creative wisdom, a piece of Nevada sagebrush. Where the

northern hills begin to look down upon Carson there was a piece of ground which even Uncle Sam seemed hardly to think worth remembering. Upon this Mr. and Mrs. Davis determined to embark in the villa business. There was not any yellow Tiber near at hand, so they developed some water on an adjacent water-shed, and as usual in Nevada, we are told, the first crop raised by irrigation was a lawsuit. Nothing daunted by this result, Mr. Davis determined to employ vertical rather than horizontal ditches, and the result was a flowing artesian well which was sending forth quite a stream during our visit. Even with the somewhat uncertain water supply had during their early efforts, Mr. and Mrs. Davis have succeeded in changing the whole appearance of the site and have fruit and ornamental trees, pasture and garden, where there was but recently only sagebrush. They have laid out an avenue fringed with shade trees, adown which one, standing upon their doorstep, looks directly upon the State Capitol in Carson. The house is commodious and comfortable, the barn an excellent structure, and the various plantings they have made are in promising condition. Perhaps the most interesting feature of the ranch is the thoroughbred Holstein herd which Mr. Davis bought last year from Smiths, Powell & Lamb, the famous New York Holstein breeders and importers. We have, unfortunately, lost the notes we made of the names and breeding of the animals in Mr. Davis' herd, but we remember the excellent appearance of the cattle. We think Mr. Davis has done wisely in starting in early in breeding so popular a breed as the Holsteins, and doubt not his venture will prove a good thing for his own interests and for the State. There is one thing about the farming operations of Mr. and Mrs. Davis which it will be interesting to recall when they become famous as farmers, and that is when they began upon their choice piece of sagebrush neither of them knew anything about farming. They were as unused to it as the soil they entered upon. They have, of course, had many amusing experiences; but their liking for the effort has sustained them through all mistakes and through the vexations of the water question and the labor question, and will, no doubt, lead them on to a gratifying success.

## Nevada Cherries.

While stopping at the house of Trenmor Coffin, Esq., of Carson City, we had some very fine May Duke cherries, grown by Stephen A. Kinsey, of Genoa. Mr. Kinsey planted an orchard of a number of varieties, and finds the May Duke the only cherry of those he had which bore satisfactorily. It has a crop every year. The Royal Ann and Black Tartarian proved of no account. The Early Richmond only bears occasionally. People who have their palates set for sweet cherries may not count much on the May Duke for a table fruit, but they do very well where other varieties are untrustworthy.

## Shade Trees in Nevada.

One who visits Carson City in the summer is delighted with the abundance of shade trees on the residence streets. The main reliance is the cottonwood, but Lombardy poplars are being largely introduced as a very satisfactory substitute. Some parties are showing much enterprise in testing many kinds of Eastern and Southern trees. We were especially interested in an experimental plantation which Mr. Trenmor Coffin has on the large lot of ground in the center of which his elegant brick law-office is situated. Mr. Coffin is evidently an ardent tree lover and has taken great pains in securing many kinds of trees from distant parts. His plantation is still young and it is too soon to draw conclusions from it, but in a few years the results his records will show will be of great value to the future forest planters of the State. It seems that the hardest condition which the trees have to withstand is a heated term in midwinter which awakens them into activity, and then a return of winter in March catches them in very vulnerable condition. Mr. Coffin contemplates wrapping his young trees with straw and covering the ground to keep them asleep during the false spring in February. It is altogether likely that in this way many handsome trees can be made to succeed for city gardens, but, of course, the most important thing to know is what trees can be trusted to take care of themselves in spite of the peculiar conditions. Possibly for the bene-

fit of the experiment Mr. Coffin may protect some and let others of the same kind go it alone.

It seems to us that the State of Nevada would do well to furnish its new State University with the means for carrying on experiments in forest tree planting and for collecting and publishing the experience of other tree planters. Certainly the State needs a tree wherever a tree can be induced to grow, and trustworthy information as to what would be likely to succeed would stimulate planting.

## Machine Shops at Carson.

Under the guidance of Mr. D. A. Bender we made an interesting trip through the well appointed foundry and machine shops of the Virginia & Truckee Railway at Carson City. These shops are the outgrowth of necessity arising from the need of repairs to ponderous machinery on the Comstock, and are better equipped than car shops generally. They are doing a great deal of important work and keep a large force employed.

## Red Clover in Nevada.

On the railroad from Carson to Virginia City, at the Brunswick mill, there is a ditch carrying water, probably for milling purposes. We noticed along the bank of the ditch, and where the roots are fed by seepage water, some red clover plants growing very vigorously. Whether planted or sown by chance, we do not know. Possibly the plant came in, as was reported from the dry land near Riverside, from the chance dropping of a seed or by its carriage by the water from some distant plantation. At all events, the plant looked as though it might be at home in the Carson valley if it could find water to sustain it.

## Virginia City.

A very delightful day was that occupied with an excursion from Carson City to Virginia City and return. The railroad has a considerable climb to make and tacks hither and thither around the mountain slopes to accomplish it. For the first half of the distance the Carson river, with its numerous ore mills, flumes and chutes, furnishes full entertainment for the eye. The precipitous mountain-sides, with prospect holes and abandoned tunnels and large hoisting works, with Silver City nestling in a canyon far below the road, occupy the visitor's attention until he is rolled into Gold Hill, and thence on to Virginia City, with its large number of hoisting works, many of which are now closed, and with its fine stores, hotels and residences clinging to the steep hillside, and now, they say, gradually sliding, as the surface is affected by the thorough honeycombing of the interior by mining drifts and tunnels. We had read so much about the decaying glory of the Comstock that we confess we expected to see a much more run-down city than we did see. Maybe if we had seen it all in flush times we should have better data for judging, but there seemed to be plenty of people and peculiar things enough to keep the tourist busy for a week.

## Homeward.

Virginia City was the end of the outward course, and the week devoted to the excursion was nearly gone. A quick ride back to Carson, a departure thence, at nightfall, for Reno, and we were drawn through much that we wished to see in Nevada after the darkness had veiled the Washoe valley. For this reason our agricultural notes on the region could be written on the wrong side of a postage stamp. We were much pleased with Reno—so much as we could see of it after dark, and before the six o'clock train started the next morning. The town has grown wonderfully, and has built up in a way bespeaking enterprise and good business methods. We regretted exceedingly that we could not see the town in action.

Coming westward from Reno, one sees much productive ground being turned to good account along the Truckee river. There are improved buildings on the older places, and many marks of new settlement and beginners in agriculture. The ride up the Sierras from the east is very delightful. The lumbermen are making sad work of the forests—viewed from the tourist's standpoint, at least—but the beautiful Truckee river, with its rushing, leaping, crystal waters, is a sight not to be forgotten. Reveling in the beauties of these waters, as the early morning sun played upon them, we re-entered California and took our turn in growling at the snowsheds.



## HORTICULTURE.

## In the Los Gatos and Saratoga Country.

EDITORS PRESS:—On the slopes extending from the Lower Santa Clara valley up and on either sides of the Los Gatos and Saratoga creeks we find the surface diversified with hills and valleys, having an abundant supply of good water and many features which go to make up a country suitable for many first-class family homes. We here have much more rain than at San Jose, and the thermometer is said to range from 10 to 12 degrees higher in winter here than there. The soil is generally a light sandy or gravelly loam.

Most people are engaged in fruit culture, and we find peaches, prunes, plums and almonds among the fruits most successfully cultivated. From what we see and hear, we believe the culture of the apricot is in this region, with most people, not a financial success. It is claimed that pears do well, excepting the Winter Nelis, which should be excepted almost anywhere in California. Cherries should not be made a specialty here. The tree grows and blooms well, but much of the fruit drops off prematurely.

F. M. Farwell, half a mile southeast of Saratoga, says grapes grow here to perfection, have high flavor and make some of the best wines we have. Raisin grapes bear well, but mature crops too late for drying. Fruit grown here is of high flavor. Trees and vines grow thriftily and are by one or two years longer coming into bearing than those grown in the lower places of the Santa Clara valley. Mr. F. is supplied with an abundance of water, running in a small creek through his place, fresh from the Santa Cruz mountains. By constructing a reservoir he could have a fish pond, and also all the water that could be desired for irrigation purposes. Fruits and vines need no irrigation. On trial he has found irrigation to be a detriment to both trees and crops. At this place we have delightful drives among the spreading oaks.

At Mr. J. W. Fuller's place, one mile southeast of Saratoga, we find an orange orchard of 100 trees seven or eight years old, which commenced bearing at three years, and are now bearing regularly, and have never been irrigated. The varieties are Navel, Mediterranean Sweet, and some others not known. The fruit looked large and well colored. He has one lemon and one lime tree, set out three years ago, both in bearing. It would seem that these representatives of the citrus family would indicate success, at least in growing and bearing, in this neighborhood. From what we learn at other places, however, we suspect some peculiar condition of the ground at Mr. Fuller's place which promotes the growth and bearing of the orange without irrigation. The flavor of the fruit is reported by Mr. and Mrs. Fuller as good as any grown in the State.

## Nut-growing.

At many places we see fine trees of the English walnut. We even see some considerable orchards of this fine nut-bearing tree. The tree grows well, and makes a good shade in summer, but financially seems to be bringing poor returns for the expense of cultivation. The fruit mostly falls off in the spring-time. Some years in some localities it may prove a partial success, but, on the whole, is generally pronounced a failure.

At the Yoko place, about two miles southeast of Los Gatos, we find on a stony hillside, where the soil is dry and rather poor, the almond doing well. Chestnuts also do well in this situation as far as tried. The varieties selected as best are the seedling Marron de Lyon and Combe.

Mr. John Casella, of Milpitas, who happened to be present with me at the Yoko place, gave me the following directions, pursued in Italy, for drying the chestnut ready for use: When the nuts commence to color on the tree, knock them down; put in a pit or big pile, cover up with grass or other material to keep from drying. Let them lie two weeks, during which time they heat. Then knock off shell with wooden mallet. Then let them lie in the sun till perfectly dry and ready for use. After they are dry, put into a bin packed in straw, above and below, with sand covering the straw on top. The bin with the packing and sand on top should be sufficient to exclude air in order to keep well. This treatment of the varieties mentioned will free the chestnut of any astringent qualities which are sometimes found in the skin of the kernel. Italian chestnuts are reported by Mr. Casella to bear here in five years, while in Italy the same would bear their first fruit at from 8 to 10 years old.

## Olives and Figs.

From the experiments being made at the Yoko farm, and the success so far attending, it would seem that the olive may prove a great success on these steep hillsides. The trees of the young olive orchard here are growing rapidly and are thus far free from disease. Great hopes are entertained of the future of the olive here. Olives, as well as chestnuts, bear here much younger than in Italy or France. Mr. Yoko informs me that olives in this vicinity generally commence bearing at six years old. In those old countries not before 10.

J. F. Kennedy, near Los Gatos, is experi-

menting with new varieties of fruit trees. Of the olive he has one Sevilleano Gordal from Spain, imported early this spring, and has since duplicated the order. This is the tree producing the queen olive of commerce, a very large olive—largest known—and said to need rich land for its proper development. It is the great pickling olive. He has also the Manzaniella from Spain, much larger than our Mission olive, earlier and more productive. This is said to be the best olive for oil.

Of the fig he has eight varieties from Dalmatia, all Adriatic figs, and described as follows: (1) Large white fig, very thin skin, little more than a film, filled with a kind of nectar or honey that will run right out on cutting open; very sweet. (2) Green Smyrna, very large, of greenish color, said to be productive. (3) Apple fig, shape of an apple, good flavor, and as good as the type generally. He has five other varieties much like the White Adriatic—perhaps only varieties. These five all extremely prolific. Mr. K. has seen all these figs in bearing and tested the fruit of all except that of the Green Smyrna. These, as it is with figs generally, should have water at maturity of fruit. All the above-named fruit trees at Mr. K.'s are very young and will be only yearlings next fall. The fig is readily budded, and so the common fig can be used for budding stock and would bring any foreign or new variety speedily into bearing. It has been said that the fig thus budded would not do well. I asked Mr. K. what experience, if any, he had had in this direction. He said that he had tried it and that such grafting or budding has with him succeeded admirably.

Mr. K. has the "Commercial Almond," which originated in Tulare county as the "Herriott," now known by the name first above given. It is a straggling tree with a very large leaf, a much larger kernel than the Languedoc, of as fine flavor and texture of shell, more evenly distributed over tree, and fruit sets better.

Of apricots, the only trees bearing at Mr. K.'s place this year are the Hems Kirk and Blenheim. Priers' Royal Golden usually succeeds well, bearing when others fail. It is large and of fine flavor, and thought to be best at this place. It compares well with the Early Golden. The tree has the habit of the Royal; but the fruit is large and yellow like the Early Golden. It is worthy of general trial. MCD.

Santa Clara Co.

## Stockton Notes.

[Written for RURAL PRESS BY MRS. W. D. ASHLEY.]

The chief business here now is receiving the new crop for sale and storage. Sales have been made at \$1.29 and \$1.30, good milling. Considerable grain is yet to be thrashed around Linden and Farmington.

The trial of harvesters before the State Agricultural committee for a prize of \$250, on the 12th, is said to have not been a success, because some of the best running machines had been put away and a good piece of heavy standing grain could not be got for test. The Houser stands pre-eminent still for good work in lodged and all kinds of grain. One that has run five years lost only four hours in 46 days' cutting, and cut 30 acres a day in standing grain. They are made at the "Stockton Combined Harvester and Agricultural Works." The Myers machine has run finely unless grain was badly lodged. One cut \$700 worth, besides the owner's crop. A man hired one and cut enough out to pay for his own cutting and thrashing.

Matteson's "Stockton Chief," a pull machine, cuts 12 feet, turns corners, has no belts, uses 12 or 16 horses, and costs only \$1300 or \$1500. It has been tested lately, and is very popular for strength and lightness. He has conditional orders for 30 if crops are good next season. It is said that a man at Acampo cut enough with one this year to pay for it at \$1600. The firm is putting up another building on their agricultural block for setting up machines, 136 feet by 65. This is called the windmill city, and may truly be called the combined harvester city, although the combined machine was invented near Lebanon, Oregon, in 1855, it is claimed.

Business men have straightened and gone on again since the disastrous fires, but it is hard on the many poor people who saw the earnings of years licked up by the flames, that left some to regain with stiffened limbs and in harder times what they had thought would be the comfort of age. A young lady, a teacher, lost \$1000 worth of books. The last fire is said to have destroyed \$190,000.

The River and Harbor Bill gives San Joaquin river and Stockton and Mormon channel \$18,750 to clean and improve channels.

Striped and spotted beetles (diabrotica) have spoiled the roses all summer, and taken late gardens, especially squashes and beans. Buchach is useless; dusting with ashes and lime useless. They eat holes in the musk-melons and the peaches. There is also the larva of the peach moth; the worm hatches at the stem of the whole peach and goes to bed in the pit. Linnets gather all of the Egyptian corn, then twit for us to look at the plum and peach pits they left swinging while they went to test the mellow apple, but never alighted on the pan of poisoned wheat. Cabbage and turnips flourish, but alas for the "Hubbard" and the prospective winter pumpkin pie, with the blazing heat and striped beetles. Grapes are fine, promising \$25 per ton.

## A Welcome to California.

Upon the occasion of the visit of the G. A. R. to the Horticultural pavilion, a warm welcome was tendered the veterans. One of the features of the reception was an eloquent address by Mr. A. C. Bane, of San Jose, which we print as follows:

Mr. President, Friends, Neighbors, Country men:—Look around you! You stand mid the foliage and breathe the aroma of a growing, blooming, budding, fruiting garden. Thought, language and images fail us as we pause to describe it. It is a scene too high for conception; too grand for description; too sacred for comparison. The grandeur of nature and the glory of art, the dreams of fancy and the creations of poetry, all fade before this vision. Admiration no longer hovers over the Elysian fields of Virgil; Homer's sparkling rills of nectar, streaming from the gods, woo our thirst no more. The bright Bandusian fountain and the magnificent vale of far-famed Cashmere lose their splendor. Even the paradise of Milton, with its trees and its rivers, its fruits and its flowers, its hymns and its harps—a living landscape with its vernal diadem and voiced with melody—dwindles into sterility. Here is a sheaf from our golden grain fields, a garland from our decorated door yards, a cluster from our burdened orchards. A Santa Clara county home in miniature. With one glance you behold the products of every zone, of every season. A spectral view of the beauties and wonders that enrobe our vernal valley. Nature has canopied the scene with her emerald drapery, while the arched vault that bends above us is bestudded with blazing sparks from nature's sun.

This is not a Work of Fancy.

Nor a production of art; neither is it an "ethereal creation of intellectual frostwork," but it is a real, living and truthful display of the perennial products that rise and shine as perpetual monuments to the industry of our citizens, the wealth of our soil and the beneficence of God. We challenge the fame of Italy or the splendor of France; we challenge the valley of the Nile or the ancient Euphrates; we challenge Australia or her sister islands of the sea; we challenge the hills of New England or the lakelands of the North; we challenge the plains of the West or the sands of the South; we challenge every State whose star decks our flag; we challenge every sister county that goes to make our State. Yes, we can stand upon this pedestal of pride, before this pageant of wealth, wonder and beauty, surrounded by these proud and sympathetic hearts, and with Herculean strength hurl our challenge to the world! shouting upon the winged zephyrs of heaven across every sea, to every land and every people: "Our soil and our climate present to us tonight a wealth and a variety of products that yours will never yield!" Look thoughtfully upon this picture, ye sons and daughters of Santa Clara valley; see this resplendent scene of ineffable glory unfolded before you; and go away with a loftier pride in your homes; go, fostering an unbounded ambition, to expend your toil, your brain and your money, till every spot in the county becomes a conservatory of fruit and flowers.

## There was a Time

In the history of our county when the antelope and elk wandered over our lands, unhindered by fences or bars. Our farms were public hunting grounds; our flower gardens supported the tall mustard in whose branches sang the blackbird; our orchards were marshes where the tule grew and the frog croaked the evening stars to sleep. The first invader to break the monotony of nature was the farmer. With his wide plow he furrowed the valley's bosom and sowed grain thereon. Broad acres for the first time were turned under and new soil took a first view of the heavens. The springtime brought many spots of green that turned to gold in July's sun and yielded a harvest to the sower. The winds of heaven, fanned by the hand of industry, blew the seed broadcast over the land until every cultivated acre annually was bringing in the sheaves of wheat and barley. The agriculturist was monarch of the valley. Yet the lowlands were unplowed; the hillsides were uncleared. Acres that received the rays of sun and rains of heaven cast no trophy at their Creator's feet. Next the horticulturist came; a lover of nature and a friend of art; and horticulture, the true poetry of agriculture, was written and read throughout the valley. The forests were cleared, the marshes were drained, the hillsides were dug up, and the vine and fruit tree were planted everywhere, until now the leading interest of our county is her fruit; the most beautiful spots are her orchards; the richest land is her fruit land; the happiest and most thrifty citizens are her horticulturists. Horticulture

## Is a Divine Institution;

God planted the first garden in Eden; and our first parents were horticulturists. In its most comprehensive sense it is the fine art of common life; it is eminently a republican fine art. It distributes its products with equal hand to the rich and poor. Its implements may be wielded by every arm, and its results appreciated by every eye; it decorates the dwelling of the humblest laborer, who returns with the departing sun from his place of honored toil to the house which is his own, and where the blossoming vine and fragrant fruit bespeak the content and happiness of the loved ones at home.

The fruit and grain producers of this county, to stimulate the culture of the tree and vine, to display collated samples of our choicest products, and to tell the wondrous story of this wondrous valley to the world, have built this beautiful and spacious hall, and frescoed it with nature's living colors. They have built it that your eyes might herein enjoy annual feasts; they have built it that you might know the worth, the wealth and the wonders of our valley and hillsides; they have built it because hundreds of acres in our county are yet uncultivated or are unproductive; they have built it because many of you have no homes you can call your own.

## The Hillsides Call to You

Through the silent yet impressive voice of these blushing grapes; the canyons call to you through this luscious fruit; the marshes call to you through the berry and grain to come, enter, occupy and cultivate, and they will yield you a harvest, and will appoint you as king to sit in royal splendor upon the royal throne of earth's most powerful dominion, a home. All honor to the public-spirited men and women who planned and executed this beautiful hall. It is an ornament to the city and a monument that will ever reflect honor upon and perpetuate the memory of the builders. It is dedicated tonight to the fruit interests of Santa Clara county; it is dedicated to the annual display of the varied products of our soil; it is dedicated to the future generations that shall cultivate the fruit and the vine; it is dedicated to the lowlands and hillsides that are now barren, but that in the near future shall whiten with the blossom and yield their harvest; it is dedicated to the prosperity of our citizens and the adornment of our homes. In behalf of the Directors of the Hall Association, we welcome you one and all to this Horticultural Fair; we welcome you into the midst of this scene, which it prototyped by the fabled golden orchard of the Hesperides, by the hanging gardens of palatial Babylon, by the famous elevated park of old Genoa, and by the garden groves of lovely Naples.

## We Welcome the Men and Women

Of old "Forty-nine," who came when there was nothing inviting, and who made this wilderness blossom as the rose. We welcome those who came later, whose capital was added to the labor of the pioneers. We welcome the sons and daughters of Santa Clara county—those who were born in the valley and those to whom all eyes turn and in whom all interest centers as the hope of the future; those who are to accept the mantle of their parents and carry the banner of our prosperity to greater conquests and grander victories. We welcome all, citizens, friends and neighbors; enter and enjoy. But we desire to extend an especially hearty welcome at this, the opening night of our fair, to those representatives of the Grand Army, of the flag's defenders, who have come and to those who will come to our Garden City. You have come from the pine-clad hills of Maine, from the snow and ice-fields of the North, from the savannas of the South, and from the plains of the West; we welcome you to the modern Athens, the garden spot of the universe. You have undergone hardships, you have suffered, you have labored in weariness, you have hungered, you have been stripped of money, of friends, of home and of limbs for your country; in the name of a people who love our common country we welcome you to the laborers' fabled "Atlantis," to this land of peace and of plenty; this place

## Of Rest and of Delight;

To this conservatory of the beautiful, the wonderful and the luscious; to this magnificent scene of the native products of the land that Washington won, that Taylor reclaimed and that Lincoln redeemed. Soldiers, stack your muskets, sheathe your swords, and with the olive branch for your wand, enter, enjoy and rest in peace 'mid the fruits that grow by the clear waters of Eden. To the residents of Santa Clara county this horticultural fair teaches an important lesson—a lesson which we hope will be well learned and its precepts practiced, to the improvement of our county and the greater prosperity of our citizens. You have here learned what our soil will produce, have seen the rich rewards that came from industry well applied. You have learned that these marshy barrens and these brush-covered hills are but Edens in disguise. If you will but tickle them with the rake, they will smile with a harvest. Let this lesson teach the poor man to get out of the city on to God's pastures and hillsides, and cultivate and beautify them, and soon instead of a vassal you will be a lord. There is no grander nor easier nor surer way to gain independence than to be the owner of an acre of mother earth. Let us hope as the crowning result of this fair that many of our guests from the East may be attracted to our county with a purpose to make this their home, and that many of our own citizens may be induced

## To Cultivate the Fruit

And the flower. Then, ere the modest violet of early spring ope again their beauteous eyes, Santa Clara will be what she might be, and what she ought to be—a place of untold delights, a terrestrial paradise, fanned by the balmy zephyrs of an eternal spring; clothed in the gorgeous sheen of ever-blooming flowers, as delicately hued as the rose-tinted clouds of our summer sunsets, and vocal with the silver melody of nature's choicest songsters.

In conclusion, Mr. Bane read some verses by an enthusiastic poet, reciting the glories of California.



## QUERIES AND REPLIES.

### Early Fruiting Peach Trees.

EDITORS PRESS:—I send by express a box of Orange Cling peaches to show that we can raise peaches in this part of the State. These peaches grew on trees three years old, with corn planted between the rows, and no irrigation. I have about 180 acres planted to peaches, apricots, pears and prunes. I have three-year-old prune trees that I think will have over 200 pounds on a tree. When they are ripe I will pick and weigh a few trees and report. I think we have the cheapest and as good fruit land as there is in the State. The peaches I send were all from one tree, and there were at least 150 pounds left on the tree.—J. W. BRIGGS, Visalia.

The fruit arrived in good order and was much enjoyed. The specimens we measured averaged 10½ inches in circumference, and were, in fact, quite uniform in size. They would command the top price in the market. The early fruiting of orchard trees in this State is one of the most interesting points in our horticulture. At San Jose, last week, we heard that Mr. F. M. Tenney was gathering a remarkable crop of peaches from trees set out two years ago last April. He gave the land unusually good preparation, subsided to great depth, etc. The result has been a wonderful growth and early bearing. We much desired to visit the orchard, but could not find time.

### Fleas in Hens' Nests.

EDITORS PRESS:—I would like to say to "a subscriber" that the best remedy I have found for fleas in hens' nests is cremation. When I find there are fleas in the chicken-house I take out the nests, which are coal-oil cans with one side cut out, pour a little kerosene in each one, touch a match to the straw, and burn out thoroughly; then fill with fresh straw and put back. I also occasionally sprinkle the chicken-house with diluted carbolic acid, and use the same for brushing the under sides of the roosts to kill the mites which collect there in the daytime. It will not do to put it in the nests, as it will give the eggs a very disagreeable flavor.—Mrs. JOSIE P. HILL, Petaluma.

### Strawberry Plants or Fruit at Will.

EDITORS PRESS:—One of our leading strawberry growers here, in conversation with me, said he understood the Chinese growers employ a peculiar method in fertilizing their plants, by which they are able at will to direct their energies to the production of foliage or fruit. He states that it is his information that they apply a solution of soda, or of soda and ammonia, to produce foliage, and one of potash to bring them into fruiting; that, within a very few days after the application of the potash, they cease to grow and begin at once to form flowers and fruit. Will you or some of your readers kindly state whether there is any foundation in fact for this report? Have the Chinese any peculiar method worthy of our adoption?—STEPHEN POWERS, Lawley, Fla.

EDITORS PRESS:—The note of Mr. Stephen Powers, one of your Florida readers, is received. In my opinion he has been wrongly informed regarding the practice of the Chinese in the growing of strawberry plants and fruit at will, either in their native country or anywhere else. I have no knowledge of their growing the plants by the use of soda, or soda and ammonia; or of their growing the fruit at will by the use of potash. Many of the Chinese in California were experienced gardeners at home, and would undoubtedly have brought their experience into practice here in this regard if such had been their experience. I answer, further, that I know of "no peculiar method" of theirs in raising this fruit.—I. A. WILCOX, Santa Clara.

THE RIPE FRUIT-CARRIER.—Many of our fruit-growers are familiar with the excellent fruit package bearing this name, either from having seen it at the meetings of the Horticultural Society, or elsewhere, or from mention which has already been made of it in the RURAL. Extensive experimental use is being made of it now by growers of fruits for Eastern shipment. An advertisement upon another page gives interesting information regarding it. A number of prominent California capitalists have purchased the patent-right for the Pacific Coast and Territories, and have incorporated under the name of the Western Ripe Fruit-carriers' Company, with Hon. Evan J. Coleman as President, Senator George Hearst, Representative Felton, Robert F. Morrow and Frank Z. Maguire as Directors.

NEVADA COUNTY.—We have received from G. E. Brand, of the Nevada County Land and Improvement Association of Nevada City, an interesting pamphlet entitled "Nevada County: the famous Bartlett pear belt of California; its horticultural resources, healthfulness of climate, temperature, rainfall, topography, facilities for irrigation, large and profitable yield of fruits, and other useful information for home-seekers, edited and compiled by E. M. Preston." The title well describes the publication, which we doubt not will do good service in making the resources of the county better known.

GOING TO CHICAGO.—Mr. J. M. Hixson informs us that he has sold out his interest in the firm of Hixson, Justi & Co., and will remove to Chicago, where we trust prosperity will attend him.

GALVANIZED IRON.—Do not keep drinking water in a galvanized iron pail. The zinc coating acts readily upon the water and forms a poisonous oxide.

### Well Done, Good and Faithful Servant.

[Written by request, for the PACIFIC RURAL PRESS, on the death of MRS. EDWARD FRISBIE.]

It would seem that, at rare intervals, nature, in the physical, mental and moral world, puts forth an extraordinary effort, and there result some marked individuals with characteristics of such unusual strength and beauty that their fellows can but do them reverence.

Such an exceptional character has recently been called from our midst, in the person of MRS. PHOEBE A. M. FRISBIE, wife of Mr. Edward Frisbie, of Anderson, Shasta county, Cal. Endowed at birth with a constitution of amazing vigor and elasticity and a mind of unusual quickness and power, the old, much-sought ideal of "a sound mind in a sound body" seems, in her organization, to have had its literal fulfillment. Even as a child she was remarkable for her executive ability. In the work of rearing to maturity her 11 children, there was ample scope for the development and expansion of all those faculties of eye and hand, heart and brain, and nobly were those powers used. As a sister wrote some three years since—"Where will you find another such a mother, another such a woman?" Loyalty to principle was a conspicuous trait—indeed, formed the basis of her strong, earnest character. In any direction where mere self-sacrifice was required no one was easier to persuade, but let the attempt be made to sway her from principle and it was soon found that her house was indeed "founded on a rock."

Coming here to this Pacific Coast when the state of society was crude and of a different stamp from that in which she had been reared, she was told: "You will be obliged to let your children follow in such and such ways; it is the custom of society and cannot be helped." Promptly came the reply, "I think not. If their associations in society must needs be undesirable, I shall keep them out of it." Yet, with all her profound convictions of truth and right, she was no sour-faced Puritan. A more genial, cheerful, wholesome nature it would be hard to find. Her ringing laugh, her bright, vivacious words, her contagious joyousness, made her, usually, a center of attraction for both old and young when, notwithstanding her numerous home duties, she was found mingling with her friends and neighbors.

In those early days, when schools were remote and in their infancy, and her growing family needed a teacher and there was none to be had, the problem would have seemed, to most minds, unsolvable—how to guide the household and keep all comfortable, yet instruct the children. But nothing daunted, books were procured and the mother of six children, the youngest an infant in her arms, proceeded to systematize the time and the work (which was done much of the time without assistance, other than that of her little girls), and hear daily recitations from the elder ones. Just here, let it be observed, that no one of her 11 children was taught to read by an outsider. It was her theory that children should know how to read intelligently before being sent to school. Meantime, all the garments were to be made, the cradle rocked, the meals prepared, the dairy attended to, and all the ocean of work of a large farm-house daily gone through with. And let it not be supposed that any of that household were ill-fed or cared for.

When the Sabbath dawned, would not an ordinary energy have said—now, I must rest—I am too tired to attend church. But no! With unusual celerity the house was set in order, and with happy heart the household summoned for the morning home service, and then to dress for church. Once there, the time was all too short for the cheerful songs and earnest words of the devoted Sunday-school teacher.

O my mother! How many by your loving words have been led to choose the better part, only eternity will reveal. Her religion was to her a very elixir of life, for it was not only, or chiefly, the active brain, the magnificent physical resources, the sparkling social ability, but, more than all, the loving heart and the Christ-like spirit of self-sacrifice that made our departed one so pre-eminently "a mother in Israel."

There are many whose mental endowments, seconded by generous culture, have gained for them a local reputation as brilliant conversationalists; but it was not in such walks that she sought to be known. Her mission was to speak, in the ear of the discouraged and faint-hearted, words of hope and cheer. And not words alone, but helpful deeds, bore witness to her love for humanity. Was she ever too tired to help any who asked assistance? Did any of her 11 sons and daughters ever find mother's ear dull to their recitals, whether of joy or sorrow? Ah! the keenness of our grief is this—we cannot tell it to mother.

A more loyal wife, a more tender mother, a heart more filled with unwearied, quenchless, devoted love—I do not think the world has ever seen. I am not exaggerating. "Many daughters have done virtuously, but thou excellest them all."

It was not in her own household alone that her comforting presence was made a blessing. From far and near, when sickness and death invaded the homes of others, came the cry—we want you, we need you; can you come? And seldom indeed was her weariness so great, or her cares so numerous, that she did not contrive to respond to the call of distress. Said a friend to me, once—"Your mother seems such a tower of strength when she comes into a sick-room." There are many still surviving, and others who have passed on, who could testify to the aptitude of the figure.

Her humility was one of her most touching traits. Though to some degree aware of her own extraordinary gifts, no sense of superiority ever betrayed itself in manner or bearing. All mankind were her sisters and brothers, and she was ever inclined to acknowledge and reverence intellect in others.

Of flowers she was an enthusiastic lover, and they grew under her fostering care with a profusion that seemed to prove her kinship to all forms of life and beauty. The dear hands fashioned many a floral gift for the burial service of those who otherwise would have been laid to rest without those "emblems of our own great resurrection."

Nearly two years ago, her summons came. No one knew the call or dreamed that the accidental fall meant a year and nine months of suffering which grew to mortal agony the last few weeks. Yet, so it was—and on the 17th of July with the words "More light forever!" the spirit that had ever aspired to the light closed its earthly utterances and shortly after "returned to God who gave it." The

first break in our family circle, that has seemed so long charmed against the Destroyer, has come where least expected, and where human wisdom would have said—"Anywhere but there can one be better spared." Our dearest, our best, our greatest, God has taken. But remembering her teachings, we say: "It is the Lord—let Him do what seemeth Him good."

"Oh, be sure of this,  
All things are mercies while we count them so;  
And this believing, not keen poverty,  
Nor wasting years of pain, nor slow disease,  
Nor Death—  
Shall ever drift our bark of Faith ashore.  
Whose steadfast anchor is securely cast  
Within the veil, the veil of things unseen,  
Which now we know not, but shall know hereafter."

ANNA FRISBIE BAILEY.

Battle Mountain, Nev., Aug., 1886.

PICTURESQUE CALIFORNIA HOMES.—We have received a copy of the "Second Volume of California Homes," by S. & J. C. Newsom, 504 Kearny St., S. F. It is a companion volume to the "Picturesque California Homes" published last year. It contains 40 plates with designs for city, suburban and village homes, and contains many which seem to us very satisfactory. Estimates are given of cost of construction and hints of interior finish and other matters of importance to builders.

### Cheap Money for Farmers.

Farmers in this State will be glad to learn that they can borrow on mortgage any amount, from \$5000 to \$500,000, from S. D. Hovey, 330 Pine St., San Francisco, at 6 to 7 per cent and taxes. \*\*

## Educational.

### MILLS SEMINARY.

The next term of this well-known Institution will commence on

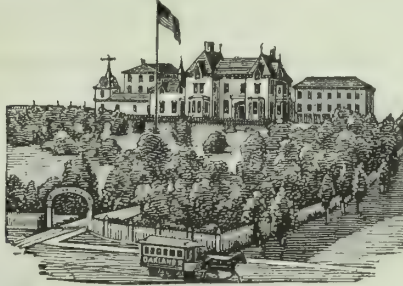
Wednesday.....August 4, 1886.

For Circulars giving particulars, address

MRS. C. T. MILLS,

Mills Seminary P. O., Alameda Co., Cal.

### California Military Academy, Oakland, Cal.



Special Feature—Commercial Department. Next Term begins July 19, 1886. Send for circular.  
COL. W. H. O'BRIEN, Principal.

### VAN NESS SEMINARY

San Francisco, Cal.

### A BOARDING AND DAY SCHOOL

—FOR—

### Young Ladies and Children,

1222 Pine St., San Francisco.

Thorough training in practical studies and accomplishments, and pleasant surroundings, are the principal advantages offered.

Fall Term Opens July 26, 1886.

For Catalogues and particulars, apply to MRS. S. B. GAMBLE, or MRS. E. H. WOOD.

REFERENCES—Rt. Rev. W. I. Kip, Bishop of California; Rev. C. O. Tillotson, Santa Cruz; Hon. C. H. Hartson, Napa; John D. Yost, San Francisco; F. A. Hihn, Santa Cruz; E. J. Wilson, Vallejo; Capt. A. D. Wood, San Francisco; Eugene Sherwood, San Francisco.

### STOCKTON

Business Telegraph Institute and NORMAL SCHOOL.

Open day and evening for both sexes. Expenses less than one-half the usual rates. Excellent board in private families from \$8 to \$10 per month. Address, for College Journal and Circulars, J. C. BAINBRIDGE, Principal, Stockton, Cal.

### PERRY SEMINARY,

Boarding and Day School,

1825 Telegraph Ave., Oakland, Cal.

MRS. HERMON PERRY, Miss KATH M. FULLER, PRINCIPALS.

Next Term will begin Monday, Aug. 2, '86

HEALD'S BUSINESS COLLEGE,  
24 Post St. S. F.  
Send for Circular.

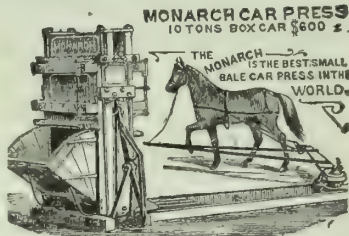
## HALL'S SARSAPARILLA

Cures all Diseases originating from a disordered state of the BLOOD or LIVER. Rheumatism, Neuralgia, Boils, Blotches, Pimples, Scrofula, Tumors, Salt Rheum and Mercurial Pains readily yield to its purifying properties. It leaves the Blood pure, the Liver and Kidneys healthy and the Complexion bright and clear.

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## MONARCH PRESS



Puts 10 Tons in a Box Car.

Bales from 10 to 15 tons per day.

Any young man can earn more on an investment of \$600 in this press than can be earned in expending \$2000 for any other machine.

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TRUMAN, ISHAM & HOOKER,

SAN FRANCISCO, CAL

WE SELL:

BALING ROPE,  
STEEL BALING TIES,  
BALING WIRE

AND THE CELEBRATED

HOLLOW IRON AXLE WAGONS.

SEND FOR CATALOGUE.

## CALIFORNIA STATE FAIR—1886.

At Sacramento, Sept. 6th to 18th.  
TWO WEEKS.

The Attention of the Farming Community of this State is particularly called to the Liberal Awards, and advantages offered for

### COUNTY EXHIBITS.

The importance of an exhibit made by separate counties, showing the productive qualities of the various sections of our State, has become more apparent each year since the system was inaugurated by this Board. Recognizing the interest made manifest in the past by both the public and the exhibitors, through whose energy and enterprise valuable agricultural lands have been brought to the notice of the world, and counties with small populations have increased in a manifold degree, by reason of the producer having come forward with his products that were of such quality as to enable him to meet all competitors, the Board have deemed it proper to increase the premiums in this Department, and to that end have appropriated \$2000 to be distributed among the various counties making displays under the following provisions: To those who may have charge of the exhibits, we would call their attention to the fact that these awards will be made for the most extensive, perfect, and varied exhibit of Farm Products (exclusive of live stock) exhibited as a County Production. Thus it will be seen that it is to be wholly devoted to the products of the farms located in the county where the exhibit is made from, and does not include manufactured goods of any kind or character except those grown and raised in the county from whence the display comes.

For the best display, as per explanation above, First premium of \$500, cash. The remaining exhibits shall receive premiums in proportion to their excellence, as compared with that receiving the First Premium. Competition to be between counties only. That is to say, that the entire exhibit made by one county must compete against the entire exhibit of another county. The premium awarded to each county exhibit will be paid to the committee in charge of said exhibit. The State Board of Agriculture earnestly desires the hearty co-operation of the various subordinate Granges throughout the State, in making this exhibition of California's products a success, whereby the varied products of different localities may be fully shown. We would ask the appointment of a committee from the Grange in each county to call upon and urge the patrons to make a display representing their respective counties.

Address the Secretary at Sacramento for Premium Lists and other information.

JESSE D. CARR, President.

EDWIN F. SMITH, Sacramento.



## \$50 REWARD

will be paid for any Grain Fan of same size that can clean and bag as much Grain or Seed in one day as our Patent MONARCH Grain and Seed Separator and Hopper or our Improved Warehouse Mill which we offer cheap. Price List mailed free.

NEWARK MACHINE CO.,  
Columbus, Ohio.



SAN FRANCISCO:  
Junction Market, Pine and  
Davis Streets.

# BAKER & HAMILTON.

SACRAMENTO:  
Nos. 9, 11, 13, and 15  
J Street.

IMPORTERS, MANUFACTURERS, AND DEALERS IN

## Hardware and Agricultural Implements.

### IMPROVED GRANGER GANG PLOWS, WITH ONE EXTRA SHARE TO EACH BOTTOM.



Granger Gang Plow, with Detachable Steel Mold-Boards, Cast Cast-Steel Shares and Cast Landsides.

No. 11, Three Gang, 8-inch.....	\$60 00	10-inch.....	\$ 65 00
No. 12, Four Gang, 8-inch.....	65 00	10-inch.....	75 00
No. 13, Five Gang, 8-inch.....	75 00	10-inch.....	85 00
No. 14, Six Gang, 8-inch.....	85 00	10-inch.....	90 00
No. 15, Seven Gang, 8-inch.....	95 00	10-inch.....	100 00

Seed Sowers, attached when ordered, either for Front or Rear Sowing.

3 Gang, Sower attached in front.....	\$8 50	Sower attached in rear.....	\$ 9 00
4 Gang, Sower attached in front.....	7 00	Sower attached in rear.....	9 00
5 Gang, Sower attached in front.....	8 00	Sower attached in rear.....	10 00
6 Gang, Sower attached in front.....	9 00	Sower attached in rear.....	11 00

Extra Molds, 8-inch, \$2.50; 10-inch \$3.50. Extra Shares, \$1.25 and \$1.50 each.

Extra for Hard Wood Frames.

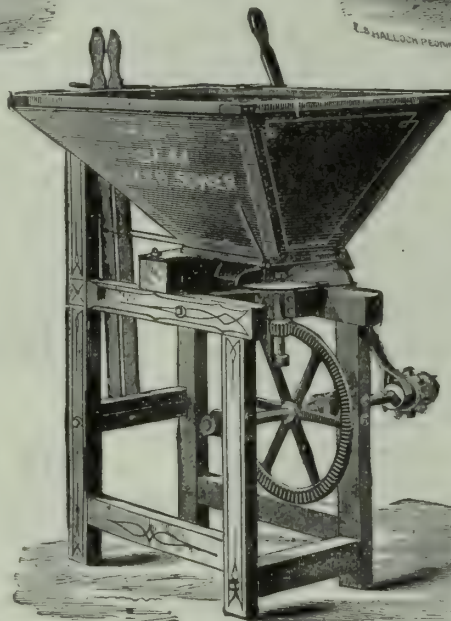
For 3 Gang, \$5.00; for 4 Gang, \$7.50; for 5 Gang, \$8.50; for 6 Gang, \$10.00.

### IMPROVED GRANGER GANG PLOWS,

With the Celebrated Gale Chilled Iron Bottoms, with one extra Share to each bottom. Granger Gang Plow, with Detachable Mold-boards, Shares and Landsides.

No. 11b, Three Gang, 8-inch.....	\$52 50	10-inch.....	\$62 50
No. 12b, Four Gang, 8-inch.....	60 00	10-inch.....	70 00
No. 13b, Five Gang, 8-inch.....	70 00	10-inch.....	80 00
No. 14b, Six Gang, 8-inch.....	80 00	10-inch.....	85 00
No. 15b, Seven.....	90 00	10-inch.....	95 00

### GEM SEED SOWERS —WITH— Armstrong's Patent Force Feed.

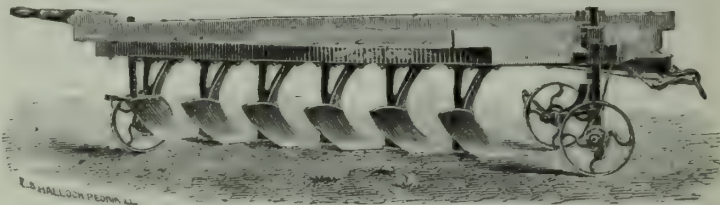


No. 1—WEIGHT, 130 POUNDS, \$20.00. This machine is run with a Chain and Bevel Gear. It is the one we have sold for years, and has given the best satisfaction of all broadcast seeders yet invented.

No. 2—WEIGHT, 164 POUNDS, \$22.50. Runs with Chain and Belt Gear. The advantages gained by the bevel gear are smoothness of movement, noiselessness while running, durability of the rapidly running parts, and the evenness with which it sows the grain.

No. 3—WEIGHT, 164 POUNDS, \$25.00. Runs entirely by gear. This machine is preferred by many to the others which run by chain.

### STOCKTON OR REVERSIBLE MOLD-BEARD GANG PLOWS.



GANG OF 8-INCH BOTTOMS.

3 Plows.....	\$33 00	5 Plows.....	\$44 00	7 Plows.....	\$57 00
4 Plows.....	38 00	6 Plows.....	50 00	8 Plows.....	65 00

GANG OF 10-INCH BOTTOMS.

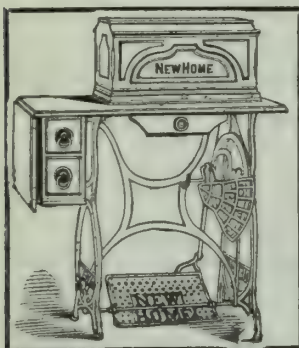
3 Plows.....	\$40 00	4 Plows.....	\$45 00	5 Plows.....	\$50 00
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These gangs and extras are made in a superior manner, and all parts are interchangeable.

#### Seed Sowers Attached to Above Gangs.

In Front, Extra, according to size.....	\$4 50 to \$ 9 00
In Rear, Extra, according to size.....	9 00 to 11 00
Rear Harrow Attachment, Extra.....	12 50
Lifting Device, Extra.....	15 00

N. B.—We are manufacturing for this season's trade a new Steel Beam Gang Plow, with 3 or 4 plows, each plow cutting 8 or 10 inches. They are much lighter than the wood frame gangs, cutting the same furrow, stronger and more durable. Each Gang has two wide-tire carrying wheels, with adjustable boxes and regulating levers to each wheel. They also have a long gauge lever, by which the gang can be regulated to take more or less land.



EASIEST

## "NEW HOME."

Territory Controlled by the  
S. F. Office:

ARIZONA,  
CALIFORNIA,  
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AGENTS WANTED.  
IN UNOCCUPIED TERRITORY.

SIMPLEST.

Best Stand,  
Best Feed,  
Best Shuttle,  
Best Attachments,  
Best Woodwork,  
Best Wearing.

### THE ROYAL SINGER!

NEW SINGING CLASS BOOK BY L. O. EMERSON  
THE BEST OF ALL!

Teachers of Singing Schools who examine this, the last of Mr. Emerson's series of successful class-books, will generally concede that it is, in some degree, superior to any of its predecessors. The elementary exercises, the graded easy tunes for practice, the part songs or glees, and the church tunes, anthems and chants, all excel in their selection or arrangement. With its happily chosen title, good and interesting music and generally attractive character, there is good ground for hope that it will be the "favorite of the season." READY SEPTEMBER 1st.  
Price, 60 cents; \$8 per dozen.

### PARLOR ORGAN GALAXY.

A good and large collection of Reed Organ music, selected and arranged by W. F. BURNS; 40 good Marches, Galops, Waltzes, Rondos, Schottisches, etc., and 17 popular songs, covering 96 sheet music size pages, yet sold for the very low price of 50 cents.

Remember our superior new Sunday School Song Book, Songs of Promise, 35 cents, and our High School Song Book, Song Greeting, 60 cents.

OLIVER DITSON & CO., Boston.

C. H. DITSON & CO., 867 Broadway, New York.

600 ACRES. 13 GREENHOUSES.

### TREES AND PLANTS

We offer for the Fall trade a large and unexcelled every description of FRUIT and Ornamental TREES, Shrubs, Roses, Vines, SMALL FRUIT TREES, Hedge Plants, Fruit Tree seedlings and Forest Tree seedlings. Priced Catalogue, 1000, mailed free on application. Address BLOOMINGTON PHOENIX NURSERY, BLOOMINGTON, ILL.



## PUMPS!

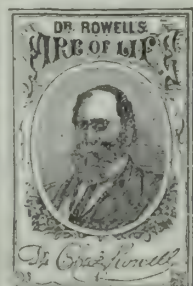
WINDMILL PUMPS, HAND-FORCE PUMPS, LIFT PUMPS, WINE PUMPS, HYDRAULIC RAMS.

And Pumps for every kind of work.

IRON PIPES and PLUMBERS' GOODS.

W. R. ALLEN,

414 Market St., San Francisco.



### A MAGIC CURE

—FOR—

Rheumatism, Neuralgia, Pneumonia, Paralysis, Asthma, Sciatica, Gout, Lumbago, and Deafness.

Everybody should have it.  
G. G. BURNETT, Agt  
327 Montgomery St., S. F.  
Price, \$1.00. Sold by all Drug  
gists. Call and see  
DR. CHAS. ROWELL  
Office—426 Kearny St.  
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### RUPTURE!

A New Invention! The "Perfection" Belt Truss, with Universal Joint Movement and Self-adjusting Spring. Worn with perfect comfort, it cures all cases of ruptured vessels, hernia, etc. Price, \$13 to \$18. Call or send for descriptive circular. Address, J. H. WIDDER, (Druggist) 701 Market Street, cor. Third, San Francisco.

### American Exchange Hotel,

SANSOME STREET.

Opposite Wells, Fargo & Co.'s Express, one door from Bank of California, SAN FRANCISCO.

This Hotel is in the very center of the business portion of the city. The traveling public will find this to be the most convenient as well as the most comfortable and respectable Family Hotel in the city.

Board and Room, \$1.00, \$1.25 and \$1.50 PER DAY, ACCORDING TO ROOM.

Hot and Cold Baths Free. None but most obliging white labor employed. Free Coach to and from the Hotel.

MONTGOMERY BROS., Proprietors.



Are you using Welling-ton's Improved Egg Food for Poultry? If not, why not? Every Grocer, Druggist and Merchant Sells this Egg Food.

### FOR SALE.

300,000 SEEDLING ORANGE TREES,

Average one inch in diameter.

Price, ten (10) cents each. Address

T. H. & J. G. HERNDON,  
Leesburg, Fla.

### COMMERCIAL HOTEL.

A. & J. HAHN, Prop'rs,

Nos. 275, 276, 277 and 2 Main Street, STOCKTON, CAL.

Rates, \$1.25 to \$2 Per Day.

Stage offices for Colleville and Oakdale, Roberts and Union Islands, and Lase's Mineral Springs stages. The most desirable location in the city. Refurnished and refitted in the best style for the accommodation of the public.

### THE GOAT-BREEDERS' ANNUAL MEETING

Will take place on Thursday, September 16, 1886, at Pioneer Hall, SACRAMENTO, at 8 o'clock P. M. of said day.

All Goat-breeders invited to attend at that meeting, and also requested to exhibit specimens of their flocks at the State Fair.  
C. W. SCHLEIFFER,  
July 23, 1886. Chairman.

### A NEW COLONY

On the new extension of Southern Pacific Railroad, on the lands belonging to R. T. BUELL, Esq., near Los Alamos, Santa Barbara county, Cal. Parties desiring to visit the property now, can go via San Luis Obispo and take the cars from thence to Los Alamos, thence by stage to the Colony. 20,000 acres of the best lands in California, subdivided into 20, 40 and 80-acre farms; \$20 to \$30 per acre. INTERNATIONAL IMMIGRANT UNION, 401 California St., San Francisco.



The Sonoma County Fair.

It was thought to be assuming quite a risk for one county to undertake such a fair as came off last week at Santa Rosa—a fair on so extended a scale, with large premiums on all classes of exhibits, agricultural, mechanical and artistic—but it proved a great success, both financially and otherwise. President De Turk, Secretary Winants and John M. Laughlin were most attentive and efficient, the excellence of their management being spoken of generally, the police regulations were admirable, the weather was delightful, and the attendance went on increasing daily to the close, the farm folk coming and camping in the pavilion, and making a kind of family picnic. From the ample columns of the *Democrat*, and notes of our representative on the spot, we make up a partial report.

Approaching the inclosure, one was struck with the beauty of the surroundings as seen from the avenue, and the soft lowing of kine came pleasantly to the ear. In the foreground the long line of stalls, with their coat of white, was almost blinding to the eye. Beyond, one caught glimpses of the track, dotted here and there with the flyers destined to afford the visitors pleasure in the days to follow, while the pavilion and grand stand loomed high above the neighboring tents and booths.

At the gate a busy scene burst upon the view, and the question was which way to turn first, but it seemed natural to join for awhile the spectators grouped near the grand stand to watch the exercising trotters whirl past. The horses seemed to feel the magical influence of the perfect morning, and their nostrils dilated as they quaffed deep draughts of the pure air.

Entering the pavilion, the eye was caught with a lovely floral bank, composed of pot plants from M. H. Dunn's nursery. Turning to the left, one came first upon Baker & Ross' buggies—their own make.

Next was the display of the Santa Rosa Soap Works—a fine exhibit tastefully arranged.

The new Santa Rosa steam fire engine was next in line. Its beauty and lightness, combined with strength and utility, sufficed to keep a large number of spectators around it all the time.

After this came a beautiful display of Sonoma county wines, from De Turk's winery, arranged in pyramidal form. This included samples of the vintage of eight consecutive years, beginning with 1878.

Fisher & Kinslow's specimens of marble work deserved and elicited flattering comments.

Ludwig & Kroncke showed tanks and fancy woodwork; and Ludwig & Son, fine buggies.

Geo. S. Brown (formerly of Oakland) had on exhibition vineyard plows and cultivators of six different patterns, each claiming superiority for some special purpose.

In the center of the floor, and stretching its entire length, was the Pomona Grange's exhibit of fruit, vegetables and fruit contained in cans, which visitors seemed never tired of inspecting. Here were displayed the choicest products of orchard, garden and housewife's sanctum. Owing to the earliness of the season, some of the fruits were unripe, but foretold perfection in their promising beauty and symmetry. Those already ripe—plums, peaches, pears and apples—were in a perfect state of preservation and promised long to retain their beauty. Among the canned fruits, one can in particular of Crawford peaches put up with the skins on attracted much attention. The beautiful velvety softness and richness of tint retained on these luscious peaches, as seen through the glass in clear liquor, was unrivaled. There were many others worthy of mention, but this can was singled out for its novelty.

Three or four branches from a chestnut tree, lined with the prickly burrs, attracted a deal of notice and drew from hoary-headed men nutting stories of the long-ago.

Doggett & Goodfellow made a fine display of the products of their feed-mill.

Colgan & Hervey showed fine carriages.

L. Keser's exhibit of articles included in the equine wardrobe was both complete and tasteful.

The W. C. T. U. bazaar was emblematical of the good work of their organization. These ladies would revolutionize the world with the simple weapons, pure water and good example. Their booth was very artistic. The center figure was a ship of somber hull and rakish rig, bearing upon its black sides in silver letters the word, "Prohibition." On either side were the inscriptions: "Wine is a Mocker" and "Prohibition Our Watchword." The latter invited the visitor to a refreshing draught of ice-water.

Ascending the stairs at the southwest corner, the first display was Spencer & Armstrong's brilliant assortment of cut-glass and fancy groceries.

Then came Mrs. Laughlin's jellies, L. Burbank's "garden truck" and E. H. Smyth's pears.

Doubleday Bros.' booth struck the visitor as beautifully and tastefully gotten up. In the German bazaar of F. W. Spence & Co., of S. F., were found pianos of the makes of Conover & Bro., S. G. Chickering, Guild and Christie & Son. In the Commercial College department fine specimens of pen-work and phonographic studies were exhibited.

The art gallery contained paintings, pencil sketches, pen-drawings, specimens of embroidery, kindergarten-work, etc., beautiful and in-

teresting enough, but not to be detailed in our brief survey.

The mineralogical and entomological display from the cabinets of the Agassiz Society, No. 664, A., was remarkably fine. The young people took a pardonable pride in their collection, and exerted themselves to the utmost in entertaining their visitors.

The central portion of the downstairs exhibit, as viewed from above, resembled a mound of fruit. It was said by those who should know, that the pavilion never looked nicer.

At the stock-sheds everything was neat and well ordered. Among the horses were Clydesdales, Normans, and Cleveland bays. There were a large number of brood mares with their little families. J. H. White, of Lakeville, showed six head of Holsteins, from his importation of 1884. His three-year-old bull, Usurper, weighing 1600 pounds, is a magnificent animal and as gentle as a kitten. Edward Steiger, of Sonoma, exhibited a calf, from the same herd, which competent judges pronounced one of the finest ever seen in California.

Guerne & Murphy, of Guerneville, showed a yearling Holstein bull calf of Peter Saxe & Son's importation.

The Jersey family, exhibited by E. W. Woolsey, presented a picture admired by all dairymen. There were two bulls and two cows in this lot. There were also other fine lots worthy of mention; but the above were singled out as being of standard blood.

The poultry exhibit was remarkably small, considering that (as the *Democrat* avers) "the income from the poultry industry in this county exceeds that of any other, not excepting lumber, the grape and its auxiliaries."

The sheep and swine sheds were but scantily tenanted, yet the exhibits made were especially good.

The Mechanics' Institute Fair.

The annual exposition of the Mechanics' Institute is now in progress in the grand pavilion in this city, and will continue to be the center of attraction in the city for a month. The space is well occupied with a great variety of industrial and art materials, natural productions of every kind, etc. It is too late to prepare any sketch of the fair for this week's *PRESS*. Let our readers note the fact that it is now in readiness for their visits. For those who cannot come we shall record our notes of the exhibition hereafter.

The opening exercises at the Grand Opera-house began at 2 o'clock Tuesday afternoon, Aug. 24th, with a grand opening overture by the orchestra under Charles Schultz. Rev. Joseph P. Macaulay made a short prayer, after which there was more music by the orchestra.

P. B. Cornwall, President of the Mechanics' Institute, in a brief address introduced Ramon E. Wilson, who delivered an excellent address, which we will publish next week.

The address of Mr. Wilson was followed by a laughing song, "Manon Lescant," by Miss Ellen Coursen and the Young Ladies' Choral, after which Fred Emerson Brooks read an original poem. The exercises closed with a cornet solo by Mr. Mahood, a chorus from *Lucia di Lammermoor* by the Choral, and music by the orchestra.

The American Exhibition in London.

The following communication has been received by Jesse D. Carr, President of the State Board of Agriculture, from Burnet Laudreth, Director in the United States for the American Exhibition in London, which opens on the 2d of next May, and closes October 31:

"May I take the liberty of calling your attention to the subject of the American Exhibition, to be held in London next summer, and suggest that if it be considered desirable by you that the agricultural products of your State be shown in London with a view of developing the foreign demand for the same, and with a view of attracting the attention of intending emigrants to your State, that it is now the proper time to take steps, during the continuance of the county agricultural fairs, to make collective exhibits of cereals and fibers. No doubt a handsome display could be gathered together in this way, and one which would serve a most admirable purpose, as indicated. Of course the State display—should one be made—would properly include products of the mine and forest, as well as those of the farm. If this subject meets your approval I will be glad to correspond with you further."

The State Agricultural Society proposes to make up, from the county exhibits of the State Fair, an exhibit for the London exhibition, and to this end, as well as for the purposes of the State exhibition, it is hoped that the counties will make a very creditable display.—*Record-Union*.

WORTHY OF FAVOR.—We give space freely to the card of the S. F. Girls' Union, in this issue, because we believe the institution one of the most worthy among the benevolent undertakings of the times and one particularly needed in our metropolis for the benefit of the city and whole coast. We are confident that many other journals, if fully informed of the really philanthropic and important benefits being derived from the Union by homeless girls and women, would be prompt to give the ladies a "God speed" in their work. The card should be read and well considered by all.

PACIFIC COAST WEATHER FOR THE WEEK.  
(Furnished for publication in this paper by NELSON GOROM, Sergeant Signal Service Corps, U. S. A.)

	Portland.			Red Bluff.			Sacramento.			S. Francisco.			Los Angeles.			San Diego.		
DATE.	Rain.	Temp.	Weather.	Rain.	Temp.	Weather.	Rain.	Temp.	Wind.	Weather.	Rain.	Temp.	Wind.	Weather.	Rain.	Temp.	Wind.	Weather.
Aug. 18-25.																		
Thursday .....	.00	65	S Sy.	.00	90	S Cl.	.00	82	S Cl.	.00	61	W Cl.	.00	86	W Cl.	.00	74	NW Cl.
Friday .....	.00	67	S Cy.	.00	83	S Cl.	.00	77	S Cl.	.00	63	W Cl.	.00	87	W Cl.	.00	75	NW Cl.
Saturday .....	.00	72	S Cy.	.00	81	S Cl.	.00	76	S W Cl.	.00	68	W Cl.	.00	89	W Cl.	.00	75	NW Cl.
Sunday .....	.01	70	NW Cl.	.00	88	NW Cl.	.00	82	S W Cl.	.00	63	W Cl.	.00	87	W Cl.	.00	74	W Cl.
Monday .....	.00	74	SE Cl.	.00	83	S W Cl.	.00	74	NW Cl.	.00	67	W Cl.	.00	83	S W Cl.	.00	73	W Cl.
Tuesday .....	.00	73	S Cy.	.00	79	S Cl.	.00	77	S W Cl.	.00	68	W Cl.	.00	83	W Cl.	.00	72	NW Cl.
Wednesday .....	.00	69	NW Cl.	.00	89	N Cl.	.00	78	NW Cl.	.00	78	W Cl.	.00	88	S W Cl.	.00	74	S W Cl.
Totals .....	.01			.00			.00						.00			.00		

EXPLANATION.—Cl. for clear; Cy., cloudy; Fr., fair; Fy., foggy; — indicates too small to measure. Temperature Wind and weather at 12:00 M. (Pacific Standard time), with amount of rainfall in the preceding 24 hours.

The Legislative Recess.

The Legislature adjourned at the close of last week and will reassemble Sept. 7th. The following is the Governor's message, stating his reasons for adjourning the Legislature:

STATE OF CALIFORNIA, EXECUTIVE DEPT.,  
SACRAMENTO, Aug. 20, 1886.

To the Senate and Assembly of the State of California: At my call you met in special session on the 20th of July for the purpose of considering and taking action upon measures which relate to the immediate and future welfare of the State. A memorial, signed by 89 members of the Legislature, was presented me as Chief Executive of the State, petitioning me to call this extra session. To that memorial were appended certain measures for legislative action in regard to the division and use of the flowing waters of the State for irrigation, and I was therein informed by the signers that those measures would receive their support. I am bound to believe that they, the elected representatives of the people, were sincere in making such representations to me. In view of the vast importance of this question of water rights to the material welfare of the State, and in view of the light which has now been thrown upon it, I cannot but believe that the Legislature will pass such laws and amendments to the Constitution as may be necessary to set aside the English common-law doctrine of riparian rights—a doctrine which, if sustained and enforced, will, in my judgment, destroy millions of property and ruin the agricultural interests of a large part of the State. The consideration already given to the pending measures has resulted in securing a nearly unanimous support of certain constitutional amendments and bills in one branch of the Legislature. Although over four weeks have elapsed since the Legislature convened, no agreement between the houses has yet been reached. The complex nature of the subject and the wide diversity of opinions as to the specific measures go to show that the matter could not receive due and sufficient consideration at a regular session which is limited in time, and during which many other affairs demand attention.

The settlement of this great question in this special session, called for the purpose, will repay the State a thousand-fold for the expenses of the session. It now appears to be necessary to defer the daily sessions for a brief period. A general election is approaching. The two great political parties, through whose organized instrumentality under our American system the Government of the State is at regular times renewed, are about to meet in conventions to nominate candidates. Many members of the Legislature desire to attend these conventions, and they may justly consider it their public duty to do so; accordingly a resolution to adjourn until the 7th day of September has been passed by the Assembly, but the same has been disagreed to by the Senate. It seems to me proper that an adjournment should be had. No additional expense would be entailed, since under the Constitution the period of the members ceases when there is an adjournment for more than three days. In the mean time, by communicating with their constituents and a consequent interchange of opinion, members may be better prepared upon their return to come to a proper agreement, resulting in wise and fruitful legislation. Now, therefore, I, George Stoneman, Governor of the State of California, by virtue of the power vested in me by Section 11 of Article V of the Constitution, do hereby adjourn the Legislature until Tuesday, the 7th day of September, A. D. 1886, at 2 P. M. of that day.

GEORGE STONEMAN, Governor.

Los Angeles County Quarantined.

We have received a copy of the following circular from the Southern Pacific Company:

To Agents and Fruit-shippers:—We have been notified that Los Angeles has been placed in quarantine against the importation of infested trees and fruits. All fruit and fruit trees imported into that county will be subject to an inspection by the Local Inspector, and if found to be infected, delivery will not be allowed. Please be particular and notify all shippers of the above facts, informing them that they must assume all responsibility in case of this company's inability to deliver on account of action by inspector.—RICHARD GRAY, General Freight Agent.

SILK AT THE FAIRS.—The State Board of Silk Culture has decided to establish booths in the Mechanics' and State Fairs. The manner of reeling silk from the cocoons will be shown daily, and small samples of silk, accompanied by descriptive pamphlets, will be distributed to all who take an interest in the matter. They will have a large exhibit at the Sacramento Fair, and new machinery, costing \$200, and weighing 1250 pounds, is on its way from Marseilles, and is expected to arrive early next week.

FROZEN beef carcasses are now being shipped from Texas to London and other European points.

Three District Fairs.

The Third District Agricultural Association, embracing Butte, Tehama and Colusa counties, held its fair at Chico last week and the town was crowded with people from the region round about.

In former years, says the *Bee*, the first named county carried the greater part of the work, but this year the others helped along splendidly, sending in fine specimens from orchard, garden and farm. Premiums to the amount of about \$6000 were divided among the exhibitors of stock, fruits, grains, vegetables, mercantile displays, art work, mechanical work, needle work and the flyers.

In the new Armory hall every foot of space was taken. The berries, peaches, pears, plums, apples, grapes, etc.—once more spoke volumes in favor of Northern California as a fruit-growing region, while the exhibit of cereals demonstrated its rank among the grain-producers.

There was nothing, however, from the Rancho Chico orchards and gardens, which in former years carried off all the first premium ribbons. The owner of the ranch, General John Bidwell, has such an aversion to horse-racing that he declared two years ago he would never make another display as long as that custom was kept up in connection with the annual fairs. He favors a fair devoted entirely to a stock show and the exhibitions of products of the soil. It is said that the General does not particularly object to trials of speed of horses, but he does object to pool-selling at the race-course. His influence and his exhibits are greatly missed.

The Fourth District Fair at Petaluma is in progress as we go to press. The exhibit of horses and horned stock is said to be large and fine, surpassing that of any previous year. The display indoors was never better, and the attendance has been up to the average.

At Nevada City, also, the attendance at the park this week has been large, while the pavilion is overflowing with horticultural and agricultural produce. The show of pears, grapes, apples and peaches is pronounced one of the best ever made upon the coast.

Costly Conflagration in San Francisco.

One of the most wide-spread and destructive fires that has taken place in this city for years broke out in Small's foundry on Brannan St. last Saturday evening, made rapid headway among the planing mills, box factories and other combustible material of the neighborhood, and, in spite of the strenuous efforts of the whole fire department, swept along two blocks on Fifth St., between Bryant and Townsend Sts., before it could be mastered.

The greatest destruction of property was that of M. C. Hawley & Co., but fortunately they were well insured. Harvey W. Rice met with a most deplorable loss, as his insurance was very small in proportion to his losses. Another establishment which readers of the *RURAL* know is that of L. Walker & Son, wool warehouse, etc., but they were well insured. Baker & Hamilton fortunately escaped with little injury. We regret exceedingly the losses and inconvenience which the conflagration has brought upon some of our best known and most enterprising men. The total loss by the fire is estimated at \$1,000,000.

THE IMPROVED DEMAND FOR WHEAT.—The news from the great wheat markets of the Atlantic seaboard is that wheat exporters are hurrying the trade and getting as much wheat as possible under engagement for delivery during the next three months. The reason for their activity can be found in the now admitted fact, which we have claimed for some time past, that the partial failure of the wheat crop nearly everywhere will make supplies quite short before another year's eating is complete. A dispatch from New York on Friday last said:

The transactions in wheat for September, October and December deliveries amounted to upward of 11,000,000 bushels. The increasing demand for Europe is chiefly based upon cablegrams from London and Paris about the bad weather. One authority is quoted as stating that the French wheat crop is largely short. The announcement that a quarter million of bushels of cash wheat has been taken at Baltimore for export this morning served to stimulate the market.

It is a very good sign when the exporters are doing more business than the grain gamblers,



## Breeders' Directory.

Six lines or less in this Directory at 50c per line per month.

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CALIFORNIA POULTRY FARM, Stockton, Cal. Send 2-cent stamp for Illustrated Catalogue.

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### HORSES AND CATTLE.

Estate of M. E. BRADLEY, San Jose, Cal., breeder of recorded thoroughbred Shorthorn Cattle and Berkshire Hogs. A choice lot of young stock for sale.

E. W. STEELE, San Luis Obispo, Cal., breeder of Thoroughbred Holstein and Jersey Cattle.

J. R. ROSE, Lakeville, Sonoma Co., Cal., breeder of Thoroughbred Devons, Roadsters and Draft Horses.

GEO. BEMENT, & SON, Redwood City. Ayrshire Cattle, Southdown Sheep, Berkshire and Essex Swine.

SETH COOK, Danville, "Cook Farm," Contra Costa Co., breeder of Aberdeen Angus, Galloways and Devons (Registered). Young stock for sale.

H. S. SARGENT, Stockton. Thoroughbred Jersey Cattle, and Poland-China Hogs from imported stock.

J. H. WHITE, Lakeville, Sonoma Co., Cal., breeder of Registered Holstein Cattle.

PETER SAGE & SON, Lick House, San Francisco, Cal. Importers and Breeders, for past 14 years, of every variety of Cattle, Horses, Sheep and Hogs.

WILLIAM NILES, Los Angeles, Cal. Thoroughbred Poultry, Cattle and Hogs. Write for circular.

COTATE RANCH BREEDING FARM, Page's Station, S. F. & N. P. R. R. P. O., Penn's Grove, Sonoma Co., Cal. Wilfred Page, Manager. Breeders of Short Horn Cattle, English Draft Horses, Spanish Merino Sheep and Berkshire Swine.

THE BEST HERD OF JERSEYS, all A. J. C. registered, is owned by Henry Pierce, San Francisco.

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JOHN RIDER, Sacramento, Cal. Breeder of Thoroughbred Berkshire Swine. My stock of Hogs are all recorded in the American Berkshire Record.

TYLER BEACH, San Jose, Cal., breeder of thoroughbred Berkshires.

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WILLIAM NILES, Los Angeles, Cal. Thoroughbred Poland-China and Berkshire Pigs. Circulars free.

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L. U. SHIPPEE, Stockton, Cal. Importer and breeder of Spanish Merino Sheep, Durham Cattle, Red Duroc and Berkshire Swine. High graded Rams for sale.

JULIUS WEYAND, breeder of pure-blooded Angora Goats, Little Stony, Colusa Co., Cal.

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J. B. HOYT, Bird's Landing, Cal., importer and breeder of Shropshire Sheep; also breeds cross-bred Merino and Shropshire Sheep. Rams for sale.

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J. D. ENAS, Napa, Cal., breeds pure Italian Queens. The best honey and wax extractor; manufactures comb foundation, sections & hive material; send for circulars.

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EDWIN L. GRIFFITH, Secretary.

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As I shall not exhibit at any of the fairs this fall, I offer for sale over two hundred fine birds in lots to suit. Many of them prize winners. Brahmas, Cochins, Plymouth Rocks, Leghorns, Wyandottes, Bronze and Wild Turkeys, Pekin and Rouen Ducks, and Toulouse Geese.

Inclose stamp for new Circular and Price List to

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These Warehouses are the largest on the Pacific Coast, and are furnished with the latest improvements for the rapid handling and storing of Grain. A mill attached, supplied with the best and newest machinery for cleaning flour and smutty wheat.

Money advanced at lowest rates of interest on Grain stored in Warehouses, Insurance effected at lowest rates in first-class companies, or Grain sold, if desired, at current rates.

STORAGE, 25 cents per ton per month. Total Storage for Season ending June 1, 1887, \$1 per ton.

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1886.

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Regular Warehouse for S. F. Produce Exchange Call Board.

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### Cattle and Horses for Sale.

The undersigned proposes to sell at AUCTION, during the SAN JOSE FAIR, which holds from September 27th to October 2d, a lot of

### HIGH-GRADE HOLTSEIN BULLS.

I shall also offer for sale my

Thoroughbred Holstein Bull, Ansonia,

At the same time and place,

I also have for sale some

Fine Roadsters and well-bred Speedy Stallions,

That may now be seen on my farm. If not sold before they will also be offered at the San Jose Fair. W. L. Johnson has charge of my stock there.

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### FRENCH DRAFT STALLIONS,

Kentucky Jacks and Jennets,  
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FOR SALE.

Some of the Stallions were imported from Europe, others from Illinois, and some young ones were bred in California from imported stock. The prices will be less than animals of equal value can be purchased elsewhere.

Call at or address Patterson's Ranch, Hueneme, Ventura County, or Patterson's Ranch, Grayson, Stanislaus County, or for further information call on or address JAMES M. PATTERSON, No. 8 Davis St., San Francisco. JOHN D. PATTERSON.

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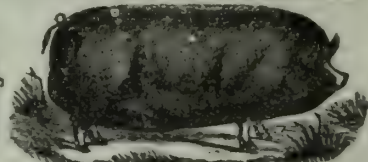
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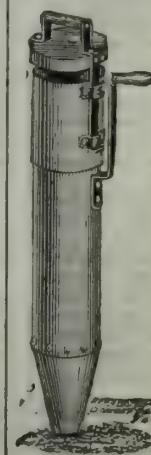
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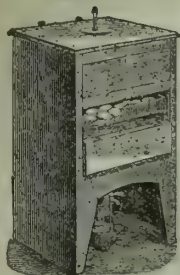
Los Angeles, Cal.

Patented March 23, 1880.



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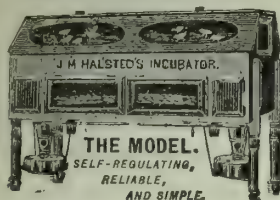
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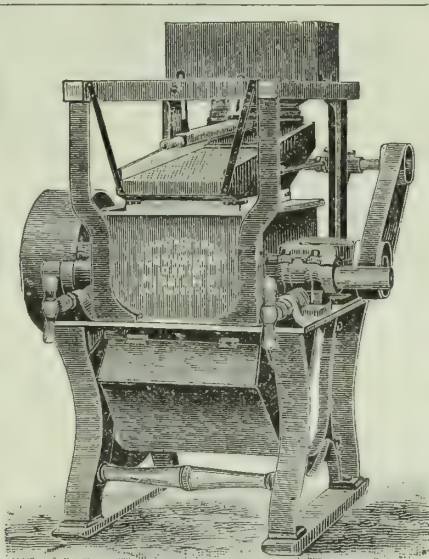
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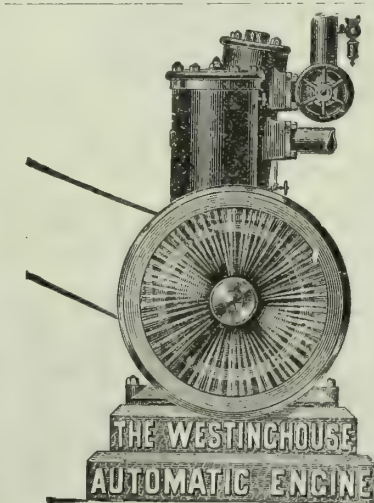
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## S. H. MARKET REPORT

NOTE.—Our quotations are for Wednesday, not Saturday the date which the paper bears.

## Weekly Market Review.

## DOMESTIC PRODUCE, ETC.

SAN FRANCISCO, August 25, 1886.

The markets have been full of activity and interest this week, and much has been accomplished, of which full notes are given below. The latest by cable, to-day, shows that the better feeling abroad is well maintained:

LIVERPOOL, August 25.—WHEAT—Firmly held. California spot lots, 65 to 75; off coast, 35s; just shipped, 35s 6d; nearly due, 35s; cargoes off coast, quiet but steady; on passage, steady; Mark Lane Wheat, firm but not active; English and French country markets, firm; Wheat and Flour in Paris, steady; Wheat on passage to Continent, 600,000 qrs.; Wheat and Flour to U. K., 2,075,000 qrs.; weather in England, more like summer.

## Foreign Review.

LONDON, Aug. 23.—The *Mark Lane Express* in its review of the British grain trade during the past week says the harvest thus far has been very disappointing. A spell of dry weather, with hot sunshine, may yet redeem what appears to be a bad harvest. Returns from 423 wheat districts show that 39 are above the average, 96 equal to it, and 288 below. The yield in 237 out of 427 barley districts is below the average; oats in 265 out of 433 districts; beans in 162 out of 275 districts, and peas in 115 out of 245 districts is below the average. Trade is sluggish, but English wheat is generally dearer. The sales of English wheat during the week were 48,050 quarters, at 32s 7d against 28,480 quarters at 33s 5d during the corresponding period of last year. Flour is 6d 1s dearer; foreign wheats from 6d 1s dearer; sellers expected a greater advance. The supply of corn is short, and prices are against buyers. Mixed American sells at 22s ex ship. Oats are in abundant supply and lower. Four cargoes of wheat have arrived; 5 were sold, all being Chilean, 7 were withdrawn, and 4 remained. The trade in forward is more active. To-day the political situation commanded some attention, and wheat was 6d dearer, while holders asked 1s advance. English flour was 1s dearer and foreign 6d 9d and 1s dearer. American corn was irregularly dearer; round corn, owing to scarcity, was 3d 6d dearer. Peas 6d dearer.

## English Wheat Markets.

LONDON, Aug. 23.—The wheat market is firmer. Holders are asking higher prices. Market is affected by fear of political trouble.

LIVERPOOL, Aug. 23.—Market is firm. Weather more settled. Resellers were offering more freely at the close of the day.

## New York Wheat Market.

NEW YORK, Aug. 22.—Wheat has been active and prices are materially improved. There has been an urgent demand for export to the continent, for which nearly two million bushels have been taken the past week.

The market closed steady, September, 89½ cents. October, 90½; November, 92½; December, 93½; January, 94½; May, \$1.00½; June, \$1.00½.

## Eastern Wool Markets.

NEW YORK, Aug. 22.—The movement in domestic wools does not assume the proportions hoped for by the more sanguine dealers, and in some cases there has been a nipping off from extreme rates, especially where cash terms could be obtained. The shading is principally upon overstrained valuations for Territory wools and Texas growths. Among sales were 20,000 pounds Oregon at 24 cents, 10,000 pounds Montana at 30 cents, 25,000 pounds spring California at 21 cents, 70,000 pounds spring California at 22½ cents. The Philadelphia market remains quiet, with no change in prices, but buyers look for lower prices soon. Among sales were 30,000 pounds scoured defective California at 46 to 51 cents, 1000 pounds Territory bucks at 14 cents, 15,000 pounds Territory fine medium at 23 cents, 20,000 pounds California at 19½ cents. The Boston market, though somewhat disturbed by recent defalcations, remains firm. The sales of the week were heavy, mostly in Territory wools, at prices a shade under the asking figures. Among sales were 236,000 pounds California spring and Oregon at 20 to 23 cts.

BOSTON, Aug. 21.—The demand for wool the past week has been quite good, and prices were steady. The sales of the week foot up 4,189,200 pounds, foreign and domestic, including considerable Cordova and other foreign carpet wools. There is no material change in the tone of the market. Some holders have been forced to realize by the stringency of the money market. Manufacturers have obtained a slight advantage in this way. Aside from this fact there is little if any weakness in the market. Foreign advices still report a firm and advancing market. There have been a number of our largest manufacturers in the market during the week looking round, and the sales show they bought considerable wool. There is some anxiety caused by the failures and defalcations of the past week, and uneasiness is felt by many who believe more embarrassments will follow. There has been a fair demand for California wool. Stocks are much reduced. The sales include 167,000 pounds California spring and Oregon at 19 to 25c; 194,000 pounds spring at 20 to 24c; and 325,000 pounds Oregon sold at 22 to 24½c. The receipts of the week have been 11,087 bales domestic, and 1693 bales foreign.

NEW YORK, Aug. 24.—Wool is quiet and firm. Domestic fleeces, 27 to 36c; pulled, 14 to 35c; Texas, 9 to 22c.

PHILADELPHIA, Aug. 24.—Wool is dull and nominal.

BOSTON, Aug. 24.—Wool is steady. Ohio and Pennsylvania fleeces, extra, 32c; XX 34c; XX and above, 35c; Michigan extra, 31c; other grades unchanged.

## New York Hop Market.

NEW YORK, Aug. 22.—For hops the market is rather quiet, and there is nothing doing excepting the changing of a few lots among dealers. Prices have a downward rather than an upward tendency. Good 1885 hops bring 27 to 29c, but do not command a

ready sale, buyers deeming them too high. The competition of German hops is felt more and more seriously, and as they are freely offered at 23 to 25c, American hops of similar quality can hardly bring much more. Of choice hops none are offering. The vines in the districts visited by the vermin are said to be, in most instances, totally destroyed, so that the yield of this State is insignificant. The excitement in the country has about died out, as has the expectation of very high prices. California 86's quoted about 35c; 85's 20 to 24c; 84's 12 to 14c.

## California Fruit at the East.

(Telegram to the Fruit Union.)

CHICAGO, Aug. 22.—Muscats are arriving, some poor and others in good condition, and sell from \$2.00 to \$2.50 per crate. Tokays, because of the hot weather, are coming in fairly well, selling at \$2.00, \$2.25 and \$2.50. Bartletts arrive in good order and sell at \$3.50 to \$3.75. Beurre Clairgeau, selling for \$3.50 to \$3.75. Peaches carrying only medium and arrive in fair condition, sell for \$1.50 to \$1.75.

PORTER BROS. CO.

CHICAGO, Aug. 22.—Earl Brothers, Butts & Fry, and Thacker Brothers, received a special fruit train from California Thursday, as also did Porter Brothers. The condition of the fruit on its arrival here was mostly good, and selling at low prices. Pears bring from \$2.00 to \$2.75 per box; muscatel grapes sell for \$2.00, and Tokays at \$2.00 to \$2.50 for 40-pound cases, with some lots not in very good condition, going at lower prices. Gross prices are selling lower, mostly at the jobbing rate of \$1.00 per box. Peaches are almost unsalable, as the receipts are so large from Michigan. Pears will probably decline considerably next week and that following, as increased receipts are expected. It is thought that fair pears will sell soon at \$1.50 per box, as York State pears will probably be on the market soon and in large quantities.

NEW YORK, Aug. 22.—Green fruit is arriving in very bad condition, some unsalable, and prices are steadily declining. The market is very dull. California pears, \$3.00 to \$5.00 per box; plums, \$1.00 to \$2.00; grapes, \$3.00. Raisins are quiet but steady. Loose Muscatel, \$1.95; London layers, \$2.20 to \$2.45. California London, none in the market. Citron is selling at 18½ to 18¾c; currants, weaker under liberal offerings. Sales of 1500 barrels at 5½c. Prunes, quiet, 3½ to 3¾c for Turkish.

## California Products at the East.

NEW YORK, Aug. 22.—California canned peaches, \$2.25 to \$2.50; pears, \$2.50; plums, \$2.00 to \$2.25; grapes, \$2.00 to \$2.10; apricots, \$2.10 to \$2.25; salmon, \$3.55 to \$3.60.

Honey—Extra clarified, 5½ to 6c. Seeds—Moderately active for all leading descriptions. California yellow mustard, 6 to 6½c.

## Local Markets.

BAGS—5000 Calcutta, importation of 1886, are reported sold by auction at 6.05c; balance of offering withdrawn.

BARLEY—Barley is quotable about 5c per ctl. higher than last week. Call sales to-day were: Seller 1886—100 tons, 92c; 100, 90½c; 200, 90½c; 100, 90½c; 2400, 90½c; 100, 91c per ctl. Seller 1886—400 tons, 90½c per cental.

BEANS—There is very little change; Pea and Small White are a shade easier and Pink Beans slightly improved.

CORN—Nebraska corn is lower this week. The market generally is unchanged.

DAIRY PRODUCE—The recent advance turned consumption largely upon pickled roll, and fresh butter has accumulated, and is lower this week. Strictly choice fresh roll will probably not remain long down. Cheese is in moderate supply and firm. EGGS—Eggs have taken another step up. The strictly choice, which alone bring the outside figure, are scarce.

FEED—Bran has advanced 5 cents per ton since our last report. Hay has declined the same amount. The following is the range. Barley, \$4 to 7; oat, \$6 to 9; wheat, \$8 to 11 per ton.

FRUIT—Full notes are given below.

OATS—Supplies are increasing and prices declining. Considerable quantities are arriving from Oregon and Washington.

WHEAT—Wheat and flour have made a considerable advance since our last report. In the case of wheat much discrimination in quality is made. Call trading has been active. To-day's sales were: Buyer season—100 tons, \$1.44½; 100, \$1.44½; 1200, \$1.45; 200, \$1.44½; 200, \$1.45½; 300, \$1.45½. Buyer 1886—300 tons, \$1.40½; 100, \$1.40½; 100, \$1.40½; 300, \$1.41; 200, \$1.41½. Seller 1886—2400 tons, \$1.34½; 200, \$1.34. Buyer season—300 tons, \$1.45½; 500, \$1.45½; 700, \$1.43½. Buyer 1886—600 tons, \$1.41½; 300, \$1.41½; 400, \$1.41½. Seller 1886—700 tons, \$1.34; 3300, \$1.33½; 600, \$1.33½ per ctl.

[COMMUNICATED.]

## Market Information.

## Bags.

The market is dull and weak, with no large sales reported. Advices from the interior report many farmers bringing back sacks, as their crops did not turn out as well as thought; these sacks were offered or being offered for sale at lower prices than they cost originally.

## Cereals.

Notwithstanding fine weather has prevailed in England the past week, wheat in that country has ruled strong with advances in prices reported. The higher market ought to indicate that the crop outlook is bad. An English cable to the press on this coast reports the English wheat crop at 60,000,000 bushels short. As harvesting has hardly commenced the estimate is premature; besides, it is wrong, but evidently is intended to give the shortage as compared with last year. Last year the yield to the acre was 28 bushels (4 bushels above an average), and this year it is estimated at 20 bushels, and even less if bad weather is experienced to any extent next fortnight. The French crop is undoubtedly considerably short of last year and heavy imports will be in order to meet the consumptive requirements.

Late revised estimates of the wheat crop of this State do not give encouragement to expect over 800,000 short tons (flour reduced to wheat), for export. Last season the exports (flour reduced to wheat), in-

cluding that received from Oregon, aggregated 800,000 tons, and then the tonnage to take it away was less than this season. This year, owing to a lessened yield, Oregon will not send us wheat, and very little flour.

One firm in this city has received instructions to buy 1200 tons for a firm in Texas. Other purchases, it is said, will follow for shipment to that State of good to choice wheat.

The local market has ruled exceedingly strong, at higher prices. At the advance there are more sellers than buyers. Sales have been made of No. 1 shipping at from \$1.36½ to \$1.38½, Port Costa delivery, and \$1.40 to \$1.42½ for good to choice milling, delivered here.

On Thursday last, heavy transactions in wheat were recorded on call, with options advanced from 4 to 6 cents over Wednesday's sales, but they fell back about 2 cts, since when there have been several slight ups and downs.

The barley crop—it is now well established—like wheat, is not so large as has been estimated; and as the demand is quite large, the heavy receipts that came in were absorbed with higher prices ruling for both bright feed and brewing grades. Shipments of the latter to the East continue on a liberal scale.

Oats ruled steady and firm up to Monday, when heavier receipts came to hand, causing a weaker feeling; but on Tuesday the market was firm again at Saturday's prices. The oats received are, as a rule, poor and inferior to what are wanted.

No transactions are reported in rye or buckwheat. English cables report wheat very strong to-day, but Chicago and New York were lower, owing to higher freights from New York to Europe. Our market closed very strong for sample parcels, with few sellers in the market.

## Dairy Produce.

Cheese has ruled steady and firm throughout the week. Stocks do not appear to be accumulating, as the trade call is fair. Eastern mail advices report a better market, with a slight advance obtainable.

The market for fresh butter in rolls is demoralized, as receipts from the north have increased, and the warm weather is against its keeping, thus forcing it on the market at the best obtainable prices. It is hard to get over 25 cts for gilt-edged.

Eggs have ruled strong throughout the week, with an advance obtained for all qualities, but particularly choice to gilt-edged. The consumption is in excess of receipts, causing stocks to be materially lowered.

## Feedstuff.

Hay continues to come in freely, but very little received is fine and, in all respects, first-class. The latter is wanted, and high prices paid—running up to \$13.00 afloat. Good to choice, but not extra choice, and also inferior grades, are in liberal supply, with a strong selling pressure reported.

Ground barley and rolled barley, in sympathy with barley, are strong and higher, with a good trade call ruling.

Bran, middlings and oil cake meal are strong, with a good consumptive demand ruling.

## Fruits.

Under heavy receipts on Thursday and Friday and still heavier on Saturday, Grapes were decidedly demoralized on the last named day. Canners bought Muscats as low as 30 cts a box and all other varieties proportionally as low. Our Monday receipts being lighter allowed merchants to clean up, which gave a firmer market on Tuesday, and a strong market to-day. The first Isabella grapes of the season were received to-day and sold at \$1.50 per box. There is more inquiry for wine grapes, with sales of Zinfandel at from \$20 to \$30 per ton, according to the locality grown; Muscatel grapes have sold at the same price.

Peaches under lighter receipts and a good demand have held to strong prices, with an advance obtained for choice varieties of clingstones.

Plums and Prunes under heavy receipts have ruled exceedingly low, with only choice varieties receiving attention.

In nectarines very little has been done, as receipts were light.

Pears, if choice, were quickly taken, with some extra choice Bartletts selling at over \$2 per box on the wharf. Cooking pears were hard to place.

The bulk of the apples received so far has been more or less wormy and otherwise inferior, causing them to be hard to sell. Choice varieties in good condition sold at from \$1 to \$1.50 per box; the latter was an outside figure.

Figs have been slow throughout the week, with prices favoring buyers.

A consignment of pomegranates came in to-day and sold at \$1 per box from the store.

Cantaloupes have been steadily advancing under lighter receipts and a good demand.

Watermelons are selling for more money as receipts fall off, and the hot weather increased the demand.

All kinds of berries ruled steady up to Monday, when, owing to only 71 chests being received, blackberries sold up to \$4 per chest; strawberries, \$6; and raspberries, \$11, with freer receipts since prices have shaded off.

## Hops.

The market is quiet, but strong for old and also for new for future delivery. The stock of old not in brewers' hands does not aggregate over 150 bales, with the quality poor. The New York crop is now placed at 20,000 bales against 150,000 bales last year. It is claimed that the bulk of this coast's 1886 crop has been bought up, chiefly for shipping East.

## Live-Stock.

Beef cattle are offering in excess of the demand, causing low prices to obtain. Retail butchers report a very dull trade, with lighter sales than at this time last year; why it is they are unable to say, but advance as many theories as there are butchers. Mutton sheep are also dull and weak, with prices in buyers' favor; the quality is unexceptional and therefore the dullness cannot be said to be due to poor stock. Calves and lambs are steady, with young wanted. Spot hogs are hard to sell, as the demand for the block is light, and from packers there is no call reported. For delivery in October and November some contracts for grain-fed hogs have been made at prices reserved, but it is claimed at an advance on spot quotations. In horses the market is without change; free steppers, of fine appearance and gentle, are in demand and fetch good figures, as do general utility animals. Small draft horses are not wanted, but larger sized find a fair market.

The following are to-day's meat prices: Beef—

Stall-fed, 7 to 7½c; 1 lb; grass-fed, extra, 6 to 6½c; first quality, 5½c to 6c; second, 5c to 5½c; third, 4½c. Calves, small, 9 to 10c; larger, 7 to 8c; 1 lb. Mutton—Ewes, 4½c; wethers, 5c. Lamb—Spring, 6½ to 7c; 1 lb. Pork—Live hogs on foot, 3½ to 4c for grain and dairy fed; 2½ to 2¾c for soft; dressed, 6c for hard, and 5c for soft. Grass-fed stock sell on foot, gross weight, at one-half the price they fetch dressed; stall-fed, on foot, fetch one-third less than they sell at dressed.

## Vegetables.

Choice potatoes continue scarce and command high prices. Choice Peerless sold readily at \$1.10, while the general run of those received only fetched from 75 cts to \$1. The same remarks apply to Garnet Chilis; but Early Rose are poor and very inferior, as receipts constitute the last of the first crop.

Under heavier receipts sweet potatoes have ruled barely steady up to Monday, when they were weaker, with some difficulty had in getting over \$1.25 on the wharf, even for choice. The market is overstocked with ordinary to good.

In onions no changes have occurred the past week—the demand and receipts being about equal. Pickling onions have been drooping, with a weak closing.

Tomatoes have ruled weak and low throughout the week, as canners did not buy except at very low prices.

Summer squash, cucumbers, green okra and green peppers have been slow, with prices in buyers' favor. Pickling cucumbers have been taken in considerable quantities at 1½ cts per lb.

Receipts of cabbages and carrots have been freer, causing more of a selling pressure, necessitating some shading in prices to effect sales.

Green corn has fluctuated, with choice sweet young and fresh not selling at any time below \$1.25 for large crates. The large bulk received was fair to good and sold low, ranging from 60 cts to \$1 for large crates. On Saturday considerable carry-overs were sold to peddlers at 15 cts a crate.

Potatoes closed very strong to-day. Sales were made on the wharf of extra choice Peerless from San Leandro at \$1.20; Garnet Chilis, \$1.10, and Early Rose at 90 cents.

## Wool.

The market is quiet but firm for choice, desirable grades. Buyers are trying to obtain concessions, but so far as can be ascertained, without success. Receipts of fall wools are increasing, yet the stock on hand is light—hardly large enough to allow fair selections by buyers. Sales made this week were on last week's basis, as reported in the PRESS.

## Miscellaneous.

The tonnage movement compares with last year at this date as follows:

	1886.	1885.
On the way .....	308,471	233,281
In port, disengaged .....	56,182	102,774
In port, engaged .....	72,643	14,572
Totals .....	437,296	350,627

The above gives a carrying capacity as follows: 1886, 699,673 short tons; 1885, 561,003 short tons; increase over last year, 138,670.

The exports by sea from this port from July 1, 1886, to date, compared with the like time in 1885, are as follows, in cents:

	1886.	1885.
Wheat .....	1,154,730	575,233
Barley .....	217,788	9,769
Oats .....	2,001	3,813
Corn .....	4,094	969

Poultry has ruled steady and strong throughout the week, with choice conditioned sold at an advance on daily press quotations.

Beans are quiet and weak.

Honey is dull and lifeless, yet holders are not pressing the market, believing that better prices will prevail later on in the season.

San Francisco, August 25, 1886.

## Domestic Produce.

WEDNESDAY, August 25, 1886.

BEANS AND PEAS.		POTATOES.	
Bayo, cts.	1 35 @ 1 40	New cts.	@ @
Butter	1 35 @ 1 50	Burbank	@ @
Oatmeal	1 35 @ 1 50	Early Rose	50 @ 75
Pea	1 75 @ 1 80	Cuffey Cove	@ @
Red	1 10 @ 1 12 1/2	Jersey Blues	@ @
Pink	1 07 1/2 @ 1 12 1/2	Petaluma	@ @
Large White	3 00 @	Tonales	@ @
Small White	1 75 @ 1 80	River reds	@ @
Lima	2 00 @ 2 25	Humboldt	@ @
Field Peas, bik eye	@ 1 10	do Kidney	@ @
do green	1 00 @ 1 12 1/2	Chile	75 @ 90
do Niles	1 25 @	do Oregon	@ @
BROOM CORN.		Peerless	85 @ 1 00
Southern	3 @ 6	Salt Lake	@ @
Northern	4 @ 6	Sweet	1 @ 1 11
CHICORY.		POULTRY AND GAME.	
California	4 @ 4 1/2	Hens, dos.	6 00 @ 7 00
German	6 @ 7	Roosters	5 50 @ 7 50
DAIRY PRODUCE, ETC.		Broilers	2 50 @ 4 50
BUTTER		Ducks, tame	3 50 @ 5 50
Cal. fresh roll	21 @ 24	do Mallard	@ @
do Fancy brands	25 @ 26	do Spring	@ @
Pickle roll	20 @ 21	Geese, pair	1 50 @ 2 00
Pork, new	15 @ 18	do (roasting)	@ @
Eastern	8 @ 11	Wild Gray, dos	@ @
CHEESE.		White, dos	@ @
Cheddar, Cal. B.	7 @ 9	Turkeys, B.	15 @ 20
Eastern style	10 @ 13	do Dressed	@ @
EGGS.		Turkey Peas	@ @
Cal., ranch, dos.	28 @ 30	tail and wing	10 @ 20
do store	20 @ 26	Snipe, Eng. dos	@ @
Ducks	@ @	do Common	1 25 @ 2
Oregon	@ @	Doves	75 @ 85
Eastern	14 @ 16	Rabbits	1 00 @ 1 25
Pickled here	@ @	Hare	2 50 @ 3 75
Utah	20 @ 21	Venison	14 @ 15
FEED.		PROVISIONS.	
Bran, ton	15 50 @ 16 00	Cal. Bacon	8 @ 9
Cornmeal	25 @ 27 00	Heavy B.	8 @ 9
Hay	5 00 @ 11 00	Medium	8 @ 9
Middlings	10 00 @ 17 00	Light	10 @ 11
Oil Cake Meal	25 50 @ 25 50	Extra Light	12 @ 13
Straw, bale	35 @ 50	Lard	7 @ 9
FLOUR.		Cal. Smoked Beef	11 @ 12
Extra, City Mills	4 12 @ 4 50	Hams, Cal.	11 @ 14
do Country Mills	4 00 @ 4 37 1/2	do Eastern	14 @ 15
Superfine	3 00 @ 3 50	SEEDS.	
Barley, feed, cts.	90 @ 95	Alfalfa	11 @ 11 1/2
do Brewing	1 05 @ 1 05	Clover red	4 @ 15
do new	1 05 @ 1 12 1/2	White	45 @ 50
Cheverall	1 35 @ 1 45	Brown	20 @
do Coast	@ @	Flaxseed	2 @
Buckwheat	1 00 @ 1 10	Horseradish	5 @ 6
Corn, White	1 35 @ 1 40	Italian Rice Grass	25 @
Yellow	1 35 @ 1 40	Perennial	25 @
Small Round	1 35 @ 1 40	Millet, German	10 @ 12
Nebraska	1 12 @ 1 20	do Common	7 @ 10
Oats, new	@ @	Mustard, white.	2 25 @ 2 75
do No. 1.	1 30 @ 1 35	Rape	1 @ 1 1/2
do No. 2.	1 20 @ 1 25	Kry. Blue Grass.	20 @ 25
do black	1 12 @ 1 15	do quality	16 @ 18
do Oregon	1 65 @	Sweet V. Grass	75 @
Rye	@ 1 22 1/2		



Wheat, No. 1... 1 35 @ 1 37 1/2	Orchard..... 20 @ 25
do No. 2... 1 30 @ 1 32 1/2	Red Top..... 15 @ 20
Choice milling 1 37 1/2 @ 1 40	Langarian..... 8 @ 10
Peas..... 1 37 1/2 @ 1 40	Lawson..... 10 @ 12
do new..... 8 @ 9 1/2	Mosquit..... 10 @ 12
do old..... 8 @ 9 1/2	Timothy..... 5 1/2 @ 6
HONEY, ETC.	TALLOW
Beeswax, lb..... 20 @ 22	Crude, lb..... 1 1/2 @ 4
Honey in comb..... 7 1/2 @ 9	Refined..... 6 1/2 @ 6 1/2
Extracted, light..... 3 1/2 @ 4	Spring, ETC.
do dark..... 3 1/2 @ 4	do long..... 14 @ 18
do HOPE..... 3 @ 3 1/2	Humboldt and
Oregon..... 3 @ 3 1/2	Mendocino..... 22 @ 25
California old..... 17 1/2 @ 20	Sact'o valley..... 17 @ 20
do new..... 30 @ 32 1/2	Free Mountain..... 17 @ 20
ONIONS.	N'hern defective
Silver..... 65 @ 70	S Joaquin short..... 14 @ 18
do new..... 30 @ 32 1/2	do long..... 14 @ 18
NUTS—JOBBER.	Cava & F'th'l..... 17 @ 22
Walnuts, Cal, lb..... 7 1/2 @ 9	Oregon Eastern..... 23 @ 25
do Chile..... 7 1/2 @ 9	do valley..... 23 @ 25
Almonds, hdshl..... 6 @ 6 1/2	Southern Coast..... 13 @ 17
Soft shell..... 10 @ 12	FALL—1886
Brazil..... 11 @ 12 1/2	Southern, free..... 12 1/2 @ 15
Peanuts..... 10 @ 12 1/2	do defective..... 10 @ 12
Peanut oil..... 3 @ 3 1/2	Northern, free..... 17 @ 18
Filberts..... 13 @ 14	do defective..... 12 1/2 @ 15

## Fruits and Vegetables.

WEDNESDAY, August 25, 1886.

FRUIT MARKET.	do evaporated..... 8 @ 8 1/2
Apples, box..... 25 @ 50	do quartered..... 1 1/2 @ 2
do red..... 75 @ 1 25	Apricots..... 9 @ 10
Apricots, lb..... 3 @ 4	do evaporated..... 20 @ 20
Bananas, bunch..... 1 00 @ 2 50	Blackberries..... 9 @ 10
Blackberries, ch..... 2 00 @ 3 00	Citron..... 28 @ 30
Cantaloupes, cr..... 50 @ 90	Dates..... 9 @ 10
Cherries blk..... 4 @ 4	Figs, pressed..... 8 @ 10
do white..... 4 @ 4	Figs, loose..... 4 @ 5
do Royal Ann..... 4 @ 4	Nectarines..... 6 @ 8
Cherry plums..... 40 @ 40	Peaches..... 16 @ 18
Crabapples..... 35 @ 60	do pared..... 16 @ 18
Cranberries..... 7 00 @ 10 00	Pears, sliced..... 5 @ 5
Currants chest..... 3 90 @ 3 50	do qtd..... 2 1/2 @ 2 1/2
Figs, lb..... 35 @ 55	do evaporated..... 8 @ 10
Grapes..... 35 @ 55	Pineapples..... 1 @ 1
do Rose Peru..... 40 @ 60	Plums pitted..... 1 @ 1
do Muscat..... 40 @ 60	Prunes..... 1 @ 1
Wine, ton..... 15 00 @ 27 50	do French..... 1 @ 1
Limes, Mex..... 14 00 @ 20	Raisins, Cal, lb..... 1 87 1/2 @ 2 00
do Cal box..... 2 @ 2	Zante Currants..... 8 @ 8
Lemons, Cal, lb..... 2 50 @ 4 50	VEGETABLES.
do Sicily, box 10 @ 10 50	Artichokes, doz..... 10 @ 15
do Australian..... 5 @ 5	Beets, sk box..... 1 10 @ 10
Nectarines, box..... 50 @ 75	Cabbage, 100 lbs..... 60 @ 75
Oranges, Cal, lb..... 1 50 @ 1 75	Jarrots, sk..... 30 @ 35
do Tahiti, lb..... 3 35 @ 3 50	Cauliflower, doz..... 1 @ 1 00
do Mexican, M..... 1 @ 1	Celery, doz..... 50 @ 60
do Panama..... 1 @ 1	Cucumbers box..... 25 @ 35
Peaches, bx..... 75 @ 1 00	Eggplants..... 1 00 @ 1 50
do basket..... 75 @ 1 00	Garlic, lb new..... 2 1/2 @ 3
Crawfordis, bx..... 60 @ 1 00	Green Corn, sk..... 25 @ 50
do bskt..... 60 @ 1 00	do bay, box..... 60 @ 1 00
do org clg bk..... 1 25 @ 1 30	Green Peas, sk..... 1 00 @ 1 50
Pears bx..... 35 @ 75	Lettuce, doz..... 1 @ 1
do basket..... 25 @ 45	Mushrooms, bx..... 1 @ 1
do Bartlett, bx 1 00 @ 2 00	do cultivated..... 15 @ 17
do do bskt..... 40 @ 50	Ora, dry, lb..... 20 @ 65
Persimmons..... 1 @ 1	do green box..... 20 @ 65
do Jap, bx..... 4 00 @ 5 00	Parsnips, ct..... 1 50 @ 1 50
Pineapples, doz..... 4 00 @ 5 00	Peppers, dry lb..... 10 @ 10
Pomegranates, b..... 1 @ 1	do green, bx..... 25 @ 50
Plums lb..... 1 1/2 @ 1 1/2	Rhubarb box..... 40 @ 60
Prunes bx..... 1 @ 1	Squash, Marrow
do Egg..... 1 1/2 @ 1 1/2	fat, ton..... 15 00 @ 20 00
Quinces bx..... 50 @ 75	do Summer bx..... 19 @ 25
Raspberries ch..... 6 00 @ 8 00	Tomatoes box..... 25 @ 35
Strawberries ch..... 3 00 @ 4 50	String beans..... 1 1/2 @ 2
Watermelons 100 @ 12 00	Turnips cti..... 75 @ 1 00
DRIED FRUIT.	
Apples, sliced, lb..... 2 1/2 @ 3	

## List of U. S. Patents for Pacific Coast Inventors.

Reported by Dewey &amp; Co., Pioneer Patent Solicitors for Pacific States.

From the official report of U. S. Patents in Dewey &amp; Co.'s Patent Office Library, 252 Market St., S. F.

FOR WEEK ENDING AUGUST 17, 1886.

- 347,563.—CAR AXLE—J. Bourne, Jr., Portland, Oregon.
- 347,479.—MOTOR—B. Elmore, Redding, Cal.
- 347,705.—MOTOR—I. S. Goldman, Pasadena, Cal.
- 347,592.—ELECTRIC BELT—Ira Gray, S. F.
- 347,484.—CANDLESTICK ATTACHMENT—George Grisel, S. F.
- 347,615.—SMOKE-CONSUMER—John Keane, S. F.
- 347,721.—GANG PLOW—E. E. Krause, Rio Vista, Cal.
- 347,722.—CULTIVATOR—E. E. Krause, Rio Vista, Cal.
- 347,430.—BATH APPARATUS—W. F. Lambert, S. F.
- 347,431.—VERTICAL SHAFT BEARING—I. P. Lambing, Ione, Cal.
- 347,433.—ELEVATOR—A. J. McAdam, S. F.
- 347,435.—KING-BOLT—T. A. McGovern, Bolinas, Cal.
- 347,438.—ROCK DRILL—E. Moreau, S. F.
- 347,368.—HOSE AND PIPE COUPLING—P. J. O'Connor, S. F.
- 347,644.—STEAM ENGINE OR PUMP—W. C. Salmon, Portland, Oregon.
- 347,524.—SHOE FASTENING—J. T. Senteney, Blocksburg, Cal.
- 347,455.—CARTRIDGE-LOADER—C. Wonacott, Murphys, Cal.
- 347,353.—CAR AXLE—J. J. Kelly, S. F.

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G. W. INGALLS—Arizona.  
E. L. RICHARDS—San Diego Co.  
R. G. HUSTON—Idaho and Montana.  
Geo. McDOWELL—San Luis Obispo and Santa Clara Co's.  
FRANK W. SMITH—Montana, Utah and Colorado.  
M. S. PRIME—Alameda Co.

## Santa Rosa Nurseries.

Our RURAL reporter during fair week, in company with Mr. Luther Burbank, the well-known nurseryman, took in the "City of Roses," one of the most lovely and thriving inland cities of California. On every side, extending to the very top of the mountains on the east, dividing the counties of Sonoma and Napa, extensive orchards and vineyards have been planted. Mr. Burbank has been for years prominently identified as the chief nurseryman in this section. At the present time he has three nurseries within the city limits of Santa Rosa and one at Sebastopol, seven miles west. He has kept abreast of the times in securing all the choicest varieties of fruit, ornamental trees and rare flowers. Anticipating a demand for olive trees, he has now 60,000 of the Picholine and Mission varieties. His Santa Rosa nurseries are under-drained with terra-cotta pipes, and to this he attributes his success in the thriftiness and growth of his trees. As a sample, he has olive trees two years old, six feet in height, well branched, without irrigation, and other varieties of trees in like proportions. Such a thing as "scale" of any kind, he says, has never been known in his nurseries.

## The Fresno Nursery.

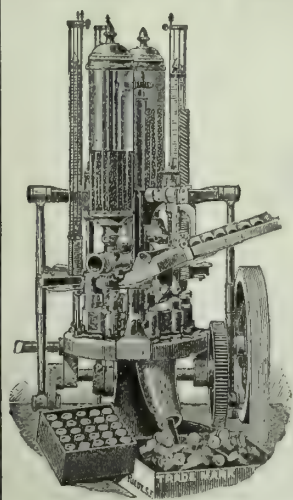
D. W. Lewis, of the Fresno nursery, opens the season in our columns with an attractive illustrated advertisement, showing the Texas umbrella tree, the most popular shade tree about Fresno, and excellently adapted to the warm valleys, though it also does very well in other situations. Mr. Lewis has a good stock of these trees and has grown them perhaps in larger quantity than any other grower. He has also a full general nursery stock, including all the most popular varieties. A specialty has been made of pear trees, of which about 30,000 yearling trees will be ready for this year's planting.

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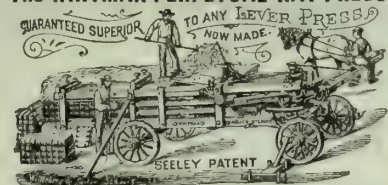
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## California Inventors

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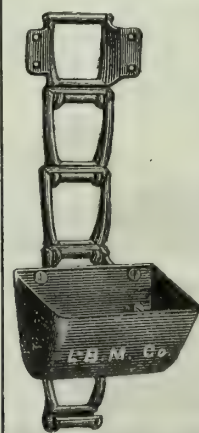
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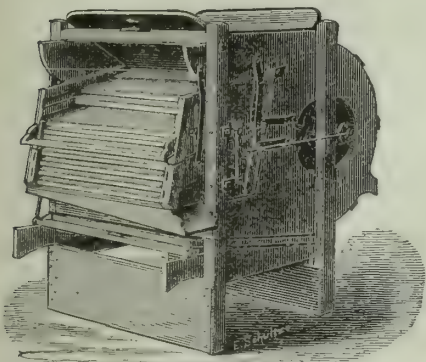
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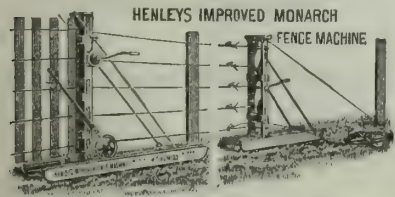


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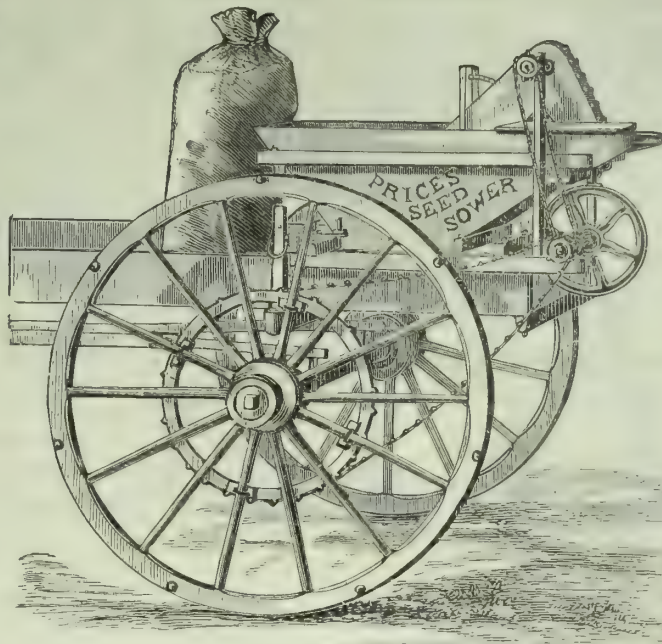
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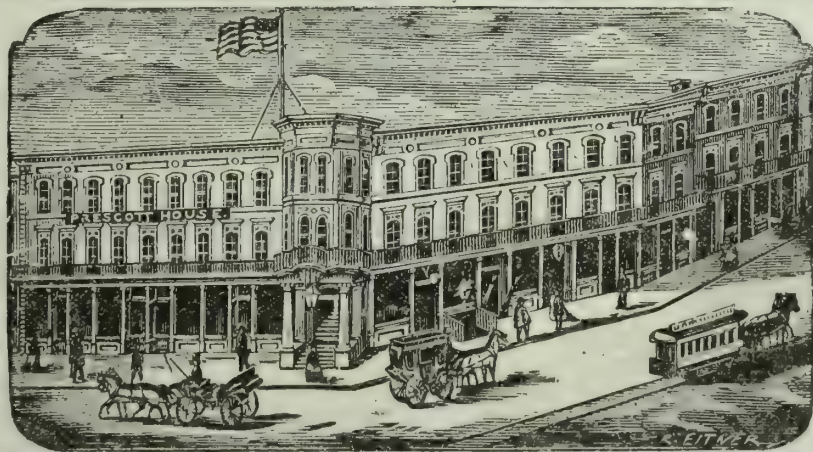
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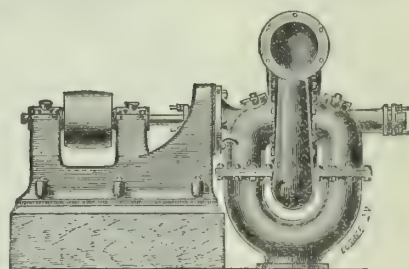
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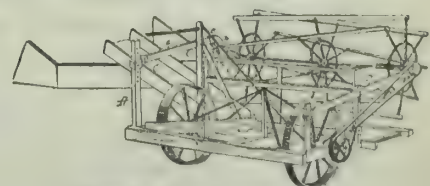
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ALL PERSONS ARE HEREBY NOTIFIED THAT THE device shown in the above engraving is covered by Letters Patent awarded to me by the U. S. Government, and are warned against making and using the same without my consent.

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**JOHN B. GEMMILL,**  
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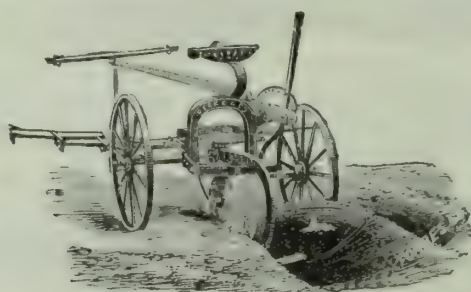
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LIGHT WORK for man and beast.

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GILPIN SULKY PLOW.

The construction of the "GILPIN" Sulky Plow is ingenious and simple. It is of light draft, easy on the operators, strong, durable and economical. It has an iron beam and an iron frame; is free from a complication of lever gearing, jack-screws, pulleys and chains, one lever only being required to operate to any required depth.

### TESTIMONIALS:

DUNNIGAN, CAL.—We have a 3 and 4-Gang New Deal Plow; have used them in gravel, adobe and the ash hill land, and we find the Plow equally adapted to each kind of soil, and consider them the "Boss" Plow for the California farmer.—BOOTH BROS.

VIRALIA, CAL.—Having been extensively engaged in farming for a number of years, I can safely recommend the "New Deal" Plow to be superior to all others, for lightness of draft, quality of work, and adjusting facilities.—JOHN TUOHY.

MERCED, CAL.—I have the four 3-Gang, 10-inch "New Deal" Plows at work, and for completely turning the ground over and lightness of draft, they are the best Plows I ever saw.—V. C. W. HOOPER.

HUBBARD, CAL.—The "New Deal" Plows have given entire satisfaction in our part of the country, and have plowed weeds under which no other Plow could have done. Mr. N. S. Cook, who had a "Stockton" Plow to use on the side-hill, could not do anything with it, and had to use the "New Deal," which worked satisfactorily.—WOLFF & LEHMAN.

YOLO, CAL.—The "New Deal" Plow is the best Plow that ever was made, excepting none. I have got "Brown's," "Caasady's," and "Eureka's," and the "New Deal" will do more work and better than any of them; furthermore, it can be worked in any kind of soil.—GEORGE WOODWARD.

LIVERMORE, CAL.—The 3 Gang, 10-inch "New Deal" Plow bought of you works first class. If I can sell my other gangs, I will use the "New Deal" altogether, as they do the work better and run much easier than any gang plow I have used or seen.—DETLEP LA FRENZ.

We can furnish one hundred more Testimonials, if desired.

For Lightness of Draft, Ease of Management, Strength, Durability and Quality of Work,  
The "NEW DEAL" is without a Parallel.

3-Gang, 8-inch.....\$75 00	4-Gang, 8-inch.....\$80 00
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All with Extra Points.



We take pleasure in calling special attention to our recent improvements in the construction of Plows, which consists of a brace crossing and WELDED SOLIDLY TO THE STANDARD, extending down and bolted to the land side, affording a firm brace to the standard and giving much greater strength than will be found in any other set-up handle plow. It also extends up and bolts to the handle with two T bolts, producing the best braced and finest plow made.

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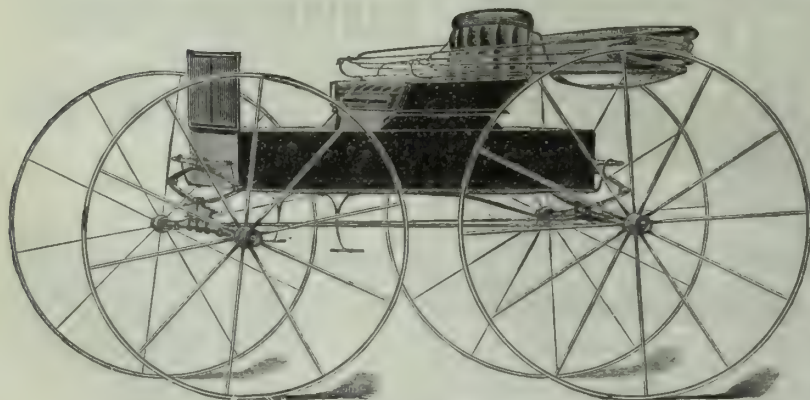
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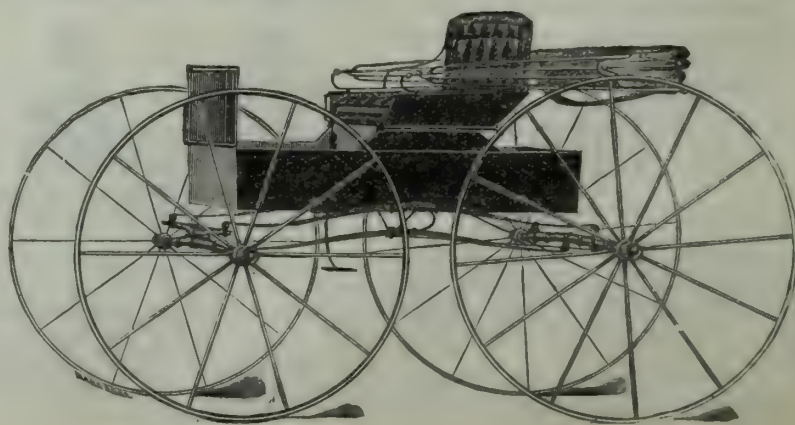
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That all should see and examine this work or send for prices before purchasing elsewhere.

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STATE FAIR EDITION—THIRTY-TWO PAGES.

Vol. XXXII.—No. 10.]

SAN FRANCISCO, SATURDAY, SEPTEMBER 4, 1886.

{ \$3 a Year, in Advance  
SINGLE COPIES, 10 CTS.

#### A Group of Holsteins in California.

The cow Dulytra (Anna), 1639 F. H. B., and 9412 Holstein-Friesian Herd-book of America, was bred by J. J. Heystra, Beetgum, Friesland, in 1878, imported to this country in September, 1884, by M. S. Bidwell, of Monterey, Mass., and to California by Mr. H. Pierce in 1885. She was selected by an agent of Mr. Steele as being the best cow imported from Holland in 1884. She was shown at the State Fair at Sacramento, at Stockton and Oakland fairs in the fall of 1885, at all of which fairs she took first premiums as best Holstein-Friesian cow. She was bought by E. W. Steele, of San Luis Obispo, and exhibited at the Monterey District Fair last year, where she again took first premium. She has a fine, glossy coat of hair, velvety skin, excellent milk mirror and veins, and a perfect udder; her head and horns are fine. She is straight on the back, square hipped, in short, is nearly perfect in form; she weighs 1450 pounds in moderate flesh. At the time when purchased by Mr. Steele she had been for more than a year on steamers, railroads, in quarantine or attending fairs, notwithstanding all of which she dropped a fine bull calf December 8th, sired by the imported bull, Billy Gibbony, No. 3227, Vol. 8, H. H. B. Since December 20th Mr. Steele has had kept a daily record of the weight of her milk product. The following is the result: From December 20th to January 1st, 641 pounds; for January, 1975½ pounds; February, 1764 pounds; March, 1754½ pounds; April, 1701½; May, 1604½; June, 1438 pounds—being 10,238 pounds in six months. This milk yielded 12 per cent cream, according to a glass with a scale of 100 parts, which showed the relative quantity of milk and cream at the end of 36 hours. There is no doubt at least 13 per cent would have been obtained by the use of the Centrifugal creamer.

According to tests made this year by weighing milk, and the cheese produced from the milk so weighed, this quantity of milk would have made 1290 pounds of cheese. Mr. Steele thinks Dulytra's milk for the season, if made into cheese, would have made 2000 pounds. In February the cow was sick for a few days, and lost 10 pounds per day in the flow of milk, which she did not regain. This, together with the fact of its being her first season in the country,

and consequently having to pass through the acclimatization process and to become accustomed to California feed, makes this a remarkable record. As showing the effect of removal upon cows, Mr. Steele states that he has dairied cows in Marin county, on the coast, that were brought from the interior, and in San Mateo and San Luis Obispo counties, cows brought from the colder climate of Point Reyes, Marin county, and even these slight changes in climate and grasses cause a marked effect on the flow of milk during the first season, decreasing

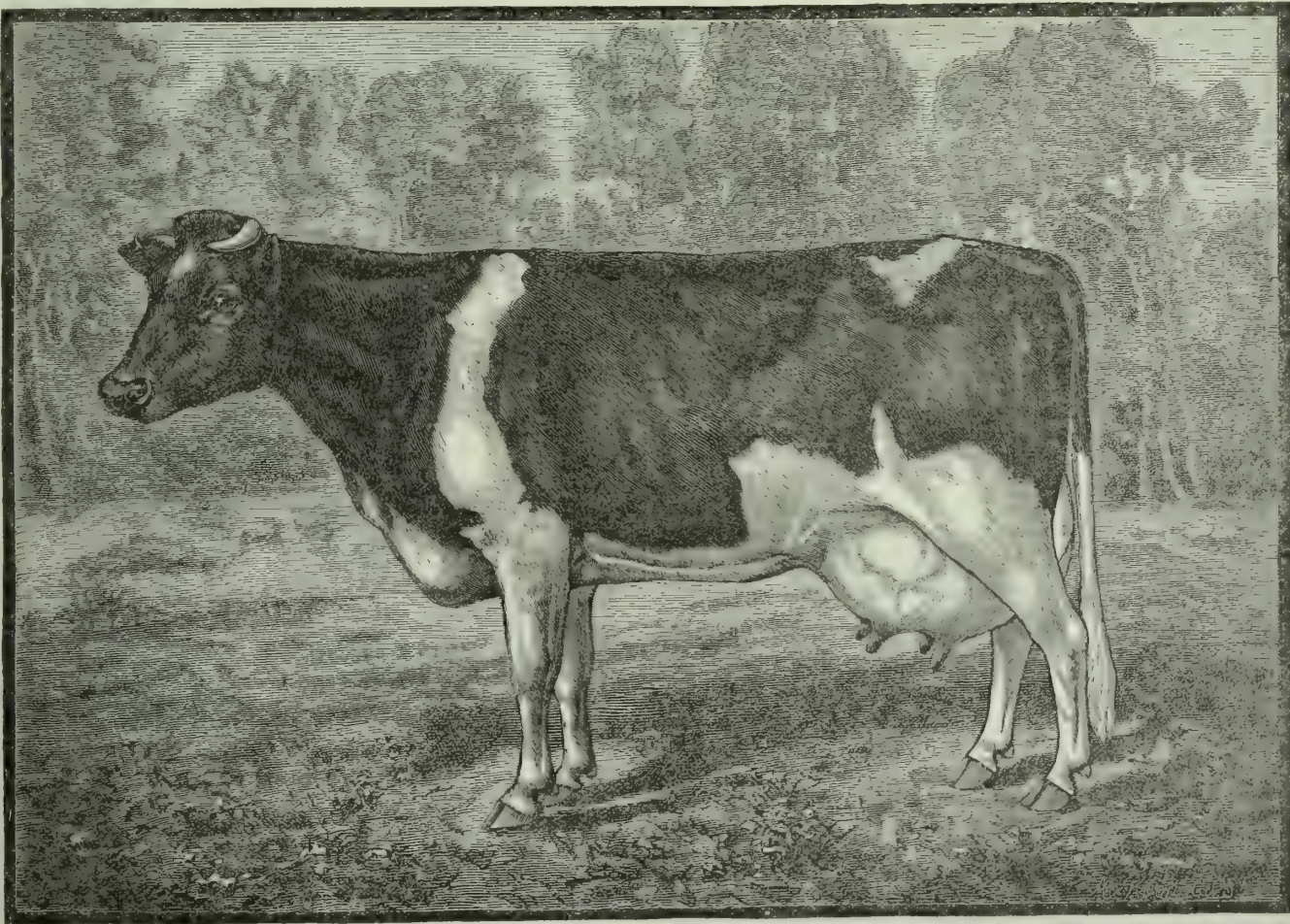
age weighed 535 lbs. A heifer calf, mother a two-year-old heifer, at seven months of age weighs 575 lbs. These calves are all raised for use, and not for show; they are well raised, but not forced. From nine thoroughbred cows, Mr. Steele has raised, this season, three bull and five heifer calves, which, at like ages, are all, except Dulytra's calf, so nearly alike that one could hardly choose between them at this time.

Mr. Steele has two thoroughbred Holstein bulls—one imported and one bred by N. M. Singarly, of Philadelphia, Penn.; eight im-

#### Our Paper.

We borrow a corner on our first page, this week, to say a word for ourselves. This enlarged edition, being devoted to the State Fair, will, no doubt, bring our journal face to face with some who are desirous of agricultural information, but who are not numbered among our subscribers. To all such we desire to say that their interest and support are respectfully solicited. The PACIFIC RURAL PRESS is conceded to be the leading agricultural and home

journal of the State; that there is no other source from which can be obtained such important and useful information of the condition and practical methods in all branches of California agriculture, and in which discussions of all important interests are mainly conducted by those actually engaged in the work. There was never a time since California farming began that there was such a demand for accurate and practical information as at present. This is owing, first, to the hosts of newcomers who are investing their means and labor in building up rural homes, and who naturally need advice as to the details of the work; and, second, from those older in California industry who desire to consult and plan together to secure the best methods of preparing products and placing them upon the



IMPORTED HOLSTEIN COW DULYTRA, OWNED BY E. W. STEELE, OF SAN LUIS OBISPO.

it from one-third to one-fourth. Such changes of conditions and surroundings often cause a heavy percentage of the cows to drop their calves prematurely; and all this, even though the change is to a better climate and grasses. With good luck and care, this cow may be set down for an increase in quantity of milk of one-third during the next season over that produced in this, her first year in California.

Dulytra's calf was raised by hand on milk and grass; has not been fed grain nor oil-cake, neither blanketed nor curried. At two months of age his weight was 310 pounds; at three, 405 pounds; at four, 556 pounds; at five, 665 pounds; at six, 755 pounds; at seven, 775 pounds. The lessened gain in the seventh month was owing to the hot weather and the weaning process. He will be registered in the American Holstein-Friesian Herd-book, under the name of Duke of Obispo.

The second bull, the calf of a two-year-old heifer, dropped February 3d, at six months of

ported cows and heifers, and one cow bred by Peter Coutts. The two year-old heifers are producing 25 per cent more milk than selected heifers from Mr. Steele's old herd under the same treatment, and the old herd have been bred for milk for 30 years and are equaled by few herds for the dairy.

When we take into account the fact that these two-year-olds have spent six months of their lives in quarantine, have crossed the ocean and the plains, made another sea voyage from San Francisco to San Luis Obispo, and then ranged on new grasses and water, we think these results demonstrate the fact that the Holsteins are a hardy and valuable breed both for the block and the dairy, and that they adapt themselves readily to the soil and climate in California. Mr. Steele is raising his calves well, but not forcing them. He intends that they shall be valuable animals for the use of the farmer and dairyman, and not for show or fancy alone.

world's markets. These demands for information, and the kindly disposition to impart it, fill our columns with life and interest, and warrant us in promising to all new friends who may be interested in our columns that they will secure benefit from subscribing for the RURAL, altogether disproportionate to the slight expenditure which a year's subscription demands from them. Any one who enlists in any branch of California farming, in stock-growing or dairying, in the poultry yard or apiary, in the orchard or vineyard, or he who does even more wisely, perhaps, and enters upon mixed farming to supply the needs of his own family and have a varied product for the market—all will find in the RURAL PRESS a painstaking friend and earnest adviser which will grow in his esteem the longer the acquaintance be. The RURAL always desires to increase its ranks of friends and patrons, and will be pleased to hear from all who may favorably judge us on first appearance.



## CORRESPONDENCE.

Correspondents are alone responsible for their opinions.

## San Jose Notes.

EDITORS PRESS:—Can you use a few notes from this smiling, hopeful land of fruits and flowers? One of the prominent citizens of this great nation fiercely asserted, some years ago, that "cotton was king." Others seem to be sure the crown would rest on wheat. Any one taking notes this month in our orchards, along our roads and streets, and through our huge canning and drying factories, must declare at sight, "no matter who or what is king, Pomona is surely queen of our purses, people and hospitality."

Our trees bowing (in many cases far too humbly) with their load of fruit. Our streets are thronged by carefully-driven teams that often have to wait their turn to unload at the factory until the patience (or impatience) of the drivers may be known, heard, if not read of all men.

Then what a sight is presented to one who has the privilege of a peep into that Babel of clatter and noise, sweet vapors and fruity smells, the canning factory, where feminine youth and old age seem striving to see which can make the most rapid movements to empty boxes for so much a box, or to fill and jar down the fruit in cans at so much an hour; while the manager walks about holding each of these busy bees close to the rules and regulations, and wishes very earnestly he could obtain 100 more workers.

Many thoughts occur to one who studies this new industry. Large-framed, fast-growing boys make much finer men if allowed to grow strong before being set to heavy work. No tree should hold a load that will bend its youthful limbs to the ground, destroying its symmetry and impairing its usefulness in after years. Prune severely, cut back each year's growth until you feel ashamed to look at the tree, and you will find it will start up and develop such crotches and strong, upright main limbs, that when you let it have a show, at four years from setting, to keep a part of its fruiting limbs, it will have backbone enough to hold its head and fruit proudly aloft and be a thing of beauty as well as utility.

I believe this service of Queen Pomona will do for a people what neither King Cotton nor Wheat can do. It will develop the love of beauty and be the means of bringing out the "artist" in many families. Beautiful groves, flower-plats and landscapes seem the natural daily sights about an orchardist's home and must affect the children whose lives they seem a part of. Each year our Horticultural hall shows the growth in this direction, but I leave the description of growth shown there to able pens, driven by those who have better opportunities to observe.

I think we need a more definite standard for our first, second and third class fruits. At the canning factories there seems to be a determination that the fruit shall correspond to the label on the can; first-class shall always open and pan out first-class, and this is easier to be sure of than to be sure what first-class means as it is boxed in the orchard. There is a complaint that when fruit first comes in or is short on the market, a certain size or number per pound is quickly taken as first-class, but the same size may be rejected and refused to apply on the contract when fruit is plenty. Can we not have a definite, well-established size and weight for each fruit independent of season? If no peach in a box of first-class could pass through an inch and three-quarter hole bored in the lid of box, we should have some idea of its required size, or if a box of given number of pounds must be filled by not more than a given number of peaches, it would give us a standard of size and weight, and the pickers' eyes would soon be so accustomed to sizes that it would be easy to approximate the right.

We here very much need some enterprises that could and would be closed during the fruit season, that the hands might be taken on by the canners. No class of help can be expected to lie around ten months to be rushed two months. We need a greater variety of occupation for common workers. Please accept this from a country observer brimful of strong faith and hope.

San Jose.

C. A. WYMAN.

## Boring for Oil.

EDITORS PRESS:—About one-fourth of a mile below Miles station, on the Pacific Coast R. R., between Port Harford and San Luis Obispo, Messrs. Nichols, Adams & Walker, of the latter place, are boring a well for coal oil. They are down over 700 feet, have plenty of carbonic gas and sulphur and an artesian flow of water strongly impregnated with sulphur, and running at the rate of 900 barrels per day. The prospect for oil is considered excellent. Should success attend this effort, there are other prospects considered of value in this part of the county which will doubtless be investigated.

San Luis Obispo Co.

MCD.

A MASS OF LEAD in an elevated furnace in Paris was completely dissipated by a stroke of lightning, no trace of the metal being found afterward.

## THE IRRIGATOR.

## The Irrigation Question in Southern California.

EDITORS PRESS:—Your correspondent, S. Bristol, in your issue of August 21st, makes some remarks which, if they were not answered, would imply that we were purposely and willfully withholding the truth for selfish purposes. The contrary is the fact; we are only anxious that the whole truth should be known, believing that any fair-minded land-holder will see that our position is so just and fair to all that he will be willing to concede all that we ask on irrigation matters. My article, in your issue of August 21st, was perhaps not so clear on some points as it might be, and as we can best arrive at a proper understanding of the matter by a full and free discussion of it in all its bearings, hence this further article.

One fact in regard to our rivers in Southern California, which is not generally known, should be stated: There is not a single river in either Los Angeles or San Diego county which runs into the ocean. San Bernardino county not being a coast county, is exempt from these remarks, but the Santa Ana, a short distance from its exit from the San Bernardino mountains, loses itself in the sand, except in an unusually wet season. The Mojave, also on the desert side of the mountains, has the same peculiarity. All of our rivers sink and rise again several times, and this quite independent of irrigation. All of the water used in Riverside comes from Warm creek, which takes its rise in and around San Bernardino. All of the water used in and around Los Angeles rises within seven miles of the city, and, except in heavy rains, has never been known to run into the San Gabriel river, its natural outlet. The waters of the San Gabriel river are all taken out near the Sierra Madre range, in which it rises, and the channel has always been perfectly dry in the summer time on the wagon-road between Los Angeles and San Bernardino. Still, a few miles below, there are two rivers—the old and the new San Gabriel—which are again lost before reaching the ocean. The old San Gabriel has this peculiarity: There are several ditches on it which take all the water they can get, but a short distance below each the water is in considerable volume again.

Mr. Bristol makes one statement in his article as follows: "It may be said, 'The irrigators are not opposed to proper indemnity, etc.' Then why have they avoided all allusions to it in all their speeches, manifestoes, conventions, etc.? They have been asked to define their position on the matter in the public prints, but to this day they are silent, and because they have been thus reticent on this most important matter they have aroused against them the suspicion and opposition of pretty much all the farmers living on the banks of rivers throughout the State." Simply because there is no need to do so. The doctrine of appropriation recognizes the rights of prior appropriation for a useful purpose, no matter whether that use be for domestic or irrigation purposes. There are really

## Three Parties in this Fight,

The riparianists, the monopolists and the appropriators. The riparianists have classed the appropriators with the monopolists, and very unjustly. Mr. Bristol has stated the doctrine of monopoly very fairly, which is to get and keep all it can, legally or otherwise, and "bluff" or wear out in our courts of law the weak and defenseless. Practically, riparianism in its ultimate effect is no better than monopoly, which seizes on anything within reach, and holds it until necessity compels people to agree to its demands. Riparianism, on the other hand, lies in wait until somebody has appropriated water and made it valuable and a necessity of life, and then starts up and says that you must let this water flow in its channel undiminished in volume. This, of course, means ruin to the appropriator. The riparian owner, in all probability, can make no use of the water; but he wants the State to exercise the right of eminent domain and pay him not its value to himself, but the value of the water to the appropriator.

## A Record of Experience.

A short description of things as they were 16 years ago will illustrate the position of the appropriators better than any argument. Nearly 16 years ago the writer was an owner of both land and water on the old San Gabriel river, in Los Angeles county, 10 miles from Los Angeles. This was one of the oldest rights on the river, and indeed in the county, at that time. The water and the land were inseparable—if not according to law according to custom, which our ablest lawyers admit is good law. The original owners of the land in good faith built their ditch and appropriated water, not for speculative purposes or to sell water, but simply for their own use. They could and did take, if necessary, all of the water in the river in summer, so long as they applied it to a good use. They could not run any of it to waste. If they had more in their ditch than they could use, they had to turn it back into the river. Had they taken water from the river and wasted it, those on the river below who suffered damage from want of water had a good cause of action at law for damages. They could have frequently sold water to adjoining lands, but

would not, for two reasons: First, if they once let water on new lands, it gave them the first right to the use of a surplus. Second, they would have been responsible to those who had built ditches lower down to catch surplus and waste water. Each owner of land was interested in proportion to acreage, and had representation in the company accordingly. The water was not sold, but was divided equitably and in such a way that those who got it this time in the daytime got it next time in the night-time. Assessments were made to pay expenses. Owners might work out most of their assessments.

This is appropriation pure and simple, and, as handed down from the Moors through the Spaniards and Mexicans under this system, only lands contiguous to rivers and easy of irrigation were so irrigated. As the country became settled up it was found that the choicest lands lay on the high mesas or table lands, that the bottom lands could raise good farm produce and fair fruits, but the best fruits could only be grown on high, dry mesas. It required capital to do this, and this brought in another system of appropriation. The system, as it now stands, is for the capitalist to buy up the lands in large tracts, water with it if possible; if not, get it by purchase elsewhere, which has frequently to be piped or flumed, owing to the porous nature of the ground run over. The land is laid off into small lots, generally 10 to 20 acres, and the water brought to it, land and water being sold together—so much water for so much land—representation accordingly. Such has been the absolute fairness of this system that the capitalist has even refrained from asking for representation on unsold land and water, trusting to the honor and honesty of purchasers themselves to manage water matters. Capitalists have gone into these enterprises, of course, to make money, but I do not know of any yet in Southern California who have made anything so far. Thus the Riverside Land and Irrigating Co., at the time of selling their ditches and other property two years ago, had spent \$180,000 more than they had received from all sources, and the purchasers, the owners of land in Riverside, are under obligations to spend \$120,000 more, which is likely to be increased as much more before contemplated improvements are completed. Of course we expect to get some of this outlay back again from future land sales.

## Of no Use to Riparian Owners.

Riverside, Los Angeles and some other places are in the position that the water they have appropriated cannot be used elsewhere to so much advantage as in the present position, and should riparian owners be able to turn the waters of the Santa Ana into the channel again, it could be of no possible benefit to any one. Until this recent decision by four out of seven judges of the Supreme Court came up, there never was any question as to the rights of appropriators in Southern California; but, in consequence of that decision, everything is unsettled because there is money in it for a certain class—that class who make their living by the sweat of another man's brow. It would not, of course, at all suit riparian owners to use the water themselves; but if they can compel the water to be turned in to the streams again they know they have us by the throat.

## Effect of the Riparian Doctrine.

It was said a long time ago by a very important personage, "Skin for skin, yea, all that a man hath will he give for his life."

If the courts should sustain the law of riparian rights we will have no option but to practically buy our places over again at their full value, improvements and all. Our titles to our lands are not worth the paper they are written on without water. Many have come here with very limited means and in poor health and went into debt to buy their lands and put improvements on them. It is an expensive business buying and improving land and waiting five or ten years without any returns for your labor or money. If the returns are large, so also are the expenditures.

The position that the appropriators take is that they appropriated these lands and waters for a useful purpose and to the detriment of no one; that after the expenditure of millions of money and years of toil, a class of men who have never done any good to society see a chance to make money, and they are trying for all it is worth. The appropriators of water ignore no man's rights. The courts here have always decided in favor of prior users of water, whether rich or poor. If Mr. Bristol has been injured as he says, had he lived in San Bernardino Co. he could have cut the dam on the river above him and the courts would have upheld him in his action, but he could only claim the water he was actually using at the time of appropriation by the other parties.

## Old Filings.

A good deal has been made of the sentiments made by the San Francisco Chronicle about the number of filings on water in the Southern counties. A filing on water amounts to no more than filing on Government land unless the law is complied with. You can file on water, but unless you go to work in good faith within 60 days it will be null and void. When a ditch is built and water appropriated it can only be applied to a useful purpose. The ditch may belong to the capitalist, but the water that runs in it belongs to the users of the water. There is no strife on that score in Southern California, for those who own the lands own the ditches and water. Such is irrigation and appropri-

tion of water as custom has decreed from time immemorial—a custom under which Southern California has grown and prospered, and which was unquestioned until the recent decision, which, if sustained, can only result in ruin to Southern California or dismemberment of the State.

## Valuation of Riverside.

In copying from the Riverside papers the figures of the assessed valuation of Riverside, I omitted one item which made the aggregate (as given in my article in the RURAL of August 21st) too small. The figures, as taken from the assessment roll, stand as follows:

Real estate.....	\$625,254
Improvements.....	641,855
Personal property.....	255,018
Cash.....	19,059

\$1,541,186

This, of course, does not materially alter the sense of my article. The total was correct, with one item omitted.

JAMES BOYD.

Riverside, Cal.

## THE FIELD.

## Prospects for Higher Wheat Prices.

EDITORS PRESS:—Many writers claim that the English wheat crop plays a less important part in regulating values than formerly. While this, to a certain extent, may be the case, yet the fact cannot be ignored that England's crop prospects still control values. This is made more clearly evident by favorable weather in July, and also in this month, depressing wheat values in that country, and unfavorable weather enhancing values. The advances abroad during the past ten days were brought about by bad crop weather, and while prices are only slightly higher now, with continued changeable weather, the effect will be more telling later on in the season. Going back only two decades, or from the year (1866) the first returns of acreage seeded to wheat in the United Kingdom were made, the results of bad and of fair weather are seen. After a medium warm summer in 1866 the season of 1866-67 gave an average price of 60s 4d per quarter. The summer of 1867 was cold and wet, giving an average yield of only 21 bushels to the acre; the price for the season of 1867-68 averaged 8s higher. The summer of 1868 was very warm and the price of wheat the season of 1868-69 dropped. The summer of 1869, though a medium season, resulted in a large harvest, and prices averaged the season of 1869-70 4s 2d. The summer of 1870 was dry and warm, but not so fine as 1868; the average price the season of 1870-71 was 54s 2d. There was speculation and demand from France on account of the Franco-German war. Damp and cool weather in the summer of 1871 gave a poor crop; prices averaged 56s 7d the season of 1871-72. Like weather in 1872, and again in 1873, gave the average price of wheat the season of 1872-73 at 57s 3d, and for 1873-4 at 61s 3d. In 1874 the summer was nearly as fine as 1868; caused wheat to sell for the season of 1874-75 at 46s 6d. Low prices ruled owing to favorable summer weather in each year up to the season of 1879-80, when the average was 46s per quarter, an advance of 4s 6d over the average of 1878-79. The advance was due to the cold, wet summer of 1879. The next two summers had medium weather, and the wheat averaged the season of 1880-81 44s 1d, and for 1881-82 46s 9d.

The summer of 1882 had medium weather, and the crop was an average; the large imports of wheat sent values down, making an average for the season of 1882-83 of 41s 11d. The average for 1883-84 was 39s 4d. The summer of 1884 was dry and warm and the crop fine, causing wheat to average only 34s 3d the season of 1884-85. The summer last year was warm and dry, and wheat averaged for the season just closing only 32s 1d per quarter.

The summer this year in England has been medium and with damp unsettled now when fine weather is of the utmost importance up to the last of September. If there is changeable unsettled weather from now on it is claimed that England will require a larger importation this season of 1886-87 than the season of 1885-86. It is safe, from all information obtainable, to place the additional requirements at fully 35,000,000 bushels, for, although the English yield may not fall much below the average to the acre, yet the grain will be damp and America's dry wheat wanted for mixing. France's summer so far has been as unfavorable as England's, and with continued unfavorable weather in this and next month, her shortage compared with last year's crop is placed at 81,000,000 bushels. This will give a total shortage for the two countries of fully 116,000,000 bushels. France's estimated shortage this year is based on the short crop which followed the unfavorable summer in that country in 1879. If the wheat crop in England and France should be as deficient as in 1879, and the Hindostan crop as short as claimed, prices in England will rule very high, particularly if the United States is unable to spare more wheat than last season (it now looks as if we will not be able to spare so much). Some well-informed parties place the advance abroad before the end of July, 1887, at fully 50 per cent on present prices.

J. R. F.

San Francisco, August 12, 1886.



## THE VETERINARIAN.

## Government Suppression of Cattle Diseases.

Recent acts of Congress make it the duty of the Commissioner of Agriculture to prepare rules and regulations for the suppression and extirpation of the contagious pleuro-pneumonia of cattle, and authorize expenditures for investigation, disinfection, quarantine, and for the purchase of diseased animals for slaughter. The following are the sections bearing upon this subject:

Sec. 3. That it shall be the duty of the Commissioner of Agriculture to prepare such rules and regulations as he may deem necessary for the speedy and effectual suppression and extirpation of said diseases, and to certify such rules and regulations to the executive authority of each State and Territory, and invite said authorities to co-operate in the execution and enforcement of this act. Whenever the plans and methods of the Commissioner of Agriculture shall be accepted by any State or Territory in which pleuro-pneumonia or other contagious, infectious or communicable disease is declared to exist, or such State or Territory shall have adopted plans and methods for the suppression and extirpation of said diseases, and such plans and methods shall be accepted by the Commissioner of Agriculture, and whenever the Governor of a State or other properly constituted authorities signify their readiness to co-operate for the extinction of any contagious, infectious or communicable disease in conformity with the provisions of this act, the Commissioner of Agriculture is hereby authorized to expend so much of the money appropriated by this act as may be necessary in such investigations, and in such disinfection and quarantine measures as may be necessary to prevent the spread of the disease from one State or Territory into another. [Approved May 29, 1884.]

## Bureau of Animal Industry.

For carrying out the provisions of the act of May 29, 1884, establishing the Bureau of Animal Industry, \$100,000; and the Commissioner of Agriculture is hereby authorized to use any part of this sum he may deem necessary or expedient, and in such manner as he may think best, to prevent the spread of pleuro-pneumonia, and for this purpose to employ as many persons as he may deem necessary, and to expend any part of this sum in the purchase and destruction of diseased animals whenever in his judgment it is essential to prevent the spread of pleuro-pneumonia from one State into another. [Approved June 30, 1886.]

In accordance with these laws I hereby certify the following rules and regulations for co-operation between the Department of Agriculture and the authorities of the several States and Territories, which I deem necessary to insure results commensurate with the money expended:

## Inspection.

1. The necessary inspectors will be furnished by the Bureau of Animal Industry of the Department of Agriculture.

2. The properly constituted inspectors of the Bureau of Animal Industry which are assigned to the respective States are to be authorized by proper State authorities to make inspections of cattle under the laws of the State; they are to receive such protection and assistance as would be given to State officers engaged in similar work, and shall be permitted to examine quarantined herds whenever so directed by the Commissioner of Agriculture or the Chief of the Bureau of Animal Industry.

3. All reports of inspections will be made to the Bureau of Animal Industry, and a copy of these will then be made and forwarded to the proper State authorities; when, however, any inspector discovers a herd infected with contagious pleuro-pneumonia, he will at once report the same to the proper State authority as well as to the Bureau of Animal Industry.

4. The inspectors, while always subject to orders from the Department of Agriculture, will cordially co-operate with the State authorities, and will follow instructions received from them.

## Quarantine.

5. When contagious pleuro-pneumonia is discovered in any herd, the owner or person in charge is to be at once notified by the inspector, and the quarantine regulations of the State, in which the herd is located, are to be enforced from that time. The affected animals will be isolated, when possible, from the remainder of the herd until they can be properly appraised and slaughtered.

6. To insure a perfect and satisfactory quarantine, a chain fastened with a numbered lock will be placed around the horns, or with hornless animals around the neck, and a record will be kept, showing the number of the lock placed upon each animal in the herd.

7. The locks and chains will be furnished by the Department of Agriculture, but they will become the property of the State in which they are used, in order that any one tampering with them can be proceeded against legally for injuring or embezzling the property of the State.

8. Quarantine restrictions once imposed are not to be removed by the State authorities without the consent of the proper officers in the Department of Agriculture.

9. The period of quarantine will be at least 90 days, dating from the removal of the last diseased animal from the herd. During this period no animal will be allowed to enter the herd or leave it, and all animals in the herd will be carefully isolated from other cattle.

When possible, all infected herds are to be

held in quarantine and not allowed to leave the infected premises except for slaughter. In this case fresh animals may be added to the herd at the owners' risk, but are to be considered as infected animals and subjected to the same quarantine regulations as the other members of the herd.

## Slaughter and Compensation.

10. All animals affected with contagious pleuro-pneumonia are to be slaughtered as soon after their discovery as the necessary arrangements can be made.

11. When diseased animals are reported to the State authorities, they shall promptly take such steps as they desire to confirm the diagnosis. The animals found diseased are then to be appraised according to the provisions of the State law, and the proper officer of the Bureau of Animal Industry (who will be designated by the Commissioner of Agriculture) notified of the appraisal. If this representative of the Bureau of Animal Industry confirms the diagnosis and approves the appraisal, the Department of Agriculture will purchase the diseased animals of the owner and pay such a proportion of the appraised value as is provided for compensation in such cases by the laws of the State in which the animals are located, when they are condemned and slaughtered by State authority.

## Disinfection.

12. All necessary disinfection will be conducted by the employees of the Bureau of Animal Industry.

## Inoculation.

13. Inoculation is not recommended by the Department of Agriculture, and it is believed its adoption with animals that are to be afterward sold to go into other herds would counteract the good results which would otherwise follow from the slaughter of the diseased animals. It may, however, be practiced by State authorities under the following rules:

14. No herds but those in which pleuro-pneumonia has appeared are to be inoculated.

15. Inoculated herds are to be quarantined with lock and chain on each animal, the quarantine restrictions are to remain in force as long as any inoculated cattle survive, and these animals are to leave the premises only for immediate slaughter.

16. Fresh animals are to be taken into inoculated herds only at the risk of the owner, and shall be subject to the same rules as the other cattle of the inoculated herd.

17. The chief of the Bureau of Animal Industry is to be promptly notified by the State authorities of each herd inoculated, of the final disposition of each member of the herd, of the post-mortem appearances, and of any other facts in the history of the herd which may prove of value.

The co-operation of Governors, of State Live Stock Commissions and of other officers who may be in charge of the branch or service provided for the control of the contagious diseases of animals in the States where pleuro-pneumonia exists, is earnestly requested under these rules and regulations, which have been framed with a view of securing uniform and efficient action throughout the whole infected district. It is hoped that, with a vigorous enforcement of such regulations, the disease may be prevented from extending beyond its present limits, and may be in time entirely eradicated.

NORMAN J. COLMAN,  
Commissioner of Agriculture.

Washington, D. C., August 2, 1886.

## POULTRY YARD.

## A Study of Gapes.

The following, by Mr. O. S. Bliss, of Georgia, Vt., appeared in the N. Y. Tribune: This disease has been known in the United States since the last century, and the method of removing the worms which cause it from the trachea of chicks with the tip barb of a hen's feather or some similar device has been handed down from that time. That fowls are sometimes relieved from immediate suffocation by this means cannot be well questioned, though most of the persons who have scientifically investigated the subject doubt its efficacy. It is certainly quite too delicate an operation for unskilled hands, and is, as a rule, to be resorted to only when danger of suffocation is imminent. But the disease has received far more intelligent attention abroad than in this country, owing to the circumstance that there it not only affects the interest of such of the people as are engaged in chicken-raising, but it interferes very materially with the sports of the aristocracy.

It is estimated that in England alone the loss of the chickens by the disease has averaged half a million a year for the last ten years; while of pheasants, partridges and other game birds the proportional loss has been much greater. In France its ravages have been still more severe. It is said that in the parks of Baron Rothschild, at Rambouillet, the known losses, chiefly of young pheasants, at one time reached a daily average of 1200 birds. In the forest of Fontainebleau it threatened total extermination. In short, all of the large game bird and poultry establishments of the country were in most imminent peril from its ravages. It broke out in the royal pheasantries of Turin, Italy, and, in fact, at one or another time it has

appeared in nearly all the noted establishments on the continent. To what extent the parasite infests wild birds is not known, but it has been found in the green woodpecker, the black stork, the swift and the magpie; hence it may be inferred that the disease cannot be made obedient to any quarantine regulations, but is liable to appear at any time where least expected.

It is, moreover, quite certain that inasmuch as infested birds do not appear to suffer any special inconvenience or injury from the presence of the parasites except when present in numbers sufficient to produce suffocation by obstructing the air passages, they may be active distributors of the disease without showing any of the known symptoms in their own cases. It is believed, and I think with abundant evidence, though scarcely positive, that the worms do not become detached from the trachea of the birds until they are fully matured, nor do any of the very large number of eggs which each contains ever leave the mother worm until after her death. But the red worm, when ejected by the coughing or sneezing action of the bird, is an attractive tidbit, which is instantly seized upon by the first bird which sees it and eagerly devoured. In from three weeks to a month from that time the new crop of worms will have become fully developed, and if enough of them have succeeded in reaching the air passages to produce strangulation, death is the inevitable result.

That they do not affect grown birds in the same manner as young chicks is inferentially believed to be due solely to their inability to force their way from the digestive apparatus into the lungs and air passages in sufficient numbers to obstruct their normal action. Their frequent presence in grown birds cannot be doubted. Whether any portion of the eggs or embryo escape digestive action and are voided with the excreta of the birds with sufficient vitality for further development, is an open question. It is quite probable, however, that such is the case, though only to a very limited extent. That a flock once infested remain so as long as the conditions are favorable is very probable, but it is very doubtful if the reproduction in grown birds is sufficiently active to perpetuate the test beyond the second season in the most extreme cases without the aid of favorable external conditions which may be easily controlled.

Ejected worms die immediately; but the eggs they contain retain their vitality for a longer or shorter period, according to their condition in respect to heat and moisture. In moist earth, at a temperature below 60° Fahrenheit, they retain their vitality nearly or quite a whole year; in dry earth, especially when warm, they lose vitality. In moist earth, when the temperature rises as high as 70° Fahrenheit, the eggs will hatch, though very slowly, the temperature required for their normal hatching and development being that of the internal organs of the chicken. In water of moderate temperature or in moist earth the embryos live with scarcely any further development for a considerable time, and finally die unless their victim, the chick, comes along and gathers them in out of the cold, when they immediately make with all due haste for the trachea, where, in couples permanently attached, they fasten themselves immovably by their mouths. Autopsies of birds who have died of the disease show that it requires from 5 in young birds to 30 or more pairs of the worms in grown birds to so close the trachea as to cause death. But a single couple, without any injury to their host, will produce eggs enough to infect a whole flock of fowls in three generations.

The treatment of gapes should be as far as possible preventive. The fowls should be entirely excluded from all places known or suspected to be infested and the grounds disinfected with sulphuric acid. Fowls known to be infested should be separated from others and confined in partially darkened apartments. In damp weather, confinement in dry houses with an abundance of dry earth, or an equivalent to cover the dry floor several inches deep, is much better than permitting them to run out in search of worms. Give only pure cold water, and change it several times a day, never permitting it to become stale. Give only dry, fine food. Fowls suspected of being infested may have medicated drinking water to advantage. In England an infusion of rue and garlic is made to take the place of water with good results. The theory upon which this is used is that, being chiefly eliminated by way of the air passages, it causes the worms to detach themselves from the trachea. Asafetida is also used in the same way and for the same reason. In France, flavoring the prepared foods very strongly with garlic beaten into a paste mass, not chopped, is claimed to have resulted efficaciously in many cases. It is indeed claimed to be a specific.

An English experimenter, in spite of total disbelief in the efficacy of the remedy, soaked the grains fed to pheasants in urine and became convinced that the ammoniated air respired caused asphyxiation of the parasites and compelled them to let go their hold on the trachea, so as to be easily ejected by the birds. Fennugreek seed is recommended as having much the same effect as the garlic-flavored food and drink. Sulphurous fumigation is believed to have afforded relief in many cases, but to be effective it must be so thorough as to nearly asphyxiate the birds as well as the parasites. Fowler's solution, turpentine and sundry nostrums, administered as medicine to the birds individually, have been recommended, but the results have generally been disappointing. In

fact, so far as I can learn, not one in a hundred cases of individual treatment was ever otherwise. There remains just one treatment about the efficacy of which there is no possible doubt, that is, the total cremation of the crop and entire respiratory apparatus of every dead bird which is in any degree infested by the parasites. Burying these, unless very deep or entirely beyond the runs of the fowls, is not to be depended upon to prevent the spread of the disease.

## Cure for Chicken Diarrhea.

EDITORS PRESS:—Mrs. S. C. Coombs, of Santa Cruz, furnishes the following recipe for curing chickens having diarrhea: Give to each fowl of tincture of camphor, one-third of a teaspoonful. If, in 10 or 12 hours, the patient is found still drooping, repeat dose. Found to be very efficient. If given in time, considered a certain cure. McD.

## FORESTRY.

## Joaquin Miller and Arbor Day.

We alluded in our last issue to Mr. Miller's proposition concerning tree-planting on Goat Island, as mentioned by the *Call*. Since then the Secretary of the Forestry Commission has written to the same journal as follows:

In your editorial columns in the issue of the 26th inst., I find an article entitled "The Movement for an Arbor Day," in which the plan for planting trees upon Yerba Island proposed by Mr. Joaquin Miller is favorably commented upon, and also his suggestion that the ladies of San Francisco and Oakland be requested to join in the work. The State Board of Forestry, which I have the honor to serve, has since its organization, by means of circulars and letters sent out, been endeavoring to instruct the people in the importance of forest culture and preservation, and this increased interest in the movement is at present particularly gratifying. There can be no question of the effects of forests in modifying climate, dispersing fogs and preserving water sources, and the suggestion to plant the headlands and hills to the seaward with forest trees should be speedily acted upon, and is one which the State Board of Forestry will assist with all the resources at its command. There could be no question of experiment in this, and from the beautifying feature of the case I am sure that the genial effects from the planting of a thick growth of trees to the westward would soon be felt, and those citizens living in the fog belt would in time rise up and call him blessed who had started the tree-planting boom.

The State Board of Forestry has at present under consideration a bill providing for the establishment of an arbor day, which will be presented for passage at the next session of the Legislature. The laws of the different States which have already established arbor days have been digested, and at present West Virginia seems to stand at the head in her efforts to interest her people in tree-planting and cultivation. The school-children and teachers are more particularly addressed and encouraged to plant trees about school sites, along country roads, about public property and in private lands. A system of rewards is offered to the class or pupil planting the greatest number of trees, and additional premiums for the rearing and care of the same. The occasion is proclaimed a holiday, and the result thus far has been most gratifying. Although this plan has not been definitely settled upon as the fittest by the Board, yet it is believed that it would commend itself and be decidedly popular. It is sincerely hoped that Mr. Joaquin Miller may meet with unqualified success in his efforts at tree-planting, and that the 30th of October, the day named by him for the inception of his work, may mark the beginning of a series of arbor days, encouraged by the State and the people at large.

SANDS W. FORMAN,

Secretary State Board of Forestry.

[By the notice which we quoted from the *Call* last week it appeared that Mr. Miller proposed to do his planting in September. According to Mr. Forman's statement the day set is October 30th. This is, of course, better than September, and possibly in some exceptional years trees then planted would live; but both dates are altogether too early.]

Our readers know that this proposition for an arbor day for California is an institution which we have advocated for years, and which we thoroughly approve. Our choice of a day has been Washington's birthday (Feb. 22d), because it is already a holiday, and because the general and official planting of trees throughout the State would be a happy and novel way of commemorating it. Besides that, it is a good time to plant trees, and the time mentioned by Mr. Miller is not a good time. We are, however, not particular about a day except that it be when the trees are quite sure to be in good condition to move and the soil in condition suitable to their growth.—EDS. PRESS.]



## PATRONS OF HUSBANDRY.

Correspondence on Grange principles and work and reports of transactions of subordinate Granges are respectfully solicited for this department.

## The Coming State Grange.

We had a pleasant call from Bro. Ohleyer, editor of the *Sutter Farmer*, on Tuesday. He assures us that the outlook for the coming session of the State Grange is very bright. Local committees are at work making all needed preparations, and the Patrons who will visit Marysville may be assured of comfort and a warm welcome. The very satisfactory condition in which the debris evil now stands tends to lift a great burden from the minds of the people of the region, and they are ready to have a joyful reunion with their brother farmers from all parts of the State. We quote the following from the *Sutter Farmer* of last week:

Next month the California State Grange will hold its annual convention in our neighboring city of Marysville. There is a widespread desire among the Grangers of the central and southern portions of the State to visit the "ancient city," as they were pleased to term it, of Marysville. In our intercourse with them at previous conventions we found many who had resided here at some time in their lives. And again, it is well known that our fair neighbor is the center of a victorious battle-field, the like of which had not agitated the world for 2000 years. This fact gives her a celebrity unknown to any other California city, and creates a desire to witness and share her glory. The Grange, as is well known, is composed of leading men and women who are engaged in the tilling of the soil, who have contributed so much of muscle and brain to place our State in the very front rank of the greatest agricultural States. We bespeak for the members a most cordial reception by the people of the fortunate city and her neighbors. We understand that committees have been named to cover every feature of the event, to whom all needed assistance should be rendered. It is now estimated that the attendance will be between 300 and 400, and possibly 500, to remain a week. Our northern contemporaries should make a note of this and lend their valuable aid.

## Grange Camp of Northern Virginia.

The project of holding a California State Grange picnic has been agitated, though without any definite result hitherto, and it may interest those who have had the matter in mind to learn something of what is doing in a similar direction by the Patrons of the Old Dominion.

The District Grange of Northern Virginia has obtained a charter from the Legislature, bought a beautiful grove, and purposes holding a great agricultural and industrial exhibition there—at Loring, Fairfax county—from the 8th to the 15th inst. Lively preparations were going on, at last accounts. Beside a hotel and three two-story structures, 28x78 feet, to be used for displays of manufactured articles, agricultural, floricultural and horticultural products and ladies' handiwork, several other buildings are going up and a number of tents will be provided for the accommodation of campers. A grand stand will be erected in a chestnut grove, from which the many distinguished speakers will address the audience.

The presence is assured of the following founders of the Order: William Saunders; John Trimble, Sec'y National Grange; J. R. Thompson, author of the ritual, and Wm. M. Ireland, Past Sec'y National Grange. By special request Bro. John R. Thompson will confer the fifth degree in due form. Hon. Pat. Darden, Master, and Bro. Mortimer Whitehead, L. of the N. G., will also be on hand, with many other prominent Patrons.

Among those expected to be present are Hon. N. J. Colman, U. S. Commissioner of Agriculture; Col. Randolph Harrison, Commissioner of Agriculture; Hon. R. Beverly, President National Agricultural Congress; T. V. Powderly, General Master Workman of the K. of L.; Hon. G. B. Loring, ex-Commissioner of Agriculture; Sen. Morton, of Illinois; Gov. Lee, of Virginia; Lieut. Gov. Massey, and Gen'l W. H. F. Lee, of Fairfax county, and many other notables.

The State Grange of Virginia will hold its annual session on the grounds, and the Frederick County Pomona Grange and the District Grange of Northern Virginia will hold joint sessions during the week.

There will be telegraph, express, freight and postoffices on the grounds, and everything that possibly can be done will be done to promote the comfort, pleasure or convenience of the visitors.

GRANGE SOCIALS were resumed at Martinez August 21st, with an evening party which was largely attended and fully enjoyed. The pleasure of the occasion was enhanced by recitations by Miss Jennie Ipswitch, Miss Grace Brackett and Mrs. W. B. Thomas, and singing by Miss Annie Ryan, all of whom were warmly applauded.

SAN JOSE GRANGE, at its regular meeting August 21st, chose 10 delegates to the Farmers' Convention to be held at Sacramento on the 15th instant.

## Meeting of Sacramento Grange.

EDITORS PRESS:—Our last meeting was largely attended by members of our sister Granges, as it was the day for Pomona Grange, No. 2, to assemble. A few of our members were absent, at the sea-shore, Los Angeles, and hop-gathering.

Sister Jones was present and acted as Secretary *pro tem*. The Grange selected 15 delegates to attend the Farmers' Convention to be held September 15th in Sacramento. A number of members spoke on the advisability of the action, and trusted some good results may grow out of it. The Master had the power to fill all vacancies if any should occur.

## Pomona Grange Meeting.

The Grange met at the close of the Sacramento Grange meeting for the purpose of conferring the fifth degree on a class of seven, three sisters and four brothers. After the ceremony all marched to the Feast of Pomona, which was abundantly supplied with fruits of the farm. There was a large surplus of fruit untouched, and it was moved to donate it to the Orphan Asylum. The next session of Pomona Grange will take place Oct. 30th, at Sacramento, when the annual election of officers will take place.

## Delegates to the Farmers' Convention.

Following are the delegates to the Farmers' Convention:

Myron Smith,	Newton Fay,
Joseph Sims,	William Curtis,
Nelson Wilcox,	Chas. E. Mack, Jr.,
John Reith,	D. R. Hunt,
Chas. A. Hull,	Jas. Reitter,
Moses Sprague,	E. Greer,
S. J. Jackman,	G. T. Rich,
	Geo. Hack.
Sacramento, Cal.	G. R.

## A Runaway Well.

A most peculiar experience with an artesian well is the following, which is telegraphed from Cedar Rapids, Iowa: William Weir & Sons began boring an artesian well at the intersection of Beech and Washington streets, Belle Plaine, on a flat about four blocks south of the Burley house. The contract called for a well with a three-inch casing and flow guaranteed. They bored a two-inch hole and theorized that the flow of water through it would wash it out so that they could sink a three-inch casing. On Thursday they struck water at the depth of 185 feet. At this time they had about 60 feet of three-inch casing down, and the water rose with strong force 12 feet above the surface in a solid three-inch stream, plainly showing the strongest flow yet struck. On Friday morning the flow was under control, but during the forenoon, in an attempt to force a three-inch tube into the two-inch hole, it broke loose and wore away sufficient space outside the tubing to allow water to boil out around it at the surface. At sundown on Friday a stream of water a foot in diameter was pouring out. At 8:30 p. m. the city authorities were appealed to to take control and give relief from the impending danger. Already many lots and houses were more or less flooded.

At 9 p. m. a gang of men was set at work, the Mayor and City Councilmen personally superintending the job until nearly morning. All expedients were tried, but the water could not be controlled. On Saturday morning Eugene Palmer proposed that a 15-inch tubing be driven to the blue clay, believed to be about 50 feet down, and by thus confining the flow to a common center the outside flow could be stopped, and then, once in the tubing, controlled; but the scheme failed. It is impossible to estimate the damages. The south part of the town is flooded and cellars are filled with water. The flow continues unabated, making two rivers through the lower part of the city. In his helplessness, the Mayor to-day applied to the hydraulic engineering science of Chicago for relief.

TEHAMA COUNTY FRUIT.—We had a call on Wednesday from Mr. George H. Flournoy, of Thomas Creek, Tehama county, who brought us some assorted samples of varieties of fruit borne on his young trees. He has trees bearing large amounts of fruit at three years from the bud, two years in the orchard. The samples he brought—the White Heath and Orange cling peaches, the President Brockworth and Winter Nelis pears, and the Hungarian prune—were all exceedingly well grown, perfectly healthy and very beautiful. Such fruit is certainly an excellent testimonial to the adaptations of his locality for fruit-growing. Mr. Flournoy takes much interest in his orchard work, and is making a thorough study of it. He promises, at his convenience, to prepare us something for publication relating to his part of the State, which is certainly not so well known as it deserves to be.

MANY Santa Barbara pampas plum-raisers are now seeking a foreign market, says the *Press*. A large number of "knock-down" boxes for shipping plumes in were received in Santa Barbara from San Francisco on the last steamer. It is estimated that these boxes hold from 3000 to 3500 plumes each, and are being shipped direct from here to London, Hamburg, and other European cities.

## AGRICULTURAL NOTES.

## CALIFORNIA.

## Alameda.

SUGAR BEETS.—*Reporter*, Aug. 28: Speaking of beets, the crop this year is a splendid one—over 20 per cent sugar, we understand, and making 15 tons per acre. The cultivators are paid \$1.35 per ton for the work done from the time the beets appear above ground "in the spring, tra la," and the time they are lifted on the wagon "in the fall, tra la." They sell at the factory for \$4 per ton.

## Butte.

COUNTING UP THE LOSS.—*Butte Record*, Aug. 28: Mr. H. B. Sanders, of Orland, has furnished the *Times* the following information, which may be interesting, and also form a basis of calculation for estimating the loss where the grain has been blown out by the wind. He ascertained that 100 grains of wheat had been counted to the measured square foot, and taking this for a basis, he weighed 100 grains of averaged sized wheat and found that it weighed exactly 62 grains avoirdupois weight; this sum multiplied by nine, the number of square feet in a square yard, would give 558 grains, and this sum multiplied by 304, the number of square yards in a square rod, would give 168,792 grains; this sum multiplied by 160, the number of square rods in a square acre, would give 2,700,720 grains, and this result divided by 7000, the number of avoirdupois grains in a pound, will give 385 pounds, or in other words, three times as much as would be necessary to seed the ground, or about \$4.50 worth at present prices. Thus it will be seen that on every 100 acres the loss would amount to 38,500 pounds, which would be worth \$450.

## Colusa.

SUMMER-SOWN ALFALFA.—*Sum*, Aug. 28: C. C. Hickok, of Grand Island, has been experimenting some in sowing alfalfa. He had a piece of land overflowed by the break at Brown's, and as the water receded he plowed the land and sowed it to alfalfa. The last was sowed in July. All this came up in splendid order and is doing well. He also tried the experiment of sowing the seed upon the water when it was about a foot deep, and this also is doing well. It has been thought that it would not do to sow alfalfa seed during the hot months, but Mr. Hickok has demonstrated that all that is necessary is to have the moisture and the land in good condition to plant it at any time.

## Fresno.

THE GRAIN CROP.—*Expositor*, Aug. 25: It will take fully a month longer to finish thrashing the immense grain crop of this county, and it will take lively work to get the grain housed before the early rains. The price has materially advanced since the harvest began. The S. F. market now shows a selling price of \$1.35 per cental for wheat, with a good demand. This increase in value means a great deal to those who have not yet sold. The grain farmers of Fresno county will realize something over \$2,000,000 for their crops this season.

ARTESIAN PROBABILITIES.—*Tulare Times*, Aug. 26: The lands around Summit Lake, west of Lemoore and just across the line in Fresno county, have attracted many Tulare settlers during the past year, and those who took up lands in that section and around the Poso Chene, and put in crops last fall, have raised good crops, realized a handsome profit from their investments of time and labor, and secured a hold of property that in a short time will bring in much money, should they feel disposed to realize on their claims. The one lack there is water for irrigation, though it is possible, and more than probable, that artesian water may be found there. There has really been no deep boring, the largest well we hear of being only 110 or 120 feet deep, in which a flow was struck that rises within three feet of the surface. The party boring this well was unable or unwilling to continue the boring further, and the reason given for going as far as he did was that the water first struck, at a shallow depth, was possessed of mineral qualities that rendered it unfit for household purposes, and he had to go deeper for what he wanted. But the fact that the water in his well rose within three feet of the surface is an indication that artesian water can easily be obtained. With artesian water that section will support an immense population, as the soil is of the richest quality.

## Humboldt.

MESQUITE GRASS.—*Eureka Standard*, Aug. 28: Mr. Marshall gives us the following from Dow's Prairie: The mesquite grass was cut and harvested during the latter part of July. The seed is kept by the farmers for sowing and the stalks are bought and used for feed at the logging camps. Mesquite hay is not adaptable to modern thrashing methods, the seeds are so light in substance that they would be scattered to the four winds during the process. On the other hand, mesquite is thrashed by the old Egyptian method. Oats, hay and wheat are now being harvested, the former two products constituting the larger part of the crop. Humboldt county, and especially Dow's Prairie, are ill adapted for the proper growth of wheat.

## Los Angeles.

GLANDERS.—*Orange Tribune*, Aug. 28: That terrible horse disease, glanders, has been dis-

covered in this valley, and a short time since a veterinary surgeon, invested with power, under the law, to condemn glandered horses, paid a visit to Santa Ana and Orange and condemned quite a number of horses, most of which have been disposed of. The disease, while fatal—there is no known cure for it—is of a mild type compared with the glanders east of the Rocky Mountains, and this is possibly due to climatic influences, but it is better to stop it at once, and the only way to do that is to kill all horses that have contracted the disease. We have reason to believe that several of the "old plugs" driven by the Chinese vegetable peddlers have the disease, and they should be attended to.

VINES IN TROUBLE.—*Santa Ana Standard*, Aug. 28: The disease which has been discovered in this valley this season in the old Mission vineyards, seems to be still spreading. The trouble originates at the roots, apparently, as vines that have made an average growth this year can be seen in many vineyards withering and dying on moist ground. In many instances roots of vines have been examined by experts with powerful glasses and pronounced sound. The actual cause for the detention of growth has not yet been ascertained so far as we have learned. The Mission grape in this valley has grown in disrepute, however, for some years, and many vineyards have already been grafted to Muscat for raisin purposes. If the diseased root plague continues to spread it will put a damper on the grafting process somewhat.

Anaheim Gazette: An inspection of some of the twigs of the diseased Mission vines shows that a worm has eaten the pith in the twigs. Whether the presence of the worm has any connection with the disease afflicting the vine is a question that has been referred to Mr. Morse, the viticultural expert, for answer. The discovery of the worm was made on the vineyard of Mr. John Taylor.

## Nevada.

HOG CHOLERA.—*Grass Valley Tidings*, Aug. 19: We are informed that a great many hogs are dying in Penn Valley and vicinity. It is asserted that Montgomery Bros. have lost fully 100 lately, Church 50, Watts 100 and many others heavily.

FRUIT AND CORN.—H. H. Hansen, who has a model farm and orchard near the Idaho mine, brings us fine samples from his ground. The Shafter Colossal raspberry, second growth, is delicious. Large, fine blackberries decorated the basket sent us, and Bartlett pears crowned the load. The specialty, however, was green sweet corn, as fine as anybody can grow. Mr. Hansen informs us that the codlin moths are treating his orchards badly this year. The pears and apples are being eaten by them, and the destruction is great. These pests will have to be killed off by combined effort, else the fruit business here cannot be the success desired.

## San Benito.

BARLEY YIELD.—*Free Lance*, Aug. 27: Probably the largest crop of barley ever harvested in this section, and for that matter in any section we have ever heard of, was that secured by S. Daviggio, of Mulberry, this season. The yield was 84 bushels to the acre. This is not a "whopper," either.

GRAIN MOVEMENTS.—On an average 6000 bags of grain are being hauled into the various warehouses in town, and shipments to the metropolis and other points average about 2500 bags daily.

## San Diego.

GETTING READY FOR THE FAIR.—*National City Record*, Aug. 26: J. M. Asher informs us that he has rented the Armory hall of the City Guard as a suitable place in which to hold the Horticultural Fair on the 6th, 7th and 8th of October, and it is hoped there will be ample preparation made and a good representation secured.

HONEY, GRAPES AND GRAIN.—*Escondido Cor. Union*, Aug. 17: The honey season is over for this year in this section. The quantity of honey is far below expectations, and the price is very disappointing. Our grape crop is very promising. Early rains to rot our grapes before they ripen is the only thing to be feared. Last night we had rain for two or three hours. About .15 of an inch of water fell—enough to wet the ground an inch deep. Heavy crops of grain have been secured, which the teams are now hauling to Stewart's or San Diego. A stub railroad to Escondido from the line of the California Southern would get nearly all the produce raised over one of the largest and most fertile sections of the county.

## Santa Barbara.

BANANA-MUSKMELON.—*Santa Maria Times*, Aug. 21: B. F. Peterson left at our sanctum on Thursday a couple of banana-muskmelons that were ahead of anything we have seen in that line. The melons were about 20 inches long and 10 or 12 inches around. In shape they resembled a banana, hence the name. Mr. Peterson imported the seed from Wisconsin.

## Santa Clara.

STILL ANOTHER RANCH FIRE.—*Capertino Cor. San Jose Herald*, Aug. 27: A huge column of smoke ascending from among our foothills Sunday morning attracted the attention of residents for miles around. The fire was caused by the carelessness of some hunters passing through the Anthony Ranch. As usual, a spark quickly generated a flame and the immense growth of tar-weed growing in all the



fields this year gave the blaze a fearful impetus, and a sweep of flame was soon rolling over the country. Unfortunately, most of the neighbors were at church, and the fire had gained some headway before parties arrived to battle with the conflagration. Soon, however, many willing hands began to arrive, quite a force got to work struggling with the flames, and at 4 P. M. nothing remained of the fire but the smoking remains of some old stumps and the charred and smoldering fences. Walter Anthony lost several cords of stove-wood and John Anthony some hay, but outside of the damage done to the fence and the destruction of much fine pasturage the damage will not count. This is not the first time this season that fire has been caused by careless hunters, and it is high time that steps were taken to avert like possibilities in the future. Causing fire on the high seas is a crime punishable by death, and it is no great stretch of comparison to strike a parallel with the individual, be it from carelessness or malice, who causes fire to start up in the stubble field of the farmer, especially while the grain is yet waiting to be thrashed as it is this year. The farmer's debts, his all, are in the crop, and hard enough has been the struggle in the present prevailing hard times to get together that which is to meet the demands of many a creditor. All hunting whatever should be prohibited by law on farming lands from July to October, and until this is effected we will continue to have plenty of just such occurrences every year.

**San Joaquin.**  
**HOW TURKEYS DO THEIR WORK.**—Merced *Argus*, Aug. 28: Some three months ago we began to watch the maneuvering of a band of 25 turkeys. When we first discovered them they had just commenced on a fine plot of evergreen rye grass. Every spear was soon demolished; then they attacked about 25 vines of fine table grapes. Of these they made quick work, leaving the once well-staked vines lying upon the ground. Next, the lower limbs of half a dozen peach trees were attacked, and now they are busily engaged in stripping the ripe figs from three trees. What they will do next is still in the womb of time. We long for Thanksgiving to come.

**Solano.**  
**GIANT PEACH.**—Solano *Republican*, Aug. 27: We were shown a peach on Tuesday last of the Late Crawford variety by G. N. Platt, from the orchard of Geo. E. Brown. The peach in question was a magnificent specimen, weighing 14 ounces, and measuring 11½ inches. Beat that if you can, Winters!—*Judicion*. Probably Winters cannot beat that, but Suisun valley can. Here is the record: The peach we refer to came from the ranch of A. T. Hatch, weighed 16½ ounces, measured 13½ inches in circumference, was of the Orange Cling variety, and had a most delicious flavor.

**Sutter.**  
**THE RIVERS CLEARING.**—Sutter *Farmer*: At last the warfare that has been waged against the barbarous practice of dumping the mountains into the streams is crowned with success. Had the law been obeyed as promulgated by the United States Circuit Court, this result would have been obtained two years ago; that it has not is wholly owing to lawlessness. The people of the valley would gladly have desisted from further litigation and agitation had they been permitted. But we intended to speak of the clearing rivers. The Yuba is nearly clear—more so than for 25 years. The Feather above the Yuba is perfect, and below nearly so; and the Sacramento shows scarcely a sign of color, and has not been so clear at Sacramento for a quarter of a century.

**Stanislaus.**  
**RESOLUTE RAPTOR.**—*News*: An eagle was killed in the chicken-house of W. E. Turner by the gardener, John Reynolds. Considerable noise was heard in the chicken-house, which he investigated. The eagle flew at him, and he protected himself with a stick until the bird receded. He then went to the house, procured a pistol, and succeeded in killing it. The eagle measured 6 feet and 10 inches from tip to tip. It is probably the first one ever killed in Modesto.

**Tulare.**  
**A FERTILE REGION.**—Tulare *Times*, Aug. 26: Thomas Jenkinson, of Mussel Slough, states that he has this year gathered 1100 pounds of fruit from one apricot tree, and 750 pounds of peaches from a five or six-year-old peach tree. This, at the rate these fruits have been retailing in Visalia this year, would be \$33 per tree for apricots and \$15 for peaches—surely an extraordinary production. He also states that 16 months after an apricot pit had been planted, a tree had grown therefrom and ripe apricots been picked from it. There is no doubt as to Mr. Jenkinson's statements, as the Mussel Slough section has proven particularly adapted to the growth of both fruit and vine. We have gathered sacks of walnuts from trees grown there, only four years from the planting of the nut. The nature of the soil allowing the water to percolate vast distances from ditches is supposed to be one of the great advantages given this section in fruit culture. Weeds do not grow so rank, and are easier kept in subjection; the soil is more friable, allowing a deeper rooting than in those sections where the ground has to be flooded. Some one proposes to change the name of this section of the county from Mussel Slough

to "Lucern Vale," or some other sweet-sounding, poetical name. I believe I but echo the sentiment of many of the pioneers of Mussel Slough when I say, let the name alone. In good time it will be suggestive of the finest land on the earth; of the most productive orchards and vineyards; of the most luxuriant pastures, covered the year around with sleek horses and cattle; of comfortable homes, wherein dwell noble men and women. Nothing can be gained by dropping the name Mussel Slough—a name interwoven with the most interesting and exciting history of the county.

**Yolo.**  
**MORE RAISINS.**—*Democrat*, Aug. 26: The Henry Bros., of Capay Valley, have purchased E. G. Bray's grape crop, near Black's station, and intend to manufacture the entire crop into raisins. These gentlemen understand the business thoroughly, and believe the Bray vineyard cannot be beaten in Yolo county for the quality of the grapes. It contains about 60 acres. From this fact alone it would appear that the raisin industry of Black's will soon be of considerable importance.

**NEVADA.**  
**FRUIT.**—Reno *Gazette*, Aug. 24: It is estimated that there are about 7000 apple trees in Washoe valley, 2000 of which are on Mr. Lewers' ranch. Robert Lewers says this is the best season for fruit that has been known in the valley for many years. The apple trees are breaking down under the heavy load. Pears, plums, peaches, quinces and other fruit are abundant.

**TICK-TORMENTED CATTLE.**—*Pioche Record*: The cattle down in the Wash are suffering with what may be called a "woodtick" complaint, and a number have died from its effects. The woodticks gather about and in the ears of the cattle, causing the beasts much suffering, and also causing a film to form over the eyes and blinding the cattle. The remedy for this, we learn from Wm. Culverwell, is first to pour coal oil into the cattle's ears. This kills the ticks in the ears and those outside are then cleaned away. They then make an ointment of burnt alum, lard and some other ingredients with which to rub the cattle's eyes, to cut and clear away the covering formed over them. Dow Barton treated 60 head of his cattle in this way the first of the week. It is thought that owing to the drought, the ticks have become abundant and get on the stock from the sagebrush.

**RABBITS DYING OFF.**—*State Journal*, Aug. 28: John Watterman, whose ranch is in Grass Valley, about 20 miles south of Winnemucca, says the rabbits are dying off, or are being killed by coyotes. Whatever the cause, there are plenty of their dead carcasses in the valley, and there is not one live one now where there were a dozen earlier in the season.

**Sonoma County Fair Awards.**  
The following are the awards for products of agricultural and allied industries at the recent fair at Santa Rosa:

- Horses.**  
CLASS 1.—Thoroughbreds—All premiums to P. Carroll, except one to C. T. Mathison for best 3-year-old, Argo. Graded—J. H. Laughlin, best mare 4-year-old, Flora; C. T. Mathison, mare Lady Bell, 4-year-old, with three colts.  
CLASS 2.—Stallions—T. Skillman, best 4-year-old; C. M. Bosworth, best 2-year-old; J. T. Carmichael, best suckling colt. Mares—D. McArthur, best 4-year old; J. W. Wiley, best 2-year-old; J. P. Rodchaver, best suckling colt. Families—J. T. Carmichael, best mare other than thoroughbred, with three colts; J. P. Rodchaver, best stallion other than thoroughbred, with five colts.  
CLASS 3.—Draft Horses—Stock Breeders' Association, best stallion 4-year-old; I. F. Cook, best 2-year-old stallion; Robert Crane, best 1-year-old stallion; J. M. Laughlin, best suckling horse colt; Robt Crane, best 4-year-old and best 3-year-old mare; R. B. Cannon, best 2-year-old mare; J. H. Laughlin, best suckling mare colt; I. F. Cook, best draft mare, with three colts.  
CLASS 4.—Roadsters' Stallions—M. Rollins, best 4-year-old, Rosewood; B. E. Harris, best 3-year-old, Sir Whipple; W. Wood, best 2-year-old, Mac; H. C. Brooks, one-year-old, Ado; J. Keeler, best suckling colt with mare, Logan; John Munson, best roadster gelding, Munson; Mares—H. C. Brooks, best four-year-old mare, Mag; B. E. Harris, best two-year-old mare, Edna; J. H. Laughlin, best one-year-old, Roxy; C. T. Mathison, best suckling mare colt, Lady Jane. Families—B. E. Harris, best family roadster with five colts.  
CLASS 5.—Carriage and Saddle Horses—Rufus Murphy, single buggy horse, Steve Story; B. E. Harris, best saddle horse, Duke.  
CLASS 6.—Stallions (Standard Trotters)—R. J. Schaffer, 4-year-old, Rustic; H. H. Button, best 2-year-old, Doc Button; I. De Turk, best yearling horse, Anteeo Button; H. W. Peck, best mare, Danville Maid; H. W. Peck, best suckling horse colt, Laurel Dale.  
CLASS 7.—Jacks—J. S. White, Black Night.  
**Sheep.**  
Graded Lambs—All awards to R. B. Cannon. Spanish Merinos—All awards to E. W. Woolsey & Son. Southdowns—All awards to Robt. Crane.  
**Goats.**  
Angora—All awards to C. W. Hardesty.  
**Swine.**  
Berkshire—V. Piezzi, best boar, Dan. Duroc—J. H. White, best boar, 2-year-old and best pen five pigs, 6 months old.  
**Cattle.**  
Durhams.—All awards to V. Piezzi. Jerseys.—All awards to E. W. Woolsey & Son, except one to

- J. Miller for best 1-year-old bull, Wm. Scituate 2d. Devons.—V. Piezzi, best 3-year-old cow, Lovey. Ayrshires.—J. Austin, best 3-year-old bull, John. Holsteins.—All awards to J. H. White, except the following: Ed. Steiger, best 1-year-old bull, Wm. Tell. Guerne & Murphy, best bull calf, Redwood Hickey.  
Graded.—V. Piezzi, best graded bull 4-year-old and over, Prince; \$5. D. McArthur, best bull over 1-year-old, Jack; diploma. Guerne & Murphy, best bull calf, Lockwood; diploma.  
**COWS.**  
V. Piezzi, best 4-year-old and over, Prince; \$5. V. Piezzi, best 3-year-old cow, Bell; \$3. Guerne & Murphy, best heifer calf, Devon; diploma. V. Piezzi, best fat cow, Cotelida; \$3.  
**Fruit, Etc.**  
C. Whitmer, best display and best variety of apples; Mrs. Mary Henderson, 2d.  
E. H. Smyth, best display and variety of pears; M. Litchfield, 2d; C. Wightman, 3d; Glenn Murdock, 4th.  
C. Wightman, best display peaches; M. Litchfield, 2d, and best display and variety of plums; C. Wightman, 2d plums; Glenn Murdock, 3d.  
Mrs. M. Henderson, best display green figs, and best general table fruits.  
Mrs. E. E. Whitaker, best fruit in glass.  
Mrs. A. Laughlin, best red currant jelly, and blackberry jelly.  
Mrs. John S. Taylor, best jams and jellies; Mrs. E. E. Whitaker, 2d.  
C. Wightman, best dried pears, dried peaches, dried plums and dried apricots.  
Mrs. M. Henderson, best soft-shelled almonds. Glenn Murdock, best 6 var. table grapes.  
L. A. Murdock, best 6 var. wine grapes.  
Ed. Steiger, best 3 var. wine grapes.  
Glenn Murdock, best var. wine grapes.  
L. A. Murdock, best general display of grapes.  
I. De Turk, best grape brandy over 1 year old, best white wine, best claret, best sweet wine, best California sherry.  
**Flowers and Foliage Plants.**  
M. H. Dunn, collection of 25 flowering plants, and collection of vine myrtle foliage plants.  
Miss Ella Murdock, cut flowers.  
Mrs. J. Harris, best bouquets.  
**Agricultural Products.**  
Grain, etc.—W. Wood, best samples of White Club wheat; Daggett & Goodfellow, best sample flour made in Sonoma Co.  
Vegetables—P. Mullally, best half bushels of red potatoes, white potatoes and of any other variety; M. L. Durbin, best 12 carrots, best 6 sugar beets, best 6 Hubbard squashes; E. A. Rogers, best 6 long blood beets, best 6 turnip beets, best 6 crook-necked squashes, best dozen ears of sweet green corn; John Roberts, best and largest pumpkins; E. Steiger, best peck tomatoes; E. H. Light, best 3 watermelons, best 3 green-flesh muskmelons.  
**Dairy and Domestic.**  
M. L. Durbin, best butter in rolls and best firkin of butter.  
Mrs. J. E. Claypool, best biscuit.  
Mrs. A. Moore, best soda biscuit.  
Miss D. Anderson, best loaf of bread made by a young lady under 18 years of age in Sonoma county. Miss S. Hall, 2d best loaf.  
Miss H. Atterburg, best corn bread.  
Miss L. Atterburg, best graham bread.  
Mrs. B. M. Button, best domestic wheat bread and best fruit cake.  
Miss D. Ames, best sponge cake.  
Miss Flora Bishop, best pound cake.  
**Machinery, Carriages, etc.**  
Baker & Ross, best mowing machine; best open buggy made in Sonoma county; best road-cart made in Sonoma county; best plow for all purposes. Geo. S. Brown, best one-horse cultivator; best farm feed mill; best gang-plow; best side-hill plow; best one-horse plow; best hilled plow; best well-pump; best haying and harvesting tools; best churn. John Drive, best fanning mill.  
E. M. Pedigo, best washing machine; best clothes-wringer.  
Doubleday Bros., best sewing machine, and best sewing machine (White) for ornamental work.  
T. J. Ludwig & Son, best top buggy; best open buggy.  
Colgan & Hervey, best family carriage; best ladies' phaeton; best two-seated open wagon made in Sonoma county.

List of U. S. Patents for Pacific Coast Inventors.

- From the official report of U. S. Patents in Dewar & Co.'s Patent Office Library, 252 Market St., S. F.  
FOR WEEK ENDING AUGUST 24, 1886.  
347,919.—CAR COUPLING—J. H. Buster, Spenceville, Cal.  
347,993.—CONCENTRATOR—J. D. Channell, Nevada City, Cal.  
347,920.—OPTICAL APPARATUS—A. Duboce, S. F.  
348,161.—SHOVEL—W. C. Gregg, Golconda, Nevada.  
348,128.—ORANGE-GRADER—J. W. Keeney, Riverside, Cal.  
347,809.—ORE-CRUSHER—S. Kendall, Angels Camp, Cal.  
347,892.—RELIEF VALVE—Jas. O. Rusby, Chico, Cal.  
347,834.—CAN-OPENER—Frank Sharp, Oakland, Cal.  
347,972.—ANCHOR—R. R. Spedden, Astoria, Or.  
347,973.—LAMP-BURNER—S. W. Spooner, Astoria, Or.  
347,898.—GATE—Sam'l Stephens, Central House, Cal.  
347,899.—WHIFFLETREE GUARD—Stephenson & Lasher, S. F.  
347,853.—SLEEVE-PRESSING FRAME—Emma J. Whitman, Oakland, Cal.  
347,909.—ORE-CONCENTRATOR—Woods & Garcelon, Santa Cruz, Cal.  
NOTE.—Copies of U. S. and Foreign Patents furnished by DEWAR & CO., in the shortest time possible (by mail or telegraphic order). American and Foreign patents obtained, and general patent business for Pacific Coast inventors transacted with perfect security, at reasonable rates and in the shortest possible time.

**The Fair at Petaluma.**  
The twentieth annual show of the Fourth District Agricultural Association, held at Petaluma last week, drew throngs of people from various quarters and proved a signal success.  
The live-stock exhibit has rarely been outdone even at our State fairs, and was claimed to be the finest ever made at any district fair in California. Among the cattle, Page Bros., of the Cotate ranch, entered no less than 33 head of Durhams—14 bulls and 19 cows. M. D. Hopkins, of Petaluma, had just imported from Michigan six shorthorns, recorded in the National Herd-book. This strain was selected especially for milking qualities, and Mr. H. intends to continue importing select Durham and Red Polled stock for dairymen. J. H. White, of Lakeville, showed 17 fine Holsteins, part Friesland-born and part of his own breeding; and good specimens of same breed were entered by E. Steiger. Several pure-bred Devons were shown by J. R. Rose, of Lakeville; herds of Ayrshires by George Bement, of San Mateo, and Tyler Beach, of San Jose; and Jerseys by E. W. Woolsey & Son, of Fulton, and W. D. Bliss, of Petaluma.  
The display of horses, too, was superb, embracing every style and grade of the equine family, from a Shetland pony up to Percheron and Clydesdale draft-stallions. One interesting entry here was J. R. Rose's span of three-year-old fillies, of McClellan stock, for which he was offered \$800. As that is but an average of his prices for five years past, it seems needless to query if there be profit in raising such horses. Mr. Whitney, the owner of Dawn, had four of his colts (yearlings and two-year-olds) hitched up in bright-colored webbing, a team which attracted a deal of admiring notice. Theodore Skillman, of course, had Normans on exhibition, and will soon set out for France to purchase a large invoice of coach horses and merinos.  
The sheep shown, though not as numerous as the foregoing, were splendid samples. Woolsey & Sons' and Easton Mills' Spanish Merinos have hardly been excelled in the State. R. H. Crane's were Shropshire and Southdown. Mr. C. has just imported a lot from Kentucky, and in order to meet the growing interest in mutton, will at once bring over another carload, going East himself to make the choice. The Poland-China, Berkshire and Duroc swine were represented sparingly but creditably.  
The poultry exhibit was good and quite extensive, as will appear upon reference to the list of awards, which we intend to print next week. Morris Bros., of Sonoma, entered nearly a score of coops.  
The line of the stock parade on Wednesday reached entirely around the track, and was therefore a full mile in length. Among the thousands of spectators were two Japanese gentlemen, looking out fine sheep and cattle for exportation to the island Empire.  
The display within the pavilion fairly matched that of the classes outside. The fruit and farm products, the specimens of work from factory and home, useful and ornamental, were abundant and admirable, eliciting from visitors an unstinted meed of praise.  
One very interesting exhibit was that from a five-acre orchard owned by F. F. Ennis. It comprised ripe plums, peaches, pears and apples, dried apples, sun-dried peaches, sun-dried plums, etc., and covered one table. In another collection of fruits raised in one orchard, owned by George W. Parks, were plums, quinces, sun-dried apples, sun-dried plums, sun-dried cherries and an assortment of jellies. A few oranges and lemons grown in the Fourth district were on exhibition, and a large showing of grapes was made by the Morris Brothers.  
The floral display of W. A. T. Stratton, in the center of the pavilion, could hardly be surpassed in extent, variety and beauty. He also had large pots of olive and orange trees in fruit.  
The line of vehicles manufactured in Petaluma by Farrell & Robinson would win admiration anywhere in America. Their fruit-wagon is one of the best-modeled and neatest extant. The wine and cider presses made by W. H. Worth are in such demand that he cannot fill the orders received for this season, although he has put on a double working force. L. Cantel showed French cheese, also manufactured in Petaluma. But it is impossible for us to give more than a few sparse notes of special exhibits, whatever merit we may slight in so doing.  
The annual address was delivered on Thursday, by P. J. Shaffer, of Olema. It is said to have been at once instructive, able and poetic. The subject of agriculture was dwelt upon at length, and the comparison between the city dwellers and farmers clearly drawn. The address throughout was listened to with attention and interest by those within hearing, and at its conclusion was loudly applauded.  
The baby show on Friday was one of the most popular things of the week. Twenty-one mothers of the district brought forward in competition as many babies under a year old. The judges found their task no sinecure, but Charles W. Hunt, from Two Rock, aged 11½ months, was finally invested with the ribbon, amid lusty cheers from the multitude. No accidents nor angry discussions occurred to mar the harmony of the entire week, and the management of the affair as a whole was thoroughly admirable. The music of the First Infantry band, from S. F., was a source of great delight to the myriad listeners.





### Better Things.

- Better to smell the violet cool than sip the glowing wine;  
 Better to hark a hidden brook than watch the diamond shine.  
 Better the love of a gentle heart than beauty's favor proud;  
 Better the rose's living seed than roses in a crowd.  
 Better to love in loneliness than to bask in love all day;  
 Better the fountain in the heart than the fountain by the way.  
 Better be fed by a mother's hand than eat alone at will;  
 Better to trust in God than say, "My goods my storehouse fill."  
 Better to be a little wise than in knowledge to abound;  
 Better to teach a child than toil to fill perfection's round.  
 Better to sit at a master's feet than thrill a listening State;  
 Better suspect that thou art proud than be sure that thou art great.  
 Better to walk the real unseen than watch the hour's event;  
 Better the "Well done!" at the last than the air with shouting rent.  
 Better to have a quiet grief than a hurrying delight;  
 Better the twilight of the dawn than the noonday burning bright.  
 Better a death when work is done than earth's most favored birth;  
 Better a child in God's great house than the king of all the earth.

—George MacDonald.

### How the Gilhooleys Went Camping.

#### A California Experience.

Written for the RURAL PRESS by MRS. MATIE E. DUDLEY.

Mrs. Gilhooley was determined to go camping, and when Mrs. Gilhooley made up her mind something had to happen. When his wife broached the subject, Mr. Gilhooley gently remonstrated, for he had often been camping, while Mrs. Gilhooley had not.

A multitude of the Gilhooley acquaintances had become inoculated with the camping craze, and, after divers consultations, some 40 persons decided to go to Hemstead beach, 30 miles distant.

Such a bustle of preparation as the several domiciles presented for the ensuing three days! Baking, boiling, roasting, while the mercury persistently rose to 100° in the shade.

At last the fated day arrived and the procession started. (I am sure Mrs. Gilhooley would use this phrase in a funeral sense were she writing her own experiences.) There being but two in the Gilhooley family, they headed the procession. Next came the Devons. Now, the Devons were more numerous; there were Pa and Ma Devon, the two Misses Devon, the three Devon boys and the baby. How they managed to stow themselves and camping necessities into one vehicle is a mystery unto this day.

Pa and Ma Devon sat majestically on a high box in front; the sunbonnets of the Misses Devon rose demurely among tent-poles, kitchen utensils, inverted chairs, and bed-clothing, and the three boys stowed themselves into various small apertures until nature rebelled and they climbed out and walked. The Devon carriage being a fair sample of the half dozen that followed it, it seems quite unnecessary to enter into details concerning their variegated appearance.

All through that long, hot day, the hottest on record, did these jolly campers move toward Hemstead beach. The dust rose in clouds and enveloped them, the sun broiled them, the gnats bit them, the five babies squaled, the older children quarreled, and their elders scolded. At last, just as the sun dipped his wings into the Pacific, preparatory to his evening plunge, the dismal crowd reached their destination and began to unload, tired, cross, and hungry.

Now the Gilhooleys were invited to lodge with the Devons, and, therefore, had not provided themselves with a tent, as the Devons had assured them there would be an abundance of room. Theoretically a tent 16 feet long does seem ample; but, when the peak is only five feet in altitude, and the canvas is stretched to its fastenings on the ground, one must admit the space for standing room to be limited.

Next to the Gilhooley-Devon tent the Serfingers erected theirs; but a strong western gale having set in, the paternal Serfinger's supper hour was embittered by the untimely collapse

of the newly-erected canvas. As the Serfinger outfit had boasted of having better accommodations than the other campers, this catastrophe caused no little merriment and chaffing on the part of their less unfortunate neighbors. At last the Serfinger tent was made to stand by anchoring it with ropes to several stable objects near by, and its dismal inmates proceeded to collect their scattered articles and stow them in it again. The Brown tent was cozy and stood in a sheltered nook. It seemed quite commodious, as there were but three occupants—Mr. and Mrs. Brown and their only son Jerry, a bright youth of 11 summers and American proclivities. Mrs. Brown drove the pegs and anchored the tent by moonlight, gathered fuel and cooked supper, while poor Brown sighed over a pain in his chest, and paid compliments to the young ladies of the party.

The wind increased as it grew dusk, so the Whitmarshes and Perkinses put up their tents by a stout board fence and vowed they'd remain there if the fence did.

The Gilhooley-Devon tent was pitched on a slope, and Pa Devon, being of a meditative turn, did not take this into consideration when arranging the beds, so that on retiring the disgusted crowd found their heels several degrees higher than their heads. Mrs. Gilhooley, being of a somewhat natural disposition, refused to submit to this outrage. The uproar that so positive a change of heads occasioned was, to say the least, extensive, as half the crowd were in *un-dress* parade. Much and loud was the grumbling at Pa Devon's expense, and Perkins' tow-headed boy yelled out: "This way, gentlemen. Right this way. Here's the Seven Sleepers, each one with his head where his feet ought to be."

Among the conveniences the Perkinses had was a young, frisky colt, which kept up a running fire on the various anchor ropes during the night, and caused the occupants of the several tents to be in constant dread of collapsing canvas. Mrs. Gilhooley, from that first night of disturbed slumber, arose in the morning several hours older than when she went to bed.

From the very first morning the formalities of polite society were carefully omitted by the campers, and grimy faces, blackened fingers, and a generally woe-begonish air pervaded camp. A dense fog had rolled in from the ocean during the night, and everything was dripping. The women stood huddled in groups, ankle deep in the salt grass, with saturated shoes and skirts, trying to escape the smoke which the men whisked in their faces, in their vigorous endeavors to coax the dampened fuel into a blaze; but all things earthly have an end, and finally the breakfasts were over, the sun shone, the five babies crowded, and the men went fishing.

Alas! an unlucky star seemed to shine on this camping party, for, in clambering over some loose rocks, Mr. Gilhooley slipped, caught his foot, and after grasping wildly at nothing for awhile, sat down very firmly on a cold, unfeeling rock, dislocating his ankle. Serfinger, Pa Devon and Perkins' boy extricated the Gilhooley foot and bore poor Gilhooley back to camp, where the injured member was duly set and bandaged.

The second night the campers retired unusually late, and silence had reigned for some time, when all were awakened by a sound of scuffling and of excited voices issuing from the Serfinger tent. All heads were protruded from the surrounding tents, and what a sight met their sleepy eyes! There lay Serfinger half out of his tent, grasping the hind legs of a struggling pig. On inquiry it was found that Serfinger was suffering from nightmare, and, in his frantic efforts to capture an imaginary burglar, had grabbed an inoffensive pig that was prowling around the camp in search of food. On awaking, Serfinger meekly crawled back into bed amid the audible grumbling of his better half, who objected to his unusually moist condition from sliding around so long on the wet salt grass.

The second morning the sun climbed over the distant mountain range, and peeped down on Mrs. Gilhooley disconsolately building her own campfire. While the Hemstead campers were making their morning toilets, excited exclamations from the Whitmarshes' lodge attracted general attention. The following dialogue discloses the conversation held in the Whitmarsh family at that hour:

Whitmarsh—"Sary Jane, what on earth have you done with my pants?"

Mrs. W.—"I ain't had your pants; where'd you put 'em yourself?"

Whitmarsh—"Why, I rolled 'em up for a pillar, but, I snum! they ain't here, and I b'leve you've hid 'em."

This charge was indignantly denied, and, to prove her innocence, Mrs. Whitmarsh began vigorously hunting for the missing garment. A thorough overturning of frying-pans, camp-kettles, bedclothes and grub-boxes disclosed the fact that the pantaloons were a minus quantity. General surmises were indulged in as to where they could have gone, which Whitmarsh savagely interrupted with: "I don't give a copper where they've gone, but I ain't goin' to stay in this blasted tent all day, anyway!"

A general mass meeting was held, but no extra pantaloons could be found in the crowd. Here was a dilemma; but Mrs. Serfinger, who was of goodly stature, came nobly to the rescue with an extra dress-skirt, which Whitmarsh donned sulkily while a messenger was dispatched to the nearest store for the garment due to masculine dignity. Whitmarsh appeared at breakfast in dress-skirt and overcoat,

but complained of feeling chilly. To this day it is a mystery where those pantaloons are. A theory is extant to the effect that a thief, in search of a pocket-book, carried them off. After the excitement had subsided, Mrs. Gilhooley proceeded to prepare breakfast for the Gilhooley-Devon crowd. One small kettle, holding but three pints, was the only vessel which the Gilhooley camp could muster in which to boil potatoes and make coffee for a family of 10 with two-edged appetites. Mrs. Gilhooley repeated several blessings before the company were allowed to partake of the food prepared by her. The first one occurred when the kettle of half-boiled potatoes turned over and nearly put out the fire. The potatoes were hastily righted and the fire renewed amid the smoke which persistently enveloped her; then Mrs. Gilhooley said another blessing and stalked off in solitude, wiping away the briny tear-drops as she stumbled along.

A farmer driving past, and observing Mrs. Gilhooley's distress, offered to thrash Gilhooley, supposing he had ill-treated his wife. Mrs. Gilhooley being too indignant to offer any explanation of her tears, the bewildered farmer drove away.

What artist's brush can portray or poet's pen describe the campers' breakfast hour?

As there were no seats in the tent, the majority of the family sat *à la Turk*. In this trying ordeal Pa Devon bore himself placidly, disposing of the food and his troublesome length of limb with equal felicity.

Ma Devon and Mrs. Gilhooley sat on the boxes in which were kept articles of great use in dining, such as bread, cake, etc.; as these were in constant demand, the poor ladies were much disturbed during each meal. You wonder why they had no table. For two good reasons: first, there was no table to have; second, there was no room in the Gilhooley-Devon tent to put a table.

After the several breakfasts were dispatched, the Perkinses proposed that the entire crowd should pay a visit to the lighthouse at Hemstead beach.

This plan was received affirmatively by all but the Gilhooleys. The Gilhooley ankle was too painful to be moved, and Mrs. Gilhooley was obliged to remain at the camp with her husband. In a spirit of self-sacrifice she offered to take charge of the boys from the several families, as there did not appear to be any room to put them after the grown people and the girls were crowded into the three buggies.

There were Jerry Brown, the three Devon boys, Frank Serfinger, Perkins' boy and Bub Whitmarsh, ranging in years from 7 to 15. The partial mothers assured Mrs. Gilhooley that the boys would not give her one particle of trouble, Mrs. Perkins remarking: "I allus bring up my young 'uns to mind."

The vehicles soon departed amid the injunctions of the parents to the boys to stay at the camp and obey Mrs. Gilhooley.

No sooner were those same confiding parents out of sight than the promises given were ignored, and away started the boys for the village or the wharf. Mrs. Gilhooley called and remonstrated in vain. The three Devons hung their heads and thrust their hands deep into their breeches pockets, apparently undecided how to proceed. Jerry Brown saucily snapped his fingers, Perkins' boy turned a handspring, while Bub Whitmarsh whistled insolently as he walked away. He being the eldest, the other boys followed, of course.

As the hours passed and the boys did not return, Mrs. Gilhooley grew almost distracted, and at last, in sheer desperation, she grasped a shake and started up the street, vowing she would "shingle" or rather "shake" every youngster she could find, and bring some of them back to camp.

During her absence the parents returned, and in the course of half an hour the anxious mothers beheld part of the truant flock meekly coming down the street, with the defiant Mrs. Gilhooley bringing up the rear, brandishing in her hand a broken shake.

Frank Serfinger had lost his hat in the briny deep, while the three Devons were saturated with surf; but Perkins' boy, Jerry Brown and Bub Whitmarsh were nowhere to be found. Their respective fathers started forthwith for the village in search of them. They were some time absent, but finally returned without the boys, wearing decidedly solemn faces. On being eagerly questioned by their wives, they explained that the boys, in throwing stones at a saloon, had been caught by the irate owner and locked up, and would probably have to remain over night.

This affair caused a slight coolness among the campers; Mrs. Devon and Mrs. Serfinger were angry at Mrs. Gilhooley for bringing their offspring home with a shake, while the other mothers were angry that she did not bring theirs at all.

Mesdames Brown, Perkins and Whitmarsh charged Mrs. Gilhooley with being the cause of their trouble and gave her a sound berating. Thereupon Mrs. Gilhooley firmly resolved never to go camping and take charge of other people's children again.

The next day, by paying the saloon-keeper \$10, the boys were liberated, somewhat crestfallen, to be sure, yet ready for another lark as soon as a good opportunity presented itself.

When the sun broke through the fog on the third morning it shone on Mrs. Gilhooley's resolute face set homeward.

She has made a solemn vow never to go camping again.

Santa Paula.

### The Characteristics of Californians.

[Written for the RURAL PRESS by CLARA SPALDING BROWN.]

In summing up the advantages and blessings enjoyed by the dwellers on the Pacific Coast, I think that we may modestly include the almost universal intelligence, breadth and charity of mind among the people. This is not meant for "California brag," but may be substantiated by any careful observer, conversant with life in this State, and in other portions of "Uncle Sam's domain." It is a characteristic of great value in the development of the country, and worthy of deep respect and appreciation.

One may ask, "Are not the settlers from all parts of the universe, since comparatively few residents are native born, at this stage of events? How, then, can they differ from the status maintained in their former homes, or be noticeable as progressive or liberal-minded beyond their companions of old?"

True, we meet now some one from Massachusetts, next a "Wolverine," or a "Sucker," or a "Maine-iac," or a "Lone Star" immigrant, and so on till all the States and Territories of our own "glorious republic" are numbered, and intermixed we find a generous sprinkling of representatives from foreign countries. Each has brought some local peculiarities of speech, mode and dress with him; but there is one common feature—one factor which, multiplied in the mass, produces a distinguishing quality in the Californian by adoption.

In the first place, it is generally the most wide-awake, earnest-thinking and acting people who leave home for a tour of observation or with the purpose of beginning life anew in a strange country. Then, having taken the decisive step, having risen out of the well-worn "rut and channel" of everyday life and struck out boldly on an untried path, travel—one of the greatest educators that the world knows—steadily enlarges the horizon of the mental sphere, even as it reveals the immensity of this earthly globe. And so it follows, that, speaking of the aggregate—there is no rule without exceptions—the men and women who buy land here, or engage in mercantile business or the professions, are imbued with a desire to forge ahead, to look at a matter from all points of view, to weigh and consider strictly according to merits and according to all the light obtainable, without narrow prejudice or obstinate clinging to ways and ideas that may have been the best that could have been entertained in eras past, but are out of place in the present stage of civilization. There is nothing like contact with the various forms of humanity and phases of life that may be studied on a long journey, to convince a person that his ways are not the only good and proper ways and his town or section is not the only spot on the universe where one may dwell with the blissful consciousness that naught else can compare with it. The quiet, easily-contented people who seldom stir from their hearthstones, at least from their native heath, do not realize the narrowness of their views, or their ignorance of what is going on in the world. They are as much concerned in the trivial doings (this applies to rural neighborhoods) of their neighbors as Californians are in the anti-riparian cause, the special session, or the gigantic improvements that are the order of the day. In my native town, duly recorded in the history of one of New England's beautiful States, as "the banner town of the State," it has at last—by special "town meeting"—been decided to build a new town hall, after years of wrangling; and the cause was won only by the "drumming up" of every voter that could be transported to the village, where the battle waged until 11 o'clock at night. A letter recently sent me says: "Mr. N. D.—ain't going to pay any more minister's tax because he (the minister) voted for the hall. He has never paid but three dollars a year. And the blacksmith says he will not do any more work on credit for any man who helped put the matter through." Imagine such a "tempest in a teapot" in California! Yet the town in question has no debt, has wealthy citizens (Mr. N. D.—is one of them, and sends a large family to church with his munificent pastoral support of three dollars), and is using for all public purposes an old-fashioned room in the church, the same as 50 years, and more, ago.

I sojourned for a brief season last year in a town of aristocratic proclivities, a few miles from Boston. Here large and handsome residences were the rule, artistic interiors were a delight to the aesthetic. The people were stylishly dressed and fastidious in small matters. Where would you look for cultivation of the intellect and enlargement of the sympathies, if not in the atmosphere surrounding the noted "Hub"? I expected a "feast of reason and flow of soul" when callers came, anticipated discussions of the latest books, the movements in art and musical circles, theatrical matters, interesting bits about notable characters, comments on public affairs, etc. What did I hear, sitting mute on the edge of the circle? One call of nearly an hour was devoted to the minute consideration of the merits and demerits of various kinds of matches, with a harrowing portrayal of unsatisfactory experiences therewith. This is an absolute fact. The few other topics that were incidentally mentioned were of equally trifling nature. I wondered where the entertainment came in, for either guest or hostess, and how they could be willing to fritter



away their time so. On another occasion the ladies present carried on an animated conversation about their servant girls, to the exclusion of more elevated topics. The desire was not to seriously consider the problem of domestic service, bringing into play the intellectual faculties with a view of paving the way out of difficulties for both maid and mistress; but story after story of Mary's peculiar ways, Bridget's incompetency and Norah's disposition to "smash things," convinced the hearer not only of the necessity for improvement in house-servants, but the desirability also of a more comprehensive treatment by their mistresses. Other calls brought forth individual opinions as to the last style of bonnet, the new shades of dress goods, etc. I do not recall a single instance when the conversation was up to the standard of which an intelligent woman's mind is capable, or when the wanderer from California felt herself in any degree benefited. She knew herself to be considered unfortunate in dwelling "on the ragged edge of civilization," and knew that the real state of the case never entered the heads of those self-satisfied women. Now I mention these things only to draw conclusions, not to criticize unkindly or unfairly. It has been the rule in my experience in California—and haven't you all found it so?—for affairs of general interest and of more or less importance to receive at least passing mention when visitors were being entertained. Not all are posted in or inclined toward art, literary or musical matters; but the condition of the crops, the amount of rainfall, the methods of irrigation, the experience in planting, pruning and grafting, the warfare against pests, the various soils and products of those soils, the city, county and individual improvements, railway affairs, legislative business—these and other progressive subjects are treated, according to capacity and knowledge, in even the remotest sections of the State. Men, women and children evince interest in these things, though they may not be connected personally with any of them.

Our public-school system will bear comparison with that of any State in the Union. Let a subscription paper be started for any good cause, and from the pockets of our citizens will come amounts that tell their own story of liberality. I pay this tribute because I think it richly deserved, and I wish that every stranger to our coast could comprehend the nature of the people who are rapidly bringing the "Golden State" into enviable prominence.

I would not like to be understood as advocating a wholesale uprising and evacuation of other localities; nor would I insinuate that everybody who lives and dies where he was born is stupid or content with narrow aims. I presume there are few persons who love the land of their birth more than I do, who have suffered more from the pangs of homesickness, or who cherish better the memory of friends that perhaps will never be seen on earth again.

There were advantages left behind which California cannot at present offer, and there exist beauties of nature for which the heart longs even under the shadow of our grand Sierras. Still I can see the spirit of reform, of liberality and charity, manifesting itself here as it was not visible to me there—exceptions noted, as in all things. I think that the Central States are ahead of "good old New England" in these respects, inhabited as they are largely by the venturesome from colonial precincts and their descendants. And when it comes to California, why, the circle widens all ways, and it may well be a proud matter for the State that it is so.

Los Angeles, Cal.

## YOUNG FOLKS' COLUMN.

### Ant Lore.

"Stop, Hallie! See what you are doing!"

"He's making a dreadful dust," said Elmore.

"He's destroying a whole city with all its wealth, and maybe killing whole families, babies and all."

Both boys looked at Uncle Frank in a horrified way, and then looked quietly and curiously at the ground.

"It's only an old ant hill, uncle!"

"Only an ant hill? And what is that but a city of many thousand people, a few hundred

"All, perhaps, but the trouble of assorting and storing them."

"Storing? Storing? Do they go to that trouble?"

"Does your papa in his store mix flour and hams and coffee and molasses together? Fancy these ants mixing crumbs of bread, grain, dead flies, bits of sugar or apple, and dried insects all together! They have a place for everything, and put everything in its place."

"But what about the babies?"

"Don't you see those white things they are carrying away!"

"They are grains of rice, I suppose."

"They are nothing of the kind, but baby ants being carried to a place of safety."

"I'd awfully hate to be one of their babies,

## DOMESTIC ECONOMY.

**FRICKADELLEN.**—Soak half a pound of bread crumbs in one pint of cold water. Mince very fine a half a pound of any kind of roast or boiled meat with a little fat. Now, put the bread in a napkin and press it, in order to extract all the water. Fry one table-spoonful of finely-chopped onion in two ounces of butter for two minutes; add the bread, stirring with a wooden spoon until rather dry; mix the bread with the minced meat, seasoning with one teaspoonful of salt, half a teaspoonful of pepper, a little grated nutmeg and grated lemon-peel, stirring constantly until very hot; then add two eggs, one at a time; mix well and pour in a dish to cool. When quite cool, take pieces the size of an egg and roll in oval shape, slightly flattened; dip in egg and bread crumbs and fry in a quarter of a pound of lard or drippings made very hot. Serve on a napkin or on a border of mashed potatoes with sauce or garnish to taste. Remnants of poultry, game, fish and even vegetables may be prepared in this way.

**GREEN PEA SOUP.**—Marion Harland gives this receipt: Two quarts of liquor in which corned beef or mutton has been boiled; two quarts of green peas; bunch of sweet herbs, including a shallot or young onion; one even table-spoonful of prepared flour rubbed up with one of butter; pepper to taste; disk of fried bread; boil, skim and strain the liquor and return to the fire with the pea pods. Cook them 20 minutes, strain them out and put in peas and onion. Cook until the peas are soft and broken; rub all through a colander back into the pot, stir in the floured butter; season, boil two minutes and pour upon the fried bread in the tureen. The advantage of using flour in this recipe is to prevent separation of the pea pulp and the liquor.

**PEACH AND TAPIOCA PUDDING.**—For this pudding there will be required one can of peaches, a generous half pint of tapioca, three-fourths of a cupful of sugar, half a teaspoonful of salt and one quart of water. Soak the tapioca over night in cold water; in the morning turn it with the water into a double boiler and cook for an hour. On removing from the stove add the salt, sugar and juice of the peaches, and stir thoroughly. Pour a layer of the mixture into a well-buttered pudding dish, then lay in the peaches and pour over the fruit the remainder of the tapioca; bake in a moderately hot oven for one hour.

**LEMON TRIFLES.**—Squeeze four lemons into half a pint of water and throw in the rinds, adding one-half a pound of loaf sugar; cover closely, and let it stand one hour; then take out the rinds and let stand all night; then strain through a cloth, add one ounce of isinglass, and put in a saucepan with six well-beaten eggs. Set it on the fire and keep stirring it till it is as thick as cream. When milk warm put in molds. This is a very light and delicate dessert. Molds for receiving creams, blanc mange, etc., should always be wet in cold water. Half a pound of sugar is half a pint.

**RECIPE FOR ROOT BEER.**—Take one ounce each of sassafras, allspice, yellow dock, and wintergreen, half an ounce each of wild cherry bark and coriander, quarter of an ounce hops, and three quarts molasses. Pour sufficient boiling water on the ingredients and let them stand 24 hours, filter the liquor, and add half a pint yeast, and it is ready for use in 24 hours.



HOW FIDO LEARNED TO SPEAK.

times smaller than you, 'tis true, but alive and capable of feeling and planning and working."

"I believe you about the numbers—just see them swarm! But weren't you joking about the 'wealth' of the city? I don't see any banks and stores."

"There were banks and stores, nevertheless, and all this year's crops and goods in them."

The boys looked, rather than asked: "What kind of goods, pray, are in an ant hill?"

"There was stored in that city what was worth as much to its owners as your own father's stock of groceries and bank account to him—wheat seed, crumbs of bread, grain and sugar, shreds of meat, dead bugs, etc., enough to last all winter. Suppose you take all the provisions out of Chicago?"

"Well," said repentant Hal, "I'll bring my pockets full of wheat and things, and that will pay them all back."

and get nothing for breakfast but dried bugs and ragweed seeds."

"Mistaken again. Their babies are fed the sweetest and richest of milk."

"Can these fellows carry away milk, too, or have they milkmen as well as banks and stores?"

"Better than that; they keep their own cows—the aphids, a kind of plant louse, which exudes drops of honey-like fluid just adapted to baby ants. They watch these creatures—sometimes shut them up to keep them from running off—and milk them by pressing the body with their forefeet."

"I'll watch what I kick after this."

"And remember God made the ants as well as you."—*Morning Guide.*

WEE Fanny bit her tongue and came in crying. "What is it?" said her mother. "Oh, mamma!" she said, "my teeth stepped on my tongue."





A. T. DEWEY.

W. B. EWER.

Published by DEWEY &amp; CO.

Office, 252 Market St., N. E. cor. Front St., S. F.  
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Drafts for this paper in the name of the firm.

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Registered at S. F. Post Office as second-class mail matter.

## SCIENTIFIC PRESS PATENT AGENCY.

DEWEY &amp; CO., PATENT SOLICITORS.

A. T. DEWEY.

W. B. EWER.

G. H. STRONG

SAN FRANCISCO:

Saturday, Sept. 4, 1886.

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See Advertising Columns.

THE scramble for the Fresno county raisin crop still continues, says the *Expositor*, and new buyers are appearing in the field daily. The fact is, Fresno raisins are a good thing to have.

## The Week.

Disturbance is rife. Our political and legislative sensations are mild compared with the jarring of thrones and elemental disorders in earth crust and cloud which are telegraphed each morning. In our own country, fortunately, there are but natural phenomena; in Europe the trouble predicted is international. Sunday the storm center was the city of Chicago. A storm of thunder and lightning and torrents of rain fell upon the city. A powder magazine was fired by lightning, buildings were demolished, and a number of lives lost. Earthquakes give renewed evidence of their disrespect for State lines and their repugnance to being classed among the resources of California.

On Tuesday night there was a wide-reaching tremor throughout the States east of the Mississippi, which frightened people and did some injury to buildings at many points. The center of the disturbance was Charleston, S. C. Telegraphic communication was shut off, and not until the following day did the country know that the streets of the city were, to a degree, at least, blocked by the ruins of buildings cast down, and that about 60 lives were lost in the catastrophe. No doubt the mails will bring a sad account of the deplorable event.

From abroad there comes new rumors of war. The Bulgarian ruler, cast out from his throne and dominion a week ago by a conspiracy, has been called back and re-seated by his people and his enemies condemned to death. Though the reaction has been speedy the agencies which wrought the mischief are ill-content, and are said to menace the peace of Europe by their plotting. Some predict the greatest war of the century. Certainly affairs are assuming an ugly shape, but for humanity's sake the age of war should be closed.

## Our Industrial Jubilees.

The grain harvests have been gathered and the time has come to celebrate our annual industrial jubilees. They assemble under cheering and happy auspices. Though there have been some disappointments in yield and value of certain crops, the year has generally been an encouraging one to all forms of industry. The horn of plenty is full enough and to spare, labor in demand, and no one need stand idle. These industrial associations are undoubtedly among the best and most useful of the age. No educational establishment, no school or college, is so well calculated to enlighten and advance great masses of mankind in practical knowledge in so short a time. One may not find time to visit every hamlet, town and city in the State, every wheat, barley, cotton, hop or other field; every peach, apple, orange or other orchard; every flock of sheep, herd of cattle or stable of horses; in short, he may not be able to walk over every acre of soil in the valleys or on the hill slopes, every mine in the mountains, yet he can find a very good substitute for such a survey and may learn very much of value by a week studiously spent at one of our annual fairs. The special object for which they are established must secure the approval of all who have patriotism, public spirit or agricultural zeal, and though they are not yet perfect we discern tendencies in their management which promise much for the future.

Next week the Thirty-third Annual Fair of the California State Agricultural Society will be held in the city of Sacramento. Let us briefly inventory what we are likely to see. The indications are that the orchardists, viniculturists, nurserymen, gardeners and florists will give a display in their respective branches of industry, that for beauty, taste, excellence and variety, will be equal, if not superior, to anything of the kind ever seen. We shall see samples of our great staples and vegetables, our wheat, oats, barley, corn, rye, beans, Irish and sweet potatoes, onions, cabbages, beets, turnips, etc., which a few swift years ago were largely imported and now are produced in excess of home consumption. The quality and variety of these productions are rarely equaled in any clime. We shall see a display of the leading varieties of grapes and wine known to commerce. In the line of pickled, canned and preserved fruits we can challenge the best fruit-producing countries of the globe. In this direction we cannot be excelled. And yet how short the time since

millions went out of this State to purchase and import these articles. To-day we are exporting in large quantities, and saving these millions to expend in improving our farms and homesteads. The display of woolen fabrics, the cunning work of our own looms, will be another attraction. They will comprise many fabrics made of wool or silk.

Then there will be brought together the finest and purest-blooded horses in the State. Horses in whose veins courses the fiery blood of the Arabian steeds and the high-bred race-horse of England; horses for heavy draft and the truck; horses for the road, carriage and farm; horses, in short, adapted to every purpose for which that noble animal may be used by man. We shall see the best breeds of cattle in the world; the noble Durham, the beautiful Devon, the milk-giving Ayrshire, the cheese-making Holstein, the butter-producing Alderney and Jersey. In the sheep-pens we shall find some of the finest specimens of French Merinos, Spanish Merinos, Cotswolds, Southdowns, and all the other various breeds that are known. Swine will be shown in profusion, and no doubt the beautiful Angora goats will win the admiration of all.

Now, surely, no one can witness such magnificent exhibitions of staples and stock, as we have been accustomed to see at our State and district fairs, and not be convinced of the importance of the work that has been achieved by these associations. Who can say that the great body of the people who take a lively interest in such displays receive no benefit from them? Had we space we might go through every department of an agricultural exhibition and point out its special advantages. No one can carefully study the various assortments of agricultural implements, the reapers, mowers, headers, thrashers, combined harvesters, plows, harrows, cultivators and stackers; the magnificent displays of flowers, fruits, fabrics and cunning works, the spacious picture-galleries, without lasting benefit in taste and knowledge. After witnessing these scenes of beauty, wonder and utility, no one that has a particle of sentiment or ambition can return home without a glow of emulation and a determination to do better than he had ever done. In no way, then, can we better promote the public good, develop our resources, attract immigrants to our shores and help build up a prosperous and a happy commonwealth than by liberally participating in these annual exhibitions.

## County Exhibits at Mechanics' Fair.

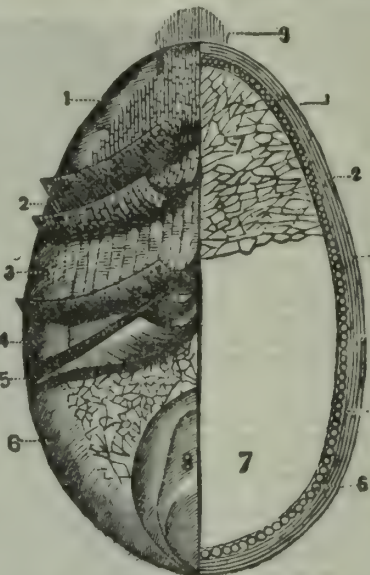
The number of county exhibits at the Mechanics' Fair, now in progress in this city, is rather smaller than was expected. Several counties which entered for the competition have failed to send on the material. The agricultural material shown is, however, of the highest excellence, and there is a good display of it, though the most of the counties have not availed themselves of the invitation of the Institute. Sonoma County Pomona Grange has a grand exhibit.

The efforts of Messrs. Whitaker and Adams and others who aid them seem to increase year by year, and they do not propose to allow their talents in this direction to fall into desuetude. They have for several years carried on work which has given old Sonoma new rank among progressive communities, and, profiting by their experience, they make each year's display far surpass its predecessor. It is to be regretted that Sonoma's competitors last year do not appear on the list this year. An honorable rivalry is a valuable progressive agency. Sonoma is evidently in the contest to stay. We hope to have space next week for a review of the materials which comprise this year's display.

Placer county has a very creditable exhibit at the Mechanics' Fair, showing various valuable industrial products and foothill fruit in all its glory. Of this, too, we expect to speak further at another time. Mr. J. S. Harvey, of Jamul, San Diego county, has a very fine exhibit of citrus fruits—bright, clean and well grown. There are also a number of individual entries of articles of agricultural interest which we shall take time to examine hereafter. The fair is now in its second week. Two full weeks remain after this, so that there will be plenty of time to arrange visits to the city during the exposition.

## What the Miller Does.

As a nation is but an aggregation of individuals, so flour is but the result of treatment of innumerable grains of wheat. A recent writer has remarked that in a flour mill the whole thing comes right down to making flour out of one grain of wheat. It is not like many industries in which there are several raw materials to be chosen, prepared, mixed, acted upon mechanically and chemically, and transferred into products entirely different from any one of the raw materials. The making of wheat flour is simply the repetition, millions of times, of



Grain of Wheat Enlarged and Analyzed.

various operations upon one grain of wheat. We show herewith the appearance of a grain of wheat cut lengthwise, and otherwise laid bare from inside to out. This enlargement will show us what is to be acted upon. The five outer layers, marked 1 to 5 inclusive, are the layers of bran. Next inside comes a layer worth more than any other portion of equal weight, consisting of gluten cells, which give "strength" to the flour and force and health to the consumer. Within this layer 6, of gluten cells, comes the greater mass of the berry, marked 7, and consisting principally of starch cells. No. 8, at the bottom, is the chit or germ, waxy or oily, and very nourishing, but discoloring the flour and preventing it from keeping, especially in a warm, moist climate. At the top will be seen, marked 9, the fuzz or beard, discoloring and innutritious. The cut being a section does not show the crease, which contains more innutritious and discoloring dirt.

From millions of such berries the miller is expected to make flour of various grades of color and strength, the machinery in use for this purpose, considering the small size and delicate nature of the berry, being of the coarsest and most cumbersome character. If any one of you will take a single grain of wheat and with the sharpest knife and the most delicate emery paper and finest brush will endeavor to take off the bran, pick out the germ, rub off the fuzz, and get the gluten layer separated from the starchy interior, the task will be found very difficult. Yet this is what must be done in the mill, by immense machines moving at a high rate of speed, and working upon grains of all sizes and shapes, and various degrees of hardness.

## The University Exhibit at the Mechanics' Fair.

The College of Agriculture of the State University has a very attractive and instructive exhibit at the Mechanics' Fair. It is located opposite the main entrance to the garden, and consists of wall space about 40 feet long, upon which are fastened 16 large glass cases containing specimens of the large grain collection of the University, each kind plainly marked with name and source whence it was obtained. There are probably 300 different varieties of cereals shown, both in this form and in the thrashed grain, which is in bottles below the cases. On the table below the cases there is a collection of fruits from the University standard orchard, all clean and correctly named. There is also quite a collection of typical grape-vines and about a score of trees and plants, which are being distributed for trial in different parts of the State, the success or failure of the plants being described in the reports of the College of Agriculture. Of the fruits shown, cions are furnished to all who may desire to have them for trial. The fruit collection being accurately named, is studied by fruit men with much interest. We understand it is expected that a display from the College will also be made at the State Fair in Sacramento.



## Kansas Agricultural College Barn.

Both with an idea of showing our readers what arrangements Kansas has made for experimental work in live-stock feeding and as suggestive perhaps to our readers who may contemplate barn-building, we give on this page a perspective view and floor plans of the new experimental stock barn of the Kansas Agricultural College at Manhattan, in that State. E. M. Shelton, professor of agriculture, under whose direction such work is done, has already made important contributions to the literature of live-stock feeding, and we congratulate him upon the improved and increased facilities which he has secured for such work. We shall take pleasure in presenting, from time to time, interesting items of the progress of his experiments and the results attained.

The engravings on this page show the college barn, or rather system of barns, designed in part for experimental uses, a considerable part, however, performing the functions of the general-purpose barn. The perspective view shows the front and westerly exposure of a connected structure, built at two different times, as the result of appropriations made for that purpose during the legislative sessions of 1876-77 and 1884-85. That portion of the building having its greatest extension north and south was built in 1877; the annex placed at right angles to this—the experimental barn proper—was finished ready for occupation in December last.

The entire structure is placed in a side-hill, sloping toward the east, and having a variation from the horizontal of about 3 feet in 50. That portion of the building first constructed was planned for a farm carrying out a system of mixed husbandry, in which the growth of grains and grasses with stock-raising have about equal prominence. The newer portion, that having its greatest extension in the direction east and west, was planned with especial reference to the wants of the farm in its experimental operations. However, in the description which follows, "the barn" will in every case have reference to the entire structure, as shown in the cut.

The old part of the barn is 97x48 feet, the new experimental portion 76x48 feet—outside measurement in both cases. The building is of Manhattan limestone, put up in the best style of rubble work; all the arches of the doors and windows, all jambs, and, with the exception of one door in the upper story, all sills, are of cut stone. A basement 9 feet 6 inches in height underlays the entire building. The upper story is 16 feet high, measuring to the top of the walls.

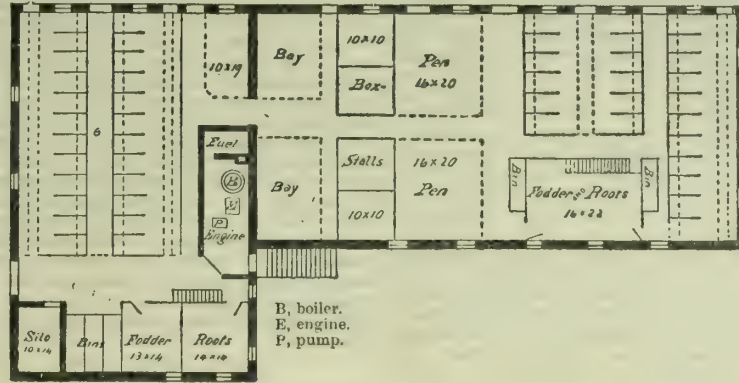
The plan on this page shows in very full detail the arrangement of the basement of the college barn. The very great number of doors and windows—the former indicated by blank spaces in the wall, the latter by the blank spaces divided longitudinally by a line—sufficiently attest the thorough lighting, and, to some extent, show the ventilation of this part. The windows are for the most part half sashes of usual size, hinged at the top so as to permit opening at will. Six ventilators—marked V in the plan of ground floor—establish a direct connection between the basement and outer air through cupolas on the roof. These ventilating shafts are made of inch flooring, with supporting joists at the corners; their sides are provided in suitable places with trap-doors, through which hay or other fodder may be pitched to the basement. Being three and a half feet on a side where they penetrate the ground floor, and three feet square at their upper extremities, these ventilators admit the passage of fodder without ever obstructing.

The barn furnishes stall-room wholly in the basement for 51 head of cattle, which might easily be increased nearly one-half by the construction of stalls in the spaces marked "pen" and "bay."

Each stall is 4x8 feet, including the manger, two feet wide. At the rear of the stall is a manure gutter 6 inches deep and 20 inches wide, and beyond the gutter in the single tier of stalls is a passage-way two feet wide, on a level with the general floor. The mangers in all except box-stalls consist of simply a foot-wide

the floor, and have sloping bottoms, so that the feed slides readily to the front, where it is drawn out through a spout. Each bin communicates with the upper story by a hinged trap-door set into the floor.

The considerable space given for the storage of fodder and roots may be used for other pur-



BASEMENT PLAN.

two-inch plank resting edgewise on the floor. This plank slides in cleats in the partitions, and these may be so adjusted that the space between the front of the manger and gutter may be increased or diminished to suit the length of the animal using the stall. The grain-boxes

poses than those named—as a hospital or as box-stalls or calf-pens, for example—but in experimental work these apartments will be found to be useful as storage-rooms for specially-prepared fodder and roots. The silo has for its walls solid masonry, well pointed, extending

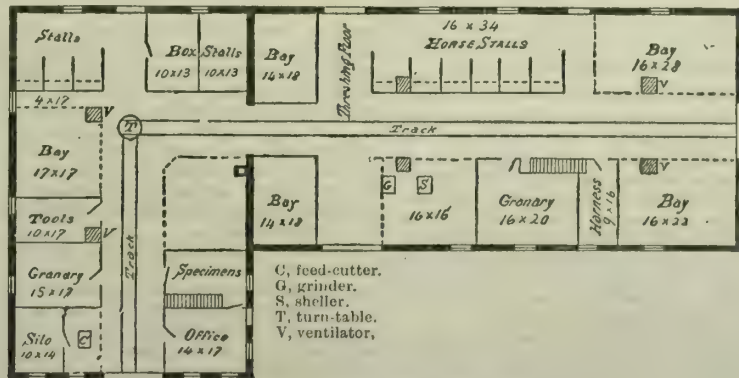


EXPERIMENTAL BARN OF THE KANSAS STATE AGRICULTURAL COLLEGE.

are made by simple partitions in the general manger. The stall partitions next the alleys—the front of the manger—are not vertical, but slope toward the alley, 18 inches out of the perpendicular; by which arrangement waste by animals while eating is largely prevented, the

upward to the main floor. The arrangement of the silo, feed-bins, fodder and root-storage rooms, with reference to convenience in feeding, has proved altogether satisfactory.

The main floor is about two feet above the ground level, and entrance is gained to it at



GROUND FLOOR PLAN.

feed being caught as it falls from the mouths of the cattle and returned down the sloping partition to the manger. The box-stalls are 10x10, as shown in the engravings—a satisfactory size in our experience, although a space of 8 or 9 feet by 10 feet would answer nearly or quite as well. The space marked "Fodder" and "Roots," if too great for the purpose suggested, may be partitioned and used as a box-stall or as a storage-room for calves.

The feed-bins, five in number, are usually 3x12 feet. They are supported two feet from

the south end and west side of the old portion of the barn, and at the west end of the new portion, as shown in the plan. Earth embankments lead directly to the doorways. These doorways are 12 feet in width, and the main floors 13½ feet—a space which ordinarily might be reduced one foot without lessening the usefulness of the barn.

The bays, with all the space over office, stalls, tool-rooms, silo and granaries, give the general storage-room of the barn for hay and other fodder. This great area has been largely

increased by flooring over a good part of the main gangway.

The horse-stalls occupy a space 16x34 feet in the old portion of the barn, while in the newer portion three stalls occupy a space rather more than 13x17 feet. Each stall in the old barn is 5x9 feet, including manger and excluding the alley 7 feet wide at the rear. In the new barn the width of the stalls is 4 feet. At the rear of the stalls is a blind gutter beneath the floor and covered by a plank on a level with it, which carries the liquid excreted to the drain at the rear of the cattle-stalls in the basement.

In the office the records of the farm are kept. It is furnished with secretary and suitable chairs and other like furniture. The specimen-room is designed as a secure place for the storage of specimens of farm and experimental crops. It is provided with suitable shelving and vermin-proof granaries. The blank space at the rear of the specimen-room may, as convenience dictates, be used as a storage-room for implements and machines, or it may be made to do service as a bay for hay or grain in the straw.

The pump in the engine-room is connected by an inch-and-a-half iron pipe with a never-failing well, located about 300 feet to the rear of the barn. It also connects, in like manner, with two cisterns, having a joint capacity of 350 barrels, which are located at either side of the main entrance to the newer portion

of the barn. These cisterns are filled from the roof of the barns. From the pump, one pipe leads to the tank which supplies the boiler, and another to a 40-barrel reservoir, which is supported by the roof trusses at a point near the roof in the central part of the new barn. A steam pipe conveys steam from the boiler to this reservoir, by which means its contents may be raised to any desired temperature. From the reservoir, pipes lead to different parts of the barn, supplying stock with water and water for cleansing purposes as needed.

Upon the track indicated in the cut moves a car, having flanged wheels of the usual form. This track leads to the corn-cribs, located south of the barn, and upon it grain and hay are conveniently shifted.

As a precaution against accidents from fire, the engine and fuel rooms have

walls of masonry, as indicated in the plan. The fuel-room is also partitioned off from the engine-room by a stone wall. The total space given to the engine and its fuel supply-room is 9x25 feet. The boiler and engine in use are of the vertical type, of nominal 10-horse power. These, with the pump and other machines, are more fully referred to in another part of this report.

The floor of the engine-room is laid with dressed flagging stone, as is the main aisle in front of the feed-bins and silo, and the alley extending past the engine-room to the door at the rear. The space marked 10x19 at the rear of the fuel-room is used for steaming and in other ways preparing experimental foods for pigs. A steam pipe from the boiler and a cold-water pipe lead to the steaming tank here located.

Outside of the matters of light and ventilation, the following are the considerations which have most influenced the arrangement of the basement:

To place those parts in close proximity which are likely to be used in connection; as, for example, all space used for the storage of feed and the stalls in which the animals are fed; to place all stalls and tiers of stalls in direct communication with the barnyard, thereby giving ease of access and quick and easy riddance of manure. The hay bays extending to the basement floor have proved most useful; they are filled with the least possible labor from the floor above, and are very easily emptied in the process of feeding.



## THE DAIRY.

### Dairying in California.

[Written for the RURAL PRESS by E. W. STEELE.]

Much is being written and published daily upon the various branches of dairying in California—so much, indeed, that it seems as though the final necessary word must or might have been said by some one or at least all of the able writers upon the subject. But all do not see all that is written and published upon any subject, or remember all they read.

When any one is in need of information upon any given point, and it comes to him, a hit is made, he puts in practice the information so gained, he appropriates it, and ever remembers it afterward. Few can learn and remember well many things abstractedly, hence the necessity for the constant repetition of facts and information upon all practical subjects. There are improvements, too, from day to day in every pursuit; new conditions arise, new facts are developed, and we pass milestones on the road to progress.

#### Location for Dairying.

If I were about to engage in dairying in California, I should first turn my attention to securing a location for the business. In deciding what would constitute a suitable location, I should consider: First, the cost of marketing produce. Can the produce be shipped regularly and arrive in good order? Secondly, are the range and climate suitable? In answering this question, I should ascertain at what time the rains commenced in the fall, if frosts might be expected to cut down the early grass, and at what time the dairying season might be expected to commence profitably on the natural grasses, and at what time do the grasses dry up. The answer to these questions in this State would be: December, January, February and March to commence dairying, and May, June and July to dry up, according to location, making the longest season in the most favored locality in the most favorable years. This gives only eight months, of which only about five months would be good dairying, and not more than two or three months' full flow of milk on the natural grasses alone, and correspondingly less favorable results in less-favored localities. But a good dairy of cows ought to milk eight months, and the best nine months, with proper feed, six months of which ought to be full flow of milk. Hence it is evident that we ought to look for a range where we can have the longest possible season of the best quality of green grasses, and more than this, where we can raise by cultivation the best kind of food to use before and after the natural grass seasons.

These requirements point clearly to a ranch of rich, arable, moist bottom or irrigable land, or both; that has rolling land, not too hilly, that will produce rich, sweet, early feed, say bunch grass, alfalfa, oats and clover, which should also grow in the bottom land luxuriantly for later feed, particularly burr clover. On such a ranch one can raise to feed, before grass grows, and after it is done growing, alfalfa, green corn, planted thick for fodder, the various kinds of grain, pumpkins and roots.

The first crop of alfalfa and the fodder corn that is likely to get too old before it can be fed, and any crop of wild oats or grain that comes to maturity before the weather is suitable to cure it for hay, should be placed in the silo. These crops and the green grass should meet. Add to these some mill feed and ground oats, barley or corn in sufficient quantities, and you will have enough of the right kind of food for your cows every day in the year, which is the first requisite, the "open sesame" in the dairy business.

#### The Water Supply.

Now we have a ranch, let us look next after the water. First—Water for stock: Springs where the cattle tramp in and stand in them, mud-holes and stagnant water, will not do. Under such circumstances at times your cattle will die of "dry murrain," malarial fever, etc. Your milk will not be good. Could you look into it with a microscope, you would see animalcules in it which rapidly increase in number until, if it stands long enough, your milk will be unsound and good cheese at least cannot be made of it. Therefore fence in your springs and conduct the water in pipes into good large troughs. In hot weather draw the water out, or, better still, have the patent troughs that you can get at P. P. Mast & Co.'s, Market St., S. F., that you can turn over, empty out and turn back again to place as easily as a bucket. This should be done at least twice a week, and scrub them occasionally with broom or brush. Medicate the water with some sulphur, copperas, salt and slacked lime. For this purpose take 100 lbs. salt, 10 lbs. copperas, 6 lbs. sulphur, 3 pints slacked lime, and mix it. In hot weather, a green vegetable growth rapidly forms in standing water in troughs, and even in running water along the margin of streams. If you will look into this vegetable growth you can see millions of minute insects, and fatal diseases are being traced more and more, these days, to animalcules.

Next, look after your running water; save it and make it grow you alfalfa or other green feed in the dry season; and if you have not got enough, try an artesian well or two for that purpose. Run the water from swampy and

springy places in ravines and hollows, in blind ditches into your dryer lands lower down (if you have any so situated), and distribute it there (a la Cole). But the dairyman asks,

#### Will it Pay?

What will be the result of all this? I will answer that, now since we have got a farm suitable and are prepared to feed with proper food every day in the year, let us get the best dairy cows possible and secure thoroughbred bulls of the best milking strains of blood. (I prefer the Holsteins, and think they are the coming cow for general dairying and beef; for reasons see Holstein article in this issue of the RURAL.) These things being done, we shall have the material to make the largest possible quantity of the best article of produce per cow, and will have made the best possible arrangements to secure the health and increase of our stock.

These are not theories that I am advancing, but the result of experience. When we used to run a dairy on grass alone and let the cows drink out of any spring or mud-hole, as they could get it, we have lost as many as 17 cows in a single day, and frequently several thousand dollars worth in a season. To-day the dairy-men in our county (and there are many of them who are dairying on this plan) are meeting with similar losses. But since I have adopted my present plan my losses have been very light; no more than an average mortality, such as is incidental to the business. But if we let down a little into old methods the extra mortality soon begins to show itself again.

#### Handling Dairy Stock.

Now we are supposed to have a suitable ranch, have arranged for feeding and watering stock and have a good dairy of cows and thoroughbred bulls of what we believe to be the best breed for our purpose. We come to the management of stock and dairy.

First, let us have the cows come in at the proper time, which will be decided by our plan of dairying. I believe that in California the most thorough dairymen either do or will gradually get into the way of milking the year around. This has been my practice for 28 years. During that time there has not been one day that either butter or cheese has not been manufactured in some of the dairies in which I have been interested.

As cows cannot milk on dry grass long, this plan of dairying requires the cows to have enough of the proper kind of food every day in the year. Even the dry cows, after milking so long, must be kept in condition in order to milk well the next season. A cow cannot milk till she has more than enough food to sustain life. It makes my blood boil to think of turning out the gentle, patient, dairy cow, who has been giving her very life during the greater part of the season for the benefit of the dairyman, on to scanty or bleached pasturage, without protection from storm or sun, where she will be compelled, in order to sustain life, to eat rushes and the pucker and often poisonous weeds that grow in damp places late in the season. Often she has to lick up dirt with the grass seed which is often the only other remaining pasturage, thereby contracting disease, and getting poor and weak. It is not profitable; it is not right; it is even worse than the admitted "man's inhumanity to man."

If we have decided to milk the year around, let us have three-fourths of the cows come in January and February and one-fourth in August. The calves can then all be weaned on green grass, which I consider to be a very important point if the calves are to be raised. Every practical man knows the danger and loss incident to weaning calves on dry grass, and that if they live their growth must inevitably be stopped for a time. Then only three-fourths of the dairy will be milking at one time. In proportion as you increase the number of cows milked in one place at one time, you increase the distance that the cows must travel for feed, and the amount of pasturage tramped out, the confusion on account of having so many new cows and calves coming in daily, and the loss consequent thereon.

#### Advantage of Smaller Bands of Cows.

Every dairyman knows that a large number of cows running together when grazing do not make as much produce in proportion as a smaller number of cows, and are more subject to accident and disease. By dividing the calving season the dairyman can more surely have the cows come in as he wishes, can manage the bulls more successfully, will not have so many cows to milk in short days and in the mud, and consequently will get them more thoroughly milked and the calves better cared for.

Again, produce sells for a better price from July to January than from January to July, and if dairymen expect to get good prices they must scatter their produce more through the year, and the extra feed will be compensated for in quality and quantity and price of produce, in condition of cows and increase, and in the saving of stock from diseases and losses therefrom. There is also an advantage in being able to keep the best and experienced milkers from year to year. Some milkers have staid with us for 15 consecutive years, put their money out at interest as they earned it and quit with respectable fortunes of their own.

#### A Bull Paddock.

Make a bull lot, and keep your bulls in it so that you can use them as you want them. They do not do well kept tied or in a barn. A lot surrounded by plenty of posts and iron-clad with barbed wire will hold them.

#### Milking.

Let the dairyman see that his cows are kindly treated and quickly and thoroughly milked. A cow (or at least many of them) will not give all her milk to a milker who is not kind to her or that she does not like. Weigh the milk that each milker milks occasionally, for a week at a time, particularly in those parts of the season when the cows are either gaining rapidly or shrinking. Keep a table showing the relative increase or decrease in quantity of milk per cow. If you have not an extraordinary lot of milkers you will be astonished at the results. Such tests have shown that some men's strings of cows were losing six pounds of milk per week per cow, while others only lost one-half pound per week per cow—all in same band, on same feed, at same time, and all of the milkers supposed to be good milkers. Such tests have a most excellent effect upon the milkers, beside teaching the dairyman something worth knowing in his business. Too much importance cannot be placed upon the thorough milking of the cows by competent milkers, who will make the cows think as much of them nearly as they would of their calves.

#### Handling of the Milk.

Having plenty of good feed, good cows, good water and good clean milkers, the dairy-men will usually have good sound milk to manipulate, without which a good article of produce cannot be made. Now about the proper handling of the milk.

It would make this article too long to go into it extensively, and it is so much a matter of observation and experience that it would do but little good if I did, especially as the subject has been treated scientifically and exhaustively in such works as "Flint's Dairyman," to which I refer any dairyman wishing recipes and directions. I will only make a few general suggestions.

There is no doubt that the most successful method of handling milk for making butter now known is with the Centrifugal creamer. With it can be separated more completely the butter globules from the milk, and in a shorter time, than by any other method now known. Having good milk the cream must be good, and, being so much less in bulk, can be kept at the proper temperature, and churned at the proper time. I believe in churning, in stopping while the butter is still in small globules, or, in other words, not gathered into a big lump; then thoroughly washing the butter with good, clean cold water until it will not color the water; then salting and working the butter just enough to mix in the salt—only working it once. You will not by this method break the grain of the butter, and it will be more solid and less salty than when worked twice.

#### In Making Cheese

The cheese-maker should know first the condition of his milk with reference to the acidity which it has arrived at when he adds the rennet. The more acid the less heat in the milk and the less rennet to add. I have set milk all the way from 65° to 88°, and made cheese in from one to six hours, according to the condition of the milk and the kinds of cheese I wished to produce. Cheese-making (successful cheese-making) is largely a matter of judgment and experience. The milk should be so cooled down at night that a good article of merchantable cheese would require three to four hours to get into the press. This can be easily and surely done if the cows have had proper food and water. If they have not you are all at sea, and the cheese-maker will have use for his experience and powers of observation if he makes a passable article, and will almost surely come out second best.

When the milk of which you are about to make cheese is in about the usual condition found in cheese dairies, where they make up at once the milk of 24 hours, heat the milk to about 84° to 86°. Add rennet enough to bring curd in from 30 to 40 minutes. Now, the texture of your cheese is determined by the manner in which you manipulate your curd. Put in the rennet, commence to heat the milk at once, and stir it while heating and continue to stir till cooked. Then put to press without salt, and you will have a cheese like a puff-ball. Then salt it from the outside until it comes down flat, and you have a partly-decomposed cheese, full of holes. This is the way Swiss cheese is made.

Take the same milk; put in the rennet at 88°; let the curd come firmly, then cut the curd slowly and carefully, and handle the curd until it is matured without heat; salt and put to press. Turn it daily, run skewers through it, still keeping it in the press for several days, and you will have a square-cornered hard cheese that will not be fit to use for several months, and then will be a sharp, crumbly cheese.

Take the other extreme; cut up your curd as quick as it comes, fine as you can; put on the heat and cook it up to 100°, or a little more, in an hour, and you will have a puffy cheese, which, if you should cut at the end of a month, would look like toasted cheese and soon after that time would commence to taste bitter.

Try still another experiment with same milk. Set at usual heat; use rennet to bring curd as usual; let the curd come firmly; cut it slowly and carefully; work the curd slowly and carefully without heat until it becomes quite mature, say for two hours or more; then apply the heat slowly, taking an hour and a half or more to raise the curd to 98°. Then cool your curd before salting, and you will have a

solid flat cheese, which will not be cheese for some time, but will be a rather dry, firm, but merchantable cheese. I give these examples to show that the texture of the cheese is fixed by the time and manner of applying the heat to the more or less matured curd at the time of the application of the heat. Cook a loaf of bread too soon and it will be heavy; too late, and it will be sour. Making cheese is a chemical operation, and must be so conducted as to have the proper chemical changes take place at the proper time. With a new cheese-maker, or in starting a new dairy, I always make what I know will be a good, solid, merchantable cheese, as herein indicated. Then, if I wish to make a mere porous, soft and buttery cheese, I cut the curd a little sooner, apply the heat a little faster until my cheese begins to round up in the center soon after being placed on shelves to cure. Then I work back to the place, when they will begin to cure and soften up in a few days, but keep their shape. When I have the texture of the cheese to suit, I try to stay there. Of course the subsequent handling of the cheese has much to do with their flavor. Some cure in cellars and some with extra heat. I always keep my cheese moderately warm, and try not to have the process of fermentation stop at all until the cheese is at least partially cured and will do for the market. Then, if it can be kept in boxes or covered with gum shellac, it would shrink less, be more moist and keep better.

[Our dairy readers will, we know, thank Mr. Steele for his very valuable and interesting essay. There are many men of many minds in dairying, and we would like them to take Mr. Steele's article as a text, and write for the RURAL what they think of his suggestions and how they may be approved or improved in their experience. We ought to have much more dairy discussion.—EDS. PRESS.]

#### Modern Furniture.

The great-grandfathers and grandmothers of the present generation would open wide their mouths in mute astonishment were they to visit a furniture wareroom of the present day, or enter a modern furnished house. They would now and then see a few specimens of the plain old familiar furniture—the case of drawers, the tall clock in one corner of the room, because of the present popular craze for antiques. But side by side they would also behold elaborately wrought massive furniture, but more especially would their attention be arrested by the numerous profane contrivances, in which one piece of furniture was made, by a few shifts and turns, to act for something quite distinct from what it appeared to be. A folding-bed, for instance, would be made to assume the appearance of an organ or upright piano, or perchance a massive combination bookcase and writing desk. Sofas, by a magic twist and jerk, would be transformed into elegant bedsteads with mattresses, pillows, sheets and blankets coming forth from the dark recesses of their interior.

Cribs for small children, when not in use for such, would be folded up and made to serve as ornamental supports for statuettes or bric-a-brac. Stationary wash-stands are made to undergo similar transformations. Some of the carved heads and figures upon modern furniture are as much unlike anything real as are the fancies of the Japanese upon their vases and other ornamental work. Buffalo horns and the long-horned cattle of Texas are oftentimes polished up and so interwoven with themselves and curious shapes of wood as to present most unique and weird appearances in the shape of chairs and tete-a-tetes. Bronze and hammered metal picture frames and round tables are also among the latest novelties in this direction. Then, again, in the matter of household decorations and wall-papers, the light, airy colors and figures of half a century ago have been changed to dark and somber colors, hiding and concealing the beauties of the furniture and carrying one back to the dark and gloomy rooms of medieval times. Such are some of the characteristics of modern furniture and ornamented indoor work.

A SIGN-BOARD FOR DOOR-PLATE.—The Yolo Democrat thinks the public would be greatly accommodated if every farmer would erect in a conspicuous place on the farm his name, in order that travelers might be guided thereby; that this would save the husbandmen the task of answering hundreds of questions, and at the same time direct to them persons who had business to transact. The suggestion is a good one, and although itinerant beats and sharpers would try to abuse such conveniences, as they do door-plates in town, yet all annoyance thus caused would, we think, be far outweighed by the grateful use of the well-meaning and honest.

TO MAKE MOCKINGBIRD FOOD, take of hemp seed three parts, toasted wheat bread two parts, maw seed one part, ox heart one part. Boil the ox heart well in water, cut it small, and place it in a pan in an oven, where it must be allowed to become perfectly dry and crisp. All the ingredients must then be thoroughly mixed and ground in a mill to coarse powder.



### The Mechanics' Institute Fair.

The annual exposition of the Mechanics' Institute is now in progress in the grand pavilion in this city, and will continue to be the center of attraction in the city for a month. The space is well occupied with a great variety of industrial and art materials, natural productions of every kind, etc. It is too late to prepare any sketch of the fair for this week's PRESS. Let our readers note the fact that it is now in readiness for their visits. For those who cannot come we shall record our notes of the exhibition hereafter.

The opening exercises at the Grand Opera-house began at 2 o'clock Tuesday afternoon, Aug. 24th, with a grand opening overture by the orchestra under Charles Schultz. Rev. Joseph P. Macaulay made a short prayer, after which there was more music by the orchestra.

#### Ramon E. Wilson's Address.

P. B. Cornwall, President of the Mechanics' Institute, in a brief address introduced Ramon E. Wilson, who spoke as follows:

*Mr. President, Ladies and Gentlemen:*—For the twenty-first time the friends and patrons of the Mechanics' Institute assemble to celebrate the opening of its annual industrial exhibition. This large concourse of people is a most fitting tribute to the ceremony, and it speaks stronger than language can express the feeling and sentiment of the community as to its success.

#### Origin of Industrial Exhibitions.

Industrial exhibitions are now fully recognized as a method of assisting the development of industries and material progress. As exhibitions purely, they are of comparatively recent date. For the purpose of effecting sales of the productions placed on view they have an origin which antedates modern history.

This latter class were called "Fairs," held at stated intervals both in Asia and Europe, in the earliest period of civilization. They are supposed to have derived their origin in religious gatherings, which first gave an opportunity for the exhibition and sale of wares to large numbers of people. The Greeks and Romans have left accounts of many such.

We find in some of the earlier text-books of the law that these institutions had become so important that special courts were established for the consideration and determination of questions of law and equity arising at them.

Fairs were instituted in France and in Southern Europe some 1000 years ago. Among the more celebrated of those early times was that of St. Denis, instituted by Dagobert, A. D. 629, and Aix-la-Chapelle and Troyes in about A. D. 800. In A. D. 826 they were introduced into Great Britain by Alfred the Great. At the end of the tenth century they had become well established and very common throughout Northern Europe.

In Great Britain patents were issued by the king, permitting the establishment of annual fairs. Some of these have become famous. The English fair at Weyhill is noted for its display of sheep; that of St. Faith's is distinguished by the numbers of Scotch cattle bought and sold, and everybody has heard of the Donnybrook fair, so long celebrated for the jollity and pugnacity which distinguished its visitors.

In France the fairs of St. Denis were discontinued. Beaucaire and Gibray have been in existence for centuries.

Fairs are still held in Holland and are enjoyed by the people as important holidays.

Germany is known as the modern home of this peculiar institution, the principal ones being those of Leipzig, Frankfort-on-the-Main and Brunswick.

In Russia the fair is the largest in the world, lasting 25 days, and the sales amount to many millions of dollars.

In Asia the fair held at Mecca, when the annual pilgrimage takes place, is the most extensive. One of equal magnitude is held in India on the Ganges, where a million people assemble annually.

On the Western Continent no such great assemblages, with but rare exceptions, are known. In early times fairs were held at the City of Mexico, frequently attracting many thousands of people.

In later years these fairs have been less required as a means of promoting commerce, owing to the facilities afforded buyers and sellers by the modern means of transportation and travel, which permits trade to be carried on with regularity and convenience throughout the year. The necessity of accumulating products of manufacturing and transporting them in quantities to the fairs, to be wholly sold in a few days, no longer exists. Their production is continual and their sales go on uniformly and promptly at all seasons.

This change in the methods of commerce has led to the institution of the industrial exhibitions, at which the object is not to procure the sale of exhibited articles, but to make visitors familiar with their character and value, and to inform them of the places of manufacture and sale, with the ultimate result of bringing the purchaser to the manufacturer and merchant, and by a course of object-teaching educating the masses in the progress of the age and the growth and development of the country.

The first of these exhibitions is supposed to have been held in France. Similar ones were

held in Great Britain by the Royal Dublin Society nearly a half century ago. The American Institute of New York commenced holding its exhibitions a little later, and still later, just a quarter of a century ago, the first exhibition of the Mechanics' Institute of San Francisco was held. They have continued annually ever since, and it has now become one of the permanent institutions of the country.

#### The Mechanics' Institute.

The Mechanics' Institute was organized in January, 1855.

Its founders declared its objects to be to cultivate a social feeling of friendship, mutual improvement, the dissemination of information and useful knowledge by the establishment of a library of circulation and reference, and the erection of buildings for any scientific, mechanical or literary purpose.

Right worthy objects they are. What a wonder it must be to those schemers now living to see the most perfect realization of their designs. What a contrast between the library of 40,000 volumes now upon the shelves, devoted to and representing every subject to which the human mind has given thought or tongue utterance, and the "library of circulation and reference" in San Francisco in 1855.

Ten years later they must have accumulated a library, for in the year 1865 was inaugurated the first of its industrial exhibitions. It would be a curious and instructive spectacle could we arrange the fair of 1865 side by side with the fair of 1886.

Not unlike many other things, the "glorious climate of California" has had its influence upon this institution, and although it was born amid the fogs and trade winds of San Francisco, and has its local habitation here, it has grown to such magnitude that it exerts a power over the development of all that is strongest and best throughout the whole commonwealth. Its capacities and capabilities will not decrease, for its fountain source is a pure spring unpolluted by selfishness and undisturbed by narrowness.

Its 31 years' growth has been unassisted by a single dollar from the public treasury, not a dime by gift, nor a penny from endowment, and not even a lottery.

It is indifferent to sects, creeds and parties. Its members and coadjutors are now composed of all parties, sects and denominations, without distinction of creed or political sentiment, until now it stands entirely above and secure from all convulsions of political contests, not dependent upon the success of one party or another, but all equally willing and anxious to form the pillars of its support, while it operates in a different sphere and extends its exploring vision far beyond the arena of party measures or political action, penetrates the mysterious work of God in the government of the material world, and draws down permanent accessions to the common stock of human enjoyment.

Its history presents a phase, not unlike that in the lives of some men, who have become great in the many walks of life through their own exertions.

The public, recognizing the permanent and abiding character of its works and the self-sacrificing enthusiasm with which its pioneers press on the enterprise, that its achievements are for the benefit of the country, has gradually become impressed with the sense of its importance and yielded co-operation.

It is now the great vanguard of the pioneers of substantial and practical improvements in all the useful occupations and employments of life.

The men who founded it, as well as those who have succeeded, and who now direct its policy and affairs, have never sought their own glory in its establishment nor their own advancement in its growth.

Who will not delight to cherish the warmest emotions of gratitude for these veteran patriots? They deserve the thanks of the whole country.

#### The Influence of its Fairs.

The primal object of this great institution is to expound and illustrate the laws of nature, as exemplified by the various industries, and to produce therefrom new and useful things for the practical application and use of the human race. This it accomplishes by the aid of volunteers from the ranks of science and art and all the departments of industry. It demolishes the barriers which obstruct the progress of the age, breaking down the inclosures of Nature's storehouse and letting mankind in to the enjoyment of constant accessions of novelties and wonders.

Its great productive forces, as applied to mankind, are emulation and stimulation.

Within its capacious receptacle are the products of the fields, the factories, the shops, the farm, the manufacturer, the mechanic, and the inventor. Hither they all come with the products of their skill, to witness the grand tournament of genius, the great trial of inventive strength, to compete for premiums, and through them for the patronage of the public. Emulation, constantly excited as it is by these exhibitions, and urged on to increased exertion, results in the production of fabrics and works of handicraft which can only be excelled by the continued application of the same stimulating process. The products of skill, labor and ingenuity are brought to the immediate view or critical examination of thousands of observers. It is a better advertisement than daubs of paint on all the fences in the country.

These fairs are the grand exchange of the ingenious and enterprising producers of the country. Here they are brought together,

many of whom would not otherwise ever meet, and interchange ideas.

The farmer comes to see what improvements have been made in agricultural implements. He finds them all in active operation, and has an opportunity to test their merits.

His wife comes with him. The latest devices in incubators, washing machines, churns, and the innumerable things which tend to lessen the work of the farmer's wife, are spread out before her. And perhaps the daughter comes too. Her mind is speedily stored with the beautiful things she sees among the finer arts and works of handicraft, which she utilizes to make the country home more home-like and attractive.

Hither comes the miner. He stops not to look to the right or to the left, but goes straightway to the rear, where all is noise and bustle. Here he finds the newest inventions for crushing ores—concentrators, separators, pumps and labor-saving drills. By their aid he finds that he can unlock the doors which lead to nature's repository, the storehouse of its precious metals. Mines upon which have been expended the fortunes of men without material results are again opened and made to yield up their hidden treasures. Hither comes the artisan, the carpenter, the mechanic, the blacksmith and the various workers in wood and iron, who find new tools and devices with which to lessen the burdens of their daily labor.

Hither come the vineyardist and the orchardist. By walking from one end of the long tables to the other, upon which are placed the various products of the tree and the vine, one can, without expense of time or money, make a visit to almost every county in the State and note with profit to himself what might take years of experience to learn, the various effects of soil and climate upon production.

Hither come the manufacturer and merchant, the one to display his products and the other to learn that he need not go beyond the boundaries of the State to find material to supply his customers.

Hither come the artist, sculptor and skilled handi-craftsman to show to the wealthy and refined good people of our State that they need not go to New York, or Paris, or Rome, to buy good pictures; that mantles with carvings and tiles, rugs, carpets, furniture, portieres, pianos, wall-paper and decorations and all the other many articles which go to beautify the dwelling-place can be bought, and that clever workmen can be had at home.

Hither come the representatives of every class of human work, of man's labor and ingenuity, to use and compete with each other in the struggle for development, prosperity and success.

Hither come the masses of the people, who have no time to inform themselves from books or papers. The days and nights of exhibition are to them a grand holiday. It is a rest from the cares and burdens of life. It provokes energy and ambition. They see what would otherwise never be seen by them, and are taught what they would never otherwise know—the improvement of machinery—the encouragement given to commerce, the perfecting of rural economy—that men are rewarded for their labor—and the advancement, development and growth of the wealth, intelligence and comfort of the people.

And last but not least come the ladies, without the presence of whom no industrial exhibition can or ought to be a success. Homage is their due, for always they are the earliest and firmest friends of whatever tends to elevate, ameliorate and perfect the happiness, the comforts and the prosperity of the human race.

Who can measure the amount of pride and exultation felt by the exhibitors? Who can measure the amount of laudable ambition engendered by the complimentary observations of the multitudes who gather at these exhibitions? Who can measure the renovating power upon public opinion?

#### The Future.

The remark is sometimes heard that each exhibition is the same as the preceding one. Such speeches are thoughtlessly and carelessly made. As evidence of it, the very people who make them buy a season ticket and come to the fair every night so long as it lasts. The public does not think so, for yearly the coffers of the institute are increased, its exhibitions are enlarged and the value of its prizes, premiums, medals and awards enhanced.

The Mechanics' Fair has become one of the solid and permanent institutions of the country and the pride of its citizens.

How could it be otherwise? There is no tract of country on the face of the earth that can compare with our own State and coast as a birthplace for everything that is promoted by agriculture or the outgrowth of inventive genius—the pillars which form the foundation of every industrial exhibition and upon which repose the prosperity of the human race.

There is enough material on hand and in sight to keep this exhibition alive and useful for generations to come; nor will it be exaggeration or arrogance to say that within the lives of those here to-day the entire block of land, now owned by the institute, will be covered by one roof, filled with evidences of the inexhaustible resources of the State.

Some doubt this. It is said that the soil, like the human frame, will wear out and refuse, after a time, longer to yield to cultivation. That all of the available precious and other metals have been taken out; that, in view of the wonders already wrought, the secrets of nature are well-nigh exhausted. They ask

what is there left to do? The elements have been pressed into service and made to perform labor. Oceans have been contracted and their opposite shores brought within a few days of each other; the wind and the wave have been trained to the car of industry; steam has been imprisoned, and its angry efforts to escape have been applied to the generation of power; vision has been protracted through the aid of glass until it has penetrated the firmament and scrutinized its structure, and the lightning has been enslaved and city is made to talk with city at the speed of sunbeams.

Think of the immeasurable distance between God and man, and that the power to create is infinite with the Creator of the endless divisibility of particles of matter, and into the phenomena and laws of nature, and the answer must come, there is food for thought and enough for idle hands to do for all time.

California is blessed with a rich, deep and varied soil, a genial climate, a vigorous and intelligent class of men, unequaled in the spirit of enterprise, industry and perseverance, a splendid system of public instruction, and exalted by moral and religious institutions. Her earth teems with rare and useful productions, embosoming inexhaustible mines of metals and bearing mighty forests.

Commanding all these resources, no one need be solicitous of the future.

The rising generation need not be awed by what has been done. Let it turn its attention to the subject of irrigating the arid regions of the State, the reclamation of the millions of tule, marsh and overflowed lands lying in the great valley and bay region; to devising methods of increased production of fruits, vegetables and cereals, variety of production, the improvement in the breeding of cattle, horses, sheep and swine; improvement in machinery which agriculture naturally develops, a means of extracting from the mountains of gravel the gold therein, without polluting the highways which empty into the valley basins below, and to make a key which will unlock Nature's laboratory, wherein are stored more riches than have yet been found.

The friends of "the good old way" are getting to be very few. The spirit of progress is continually pointing out a "new way."

That is the spirit inculcated by these exhibitions.

Friends, join hands in laying deep and everlasting the foundations of this institution. It has already done ineffable credit to its projectors—let it be venerated by a grateful posterity, and let us hope that it shall continue to do good, and last as long as our Golden Gate is open to the commerce of the world.

The address of Mr. Wilson was followed by a laughing song, "Manon Lescant," by Miss Ellen Coursen and the Young Ladies' Choral, after which Fred Emerson Brooks read an original poem. The exercises closed with a cornet solo by Mr. Mahood, a chorus from *Lucia di Lammermoor* by the Choral, and music by the orchestra.

### The Origin of Cyclones.

Dr. Werner Siemens, in a recent paper on the "Conservation of Energy in the Atmosphere," gives a very interesting theory as to the origin of cyclones. He states that the comparative vacuum formed at the center of the cyclone can produce suction only in the direction of the axis of the cyclone, so that it either raises water from the surface over which it rotates or draws down air from the higher regions of the atmosphere. The clear sky and quiet air often observable at the center of a cyclone bear evidence that there is a descending current of air. According to Dr. Siemens, a local cyclone is produced by an impulse of the superheated air, due to some local cause, given at the boundaries of an upper and lower tract of disturbance of the neutral equilibrium of an atmosphere at rest, which reaches the boundary of the upper cooled strata of air, which have a tendency to descend. An outer descending current is thus formed around the inner ascending one, the amount of air descending naturally equaling the amount ascending. If the disturbance of equilibrium embraces extended upper and lower strata of air, the descending masses would produce an increase of pressure in the neighborhood of the cyclone, gradually extending to the surface of the earth and upward into the highest regions of the air, imparting its force continually to new superheated masses of air. This air ascends with the inner and upward current, descends with the cool outside current, to again ascend, producing a circular motion. The course of the center of the cyclone is determined by the direction of the mean velocity of all the air masses forming the cyclone, and its duration is that of the disturbance of the neutral equilibrium of the atmosphere which produces and maintains it. The local ascending current, by carrying dust and particles with it, may also produce rain by condensing the aqueous vapor of the higher strata.

HOW TO DESTROY COONS.—An Arkansas farmer writes that last year, when coons made havoc in his corn-field, he went to the drugstore to buy strychnine with which to kill them. By mistake the druggist gave him morphine, and the next morning he found his field full of sleeping coons. He advises the use of morphine instead of strychnine.



## HORTICULTURE.

## State Horticultural Society.

## Discussion on Plums and Prunes.

The regular monthly meeting of the State Horticultural Society was held August 27th at Irving hall, Vice-President A. T. Hatch in the chair.

The following were proposed for membership: W. H. Pepper, of Petaluma; G. M. Gray, of Chico; and David Lennox, of Colusa.

The secretary read a letter from J. Frazer Torrence, of Folleigh Lake, Nova Scotia, concerning the use of infusorial earth in packing fruit for preservation. The infusorial earth, in which the fruit is packed, is impervious to air. The cost of the earth, if imported here from Nova Scotia, would be about \$30 per ton. The letter maintained that the best way to pick fruit for eating was to pick it from the tree a little before it reaches maturity. After plucking, the fruit should be allowed to remain in an equable temperature, which would be secured by packing in infusorial earth. A number of delicate flowers packed on March 23d were, when taken out some two weeks later, almost as fresh as when first picked. This packet was forwarded to Queen Victoria, and reached its destination in splendid condition. This system of packing is thoroughly successful with regard to eggs, a quantity packed by Mr. Torrence, on January 16th, being perfectly fresh when taken out on April 27th. Apples put away in October were in good condition, though having lost something in flavor, when the package was opened in April.

In regard to bringing infusorial earth to this State, Mr. Wickson remarked that infusorial earth is a white deposit made of the siliceous shells of small animals known as infusoria, and abounds both in California and Nevada. Mr. I. A. Wilcox, of Santa Clara, and Mr. W. M. Williams, of Fresno, both stated that they had seen an abundance of the earth in their respective counties.

Some general discussion of methods of fruit preservation ensued. Mr. Wilcox said apples were kept for a long time at New Orleans by immersing in water, and Dr. Gibbons, of Alameda told of a man in Tuolumne county, whose cellar was filled with water all winter and yet the apples came out well in the spring.

A communication was read from H. Van Nostrand & Co., of New York, respecting the state of the fruit market in that city, and arguing that the present condition of the market afforded a grand opportunity to Californians to dispose of their dried fruit produce, as the New York market is bare of stock.

Mr. Hatch submitted a letter from Ellwood Cooper, of Santa Barbara, asking what arrangements were being made to market almonds, and suggesting that the large producers would do well not to ship their own produce all to the same markets.

## Fruit Exhibits.

Dr. Gibbons showed the Flemish Beauty pear, and spoke of its great productiveness in Alameda.

Leonard Coates, of Napa, showed the Lovell peach, originated in Solano county, and which is highly esteemed by canners. He had also fine specimens of the De Tongres pear from buds from the University orchard.

Gaspar Toietti, of San Leandro, showed the hardy Tuscan, an immense and handsome yellow cling peach.

Mr. Shinn showed Prince Egelbert plums.

Mr. Pepper, of Petaluma, showed an immense Souvenir du Congrès pear, and A. T. Hatch showed one of the same variety beautifully colored. Mr. Pepper finds this variety rather a poor bearer.

Mr. Hatch showed the Muir peach, which canners esteem so highly and are now paying five cents per pound for what they can get.

Mr. Wilcox complained that the Souvenir pear would not ripen with him at Santa Clara. His soil is low and full of water.

Mr. Shinn showed a clingstone peach of good flavor and size and one of which the leaves do not curl. He obtained it from Diamond Springs, El Dorado county. It is called the Odin. He showed also Cowan's cling, a good peach, but the leaves curl in his locality. It has no red at the pit. Another variety shown by Mr. Shinn was Seller's cling, which does not curl leaves, but may not be a sure bearer. He had also McKevitt's clingstone, pure white to the pit.

W. M. Williams, of Fresno, showed sun-dried fruit from that place which was so fine that experts in the city thought they were machine dried.

Rev. A. T. Perkins, of Alameda, showed Wager and Muir peaches, well grown and handsome.

## The General Bidwell Peach.

Mr. Wickson showed specimens of a new peach which originated on Rancho Chico, as described by the following note from G. M. Gray:

This box contains a few seedling peaches that grew on a sprout that came up from the root of a dead apricot tree which was budded on peach stock. The tree was found last year, the day Gen. Grant was buried, so we called it "Gen. Grant." You will find the flavor as good as the best, and this is only an average in size, some larger but too soft to send. Give room for a word for them. I wish you would.

—G. M. GRAY, Rancho Chico.

The samples were examined with interest, and were referred for examination to a committee—W. W. Smith, James Shinn and W. M. Williams.

Subsequently the committee reported the variety undoubtedly a seedling and as worthy of propagation and trial. They recommended that the variety be called General Bidwell, because there is already a variety called General Grant. It ripens one week later than the late Crawford, and is especially valuable on that account. It would come between the late Crawford and Piquett's Late. The report of the committee was adopted.

W. C. Blackwood opened the discussion on plums and prunes with the following essay:

## The Plum.

The plum in its wild state is found in the temperate zones of both hemispheres—on the eastern as well as the western continents. There are many varieties of the wild plum, a few of which have from time to time been domesticating. When Western New York was settled many varieties of the plum were found growing wild in the forests, some of much excellence. Such were transplanted by the settlers to their gardens and were highly prized. But in time the curculio came and also the disease known as the "black knot." Before these destroyers the wild plums of that State disappeared.

In the West there are only two varieties, so far as I know, now deemed worthy of cultivation—the Chickasaw and the Wild Goose. As compared with our cultivated varieties of plums these plums are very inferior. How these plums have obtained a standing among the orchardists of the Western and Southern States I do not know, but so it is. They are held in much favor in the West and South. Then there is the June or Myrobolan plum, cultivated to some extent in this State. It originated in Canada, or rather, it was there perhaps that it first attracted the attention of orchardists. The Myrobolan is as readily and as easily propagated from cuttings as the currant. It is valuable as a stock plum to graft on, as it is not given to suckering from the roots.

The natural soil for the plum is a rich, heavy, clay loam, and propagated on its own stock; an excess of moisture in the rainy season does not seem to injure it.

The cultivated varieties of the plum are very numerous, and have been produced originally from the wild plum by hybridized seedlings, and again have been improved upon by careful selection. Hence we have now such plums as the Washington, the Jefferson, Coe's Golden and the White Magnum Bonum—all white plums. Of colored plums we have the Columbia, Duane's Purple, the Engelbert, the Ickworth's Imperatrice, and many other varieties of great worth. I will not stop to dilate upon the excellence of any of the varieties named, as the members of our society are familiar with all the kinds mentioned.

The plum is only a plum, having the property of drying and curing without the seed being removed and making a superior dried fruit. The varieties of the plum are not numerous. Those more commonly known are the German, the Fellenberg or Italian, the Bulgarian or Turkish and the French or Petite prune d'Agén. The Robe de Sargent is another French prune which is just now being brought to the notice of our orchardists by some of the enterprising nurserymen of California. It gives promise of being a very superior prune. The German is probably the most inferior of the plums I have named. I do not think it worth cultivating, especially when the orchardist can have his choice of so many superior varieties. The Fellenberg and the Bulgarian make a black plum, and have a rich, pleasant, sub-acid flavor, when cured; and require only a little sugar when cooked and prepared for the table.

The Petite prune d'Agén is perhaps for all purposes the most desirable prune we cultivate. It has no acidity, or next to none. The stone is easily extracted. It may be used in any place where raisins may be used, and is equally palatable. It may be cooked and used as a sauce on the table the same as any other dried fruit, requiring no sugar. It is essentially the poor man's plum, as it can be grown, cured and put on the market at so low a price as will put it in the reach of every householder in the land.

Having briefly noticed the plum and named a few of its leading varieties, I will now leave the subject for others to dilate upon, with the single remark that I regard the plum as standing next to the apple in its uses in the domestic economy of the household.

## Discussion.

There was doubt expressed as to Mr. Blackwood's statement that the Myrobolan originated in Canada, but Mr. Blackwood had left the room and the matter was not pursued.

James Shinn, of Niles, spoke of the superiority of Coe's Golden Drop over the Yellow Egg. He also spoke of the Columbia as bearing rather sparsely—not every year.

Leonard Coates, of Napa, mentioned the great variation in the French prune grown in different situations and soils even in the same neighborhood. He knows of no fruit which shows such marked variations.

W. H. Aiken, who was selected at the last Fruit-growers' Convention in Los Angeles to prepare a paper upon the cultivation of the plum, stated that he is now studying the subject, and would, at the convention of fruitmen in Sacramento next November, present an exhaustive paper. He will be pleased to receive

samples of prunes from growers in different parts of the State, with notes concerning the quality of the soil where the fruit is grown, the rainfall and other particulars. His address is Wright's station, Santa Clara county. A few prunes by mail will be enough from each grower, and these he intends to put in preservative solution and have for comparison at the convention.

The secretary read the following letter:

## The Double Prune d'Agén.

Edward J. Wickson, Secretary of the State Horticultural Society:—At the November meeting of the society (1885) there was read a report on Fruit and Prunes, signed by Messrs. James Shinn, George Humann and Leonard Coates, the committee, from which I will quote the following extract:

"The prunes sent by Mr. Gillet have been carefully examined. The Double Prune d'Agén is identical with Grosse Prune or Hungarian, but not of so large a size as when grown in the valley lands."

With all due deference to the conclusions of the Committee on Fruit and Prunes, I will beg leave to differ, and will try to prove to said committee that they were entirely misled in their conclusions. I waited this long, so as to be able to lay before the society the fruit, twigs and leaves of the Double Prune d'Agén, and have the society compare them with those of the Hungarian.

I will say that when I sent those samples of the Double Prune d'Agén, a year ago, to be exhibited at the meeting of the society, it was simply to show the members of the society what kind of a prune it was, and not with the idea of ascertaining to what variety it belonged; for I knew more about this new kind of prune, or, rather, plum—originated by Mr. Louis Simon, of Metz, not very long ago, but long after the Hungarian, or Pond's Seedling—than any member of the society did, having introduced it myself into this country.

The Double Prune d'Agén is a different variety altogether from the Hungarian; the wood, buds, position of the latter on the wood, leaves, fruit, pit, time of maturity, differ considerably from each other. There is as much resemblance between the two as between the Hungarian and Duane's Purple—both large plums.

Last winter I sent cions of the Double Prune d'Agén to Messrs. Coates and Rock, and both gentlemen should be able to tell by this time the difference in wood and leaves between the two kinds. The Double Prune d'Agén is commencing to ripen up here, while the Hungarian, as I saw it at Mr. Allison's, a few days ago, half a mile from my place, is way behind. I will say that the Hungarian grows as large, if not larger, here than in the valleys, it measuring nearly three inches in length and two inches through. The Double d'Agén is very juicy, and I consider it one of the finest dessert plums; but on account of its juice it is hard to cure; in fact, I found out that it will not do to cure, for it loses all its juice in drying. I have ascertained since that this Double d'Agén prune is more recommended as a dessert plum, while the Hungarian or Pond's Seedling is not thought of except for its immense size.

With the twigs of the Double d'Agén I send you two cions of the same with leaves on, and also two cions of Hungarian. I will write to Mr. Rock to bring along twigs of Hungarian with fruit on to compare, not having any bearing Hungarians on my place, my tree having been killed by the gum. By examining more closely both kinds, I am satisfied that our committee will come to altogether different conclusions as to the identity of those two kinds of plums.

I will seize this opportunity to send you a sample or two of the St. Catherine prune, plucked on trees "true from the root" (not grafted). It is not ripe yet, as it ripens with the Petite prune. I send you those samples of unripe St. Catherine only to show those members of the society unacquainted with this famous prune, what it looks like. It is a yellow plum with red cheek, and in drying turns jet black.

My Lot d'Ente did not bear this summer, so I am unable to tell yet what difference there is between that type, sent to me as the purest type, or the d'Ente or d'Agén prune, and our Petite prune. I will, however, say again, in answer to many queries, that our Petite d'Agén is a true type of the d'Ente; but I will have absolutely to wait another year before being able to tell what difference there is between that kind and the Lot d'Ente.

D'Ente prune trees obtained from the northwest of France have been bearing with me this year; it is certainly a different variety of our Petite prune and also of the Lot d'Ente, and, I believe, inferior to both. That is the type that they have been replacing in France by a purer type from the Lot since I called their attention to it.

I find that the sun does not burn the St. Catherine as it does the Petite prune; this is probably due to the skin of the St. Catherine being more tough.

NEVADA CITY, Aug. 25th.

Mr. Gillet's communication was heard with interest and the specimens sent were examined by all present. Members of the committee stated that the fruit was certainly not the same as that they called Hungarian prune last year, and that some mistake must have crept into the fruit submitted to them. The samples sent by Mr. Gillet were referred to the same com-

mittee which made the report last year, for further elucidation.

## Curing Prunes.

Mr. Coates gave the method he adopted for preparing prunes. They were shaken from the trees when quite ripe, falling on canvas. They are then dipped in lye (one pound lye to 25 gallons of water) and are probably left in the lye 10 to 15 seconds. They are then plunged in clear water—the water being changed frequently to prevent its becoming impregnated with the alkali. After the rinsing the prunes are spread on wooden trays, like those used for raisin-drying, and are placed on the ground. When they are sufficiently cured they are dipped in syrup made from boiling down the juice of over-ripe peaches, or sometimes condensed cider is used. They are then packed in boxes for market. The peach juice or cider gives them a bright gloss.

Mr. Hatch spoke of the Silver prune and its identity with Coe's Golden Drop or otherwise. Three years ago the Silver prune was shown by Mr. Shaw, of Sonoma, and it was certainly different from Coe's. He finds this year that the trees he bought for Silver prune are, a few of them, bearing fruit like that shown by Mr. Shaw and the most of them are simply Coe's. He had a poor idea of the honesty of the Oregon nurseryman who sent down such trees. He bought a lot of trees for Yellow Egg and they turned out to be peach plum.

Mr. Coates remarked that the pit of the Silver prune is shorter than that of Coe's.

W. H. Pepper, of Petaluma, in answer to questions, stated that Coe's Golden Drop with him is not a regular bearer. He has seen no Silver prunes in his neighborhood which are different from Coe's. The French prune is inclined to over-bear. He believed that prunes to produce good dried fruit should be well grown, fully ripened and well developed. The apricot on the Myrobolan stock does well. The peach on Myrobolan, in Mr. Pepper's experience, does not do well; the union is good, but the after-growth is not good, the leaves turning yellow early in the fall and the tree stopping its growth.

Mr. Klee said he was endeavoring to get to the Myrobolan stock question, because of the importance of the use of the stock if it proves satisfactory. He had examined orchards about Haywards. In one case he saw peach trees, one on Myrobolan, the other on peach stock, and one was good as the other.

John Rock, in answer to a question, spoke in favor of the Myrobolan stock for low moist land. The growth on it seems to be good, but usually 10 to 15 per cent will be lost.

I. A. Wilcox, of Santa Clara, has prunes on Myrobolan on heavy land and they are doing well. Working the French prune on the apricot, he finds the prune overgrows the root.

Mr. Tompkins, of Alameda, spoke of the excellent growth of some false Myrobolan or cherry plum trees on his land in Alameda. He had been offered \$15 each for the trees by a man who wanted the wood for furniture.

Mr. Hatch showed a plum or prune without a name, of which a tree had been found in his neighborhood. It has a transparent skin and when dried makes a very translucent and beautiful dried prune. It was admired by those present, but no one could name it.

Mr. Wilcox asked if prunes grown on wet land would lose more in curing than those grown on dry land.

Judge Blackwood said yes, but he could not tell exactly how much difference there would be. He found that in curing the Italian or Fellenberg prune lost least weight, the French next and the Bulgarian would lose most.

Mr. Wilcox asked about the time for picking the prune to produce best results. He thought if they were ripe enough to be shaken off and then dipped in lye they would not lose so much, but he heard some advocate picking earlier.

Judge Blackwood said a ripe prune would dry down well, but an unripe one would puff up like a toad in the sunshine, and leak the juice out of the stem-hole.

W. H. Pepper exhibited a very handsome large yellow plum, a seedling of his growing, which was well commented upon.

L. F. Moulton, of Colusa, who is making a study of the prune, hoping to prove it a success in Colusa, said he found the French prune doing well there in orchards where it had been grown for some time. At Mr. Totman's place it is doing well, while the Bulgarian



prune, which is a success at Haywards, fails in Colusa. The apricot does excellently in Colusa, being bright-colored and perfectly free from blemishes and freckles. There was some rather rambling discussion on different stocks for fruit trees, but as the subject, "Stocks and Soils suited to them," was chosen for regular consideration at the next meeting, we will not attempt to follow the discussion at this time. Mr. W. W. Smith, of Vacaville, was appointed to open the subject at the next meeting.

Mr. Hatch introduced Mr. McGuire, who has lately come to the State as a member of a local company which will handle the "ripe fruit-carrier," which is already known to many of our readers through notices and advertisements in our columns. Mr. McGuire stated that they wished all fruit-shippers to try them, as they were confident of their good qualities. Experimental shipments of fruit East in these carriers are now being made, of which reports will be made later. The success which attended such shipments across the Atlantic leads them to expect very satisfactory results from California eastward.

The meeting then adjourned.

#### Nurserymen's Association Meeting.

Upon the adjournment of the Horticultural Society, a meeting of the Pacific Coast Nursery-

representing unreliable, and in a great man cases entirely fictitious establishments, they cannot be held as being applicable to the canvassers sent out by well-known and responsible firms. In all cases these latter are provided with proper certificates of their authority to act as agents—a fact to which we would earnestly call the attention of the purchasing public.—W. M. WILLIAMS, R. D. FOX, Committee.

#### Mr. Dickinson's Paper.

While I recognize the right of every American citizen to engage in any kind of legitimate business, or in the sale of any kind of fruit trees, shrubs, plants or flowers, and believe that it may be carried on properly and to the interests of all concerned; and secondly, while I believe the last is sometimes done, and that tree agents might traffic and sell trees in a way which would leave no sting of reproach, yet thirdly, I sincerely regret that I must, in the interests of right and justice, accuse these men of so much misrepresentation and fraud in their dealings, that I am compelled to denounce their course, as unworthy of the confidence of farmers or of any who buy trees. As instances of what I mean I may name the following:

1st. By false statements and outright lying they induce men to buy trees of them at almost fabulous prices, often charging for common apple trees as high as \$1 to \$2 apiece for trees which only cost 10 to 20 cents.

2d. They often get these prices by representing their trees as coming from some distant nursery when, in fact, they are the remains of some old nursery bought on this coast at low prices, so as to get trees to fill their orders cheaply.

3d. They invent names for their trees and

ness to his pal, after a successful day among the pushing, jostling crowd. It is a business, however, that this association does not wish to patronize or help forward. As nurserymen and fruit-growers we denounce all such proceedings. We regard it as the meanest kind of dishonesty to lie and cheat the unsuspecting. To be willing to sell fruit trees under false names is unworthy the character of any man. We believe in right names, honest prices and just dealings with all, and we believe the course of tree agents has been, and continues to be, contrary in all these respects to the interests of the fruit-growers of the country, and we sincerely hope our orchardists will have nothing more to do with them. They have no good name to sustain, no interest whatever to consult, except to get your money. They are not like the nurseryman, whose whole future reputation is tarnished by the least carelessness as to the names and character of the trees he sells. It is therefore hoped that we, as an association, will henceforth do all we can to stop the evils which the people suffer from the practices of these men.

#### Southern California Nurserymen.

The adjourned meeting of the Southern California Nurserymen's Association met at the office of T. A. Garey, Los Angeles, on the 13th inst., at which the following business was transacted:

The Committee on Constitution and By-laws made report, and after due consideration and amending they were adopted. The following officers were elected for the first year:

President, T. A. Garey, Los Angeles; Vice-

Flemish Beauty, Winter Nelis, Beurre Easter, Beurre Hardy, Beurre Clairgeau, Beurre Bosc, Clapp's Favorite, Seckel, Vicar of Winkfield, Doyenne d'Alencon and P. Barry.

Resolutions were passed requesting W. G. Klee, State Inspector of Fruit Pests, to visit the nurseries of Southern California and inspect the same. It was the general sentiment of the members present that if there were any infected nurseries in Southern California they wanted to know it, and the trees would be destroyed, and thought that an injustice was being done in the prejudice that had arisen in some localities against the nurseries of other localities.

Meeting adjourned to meet at same place at 11 A. M., Sept. 4th, and all nurserymen of Southern California are invited to attend.

BYRON O. CLARK, Sec'y.

#### The Percheron Horse Show at Chicago.

The illustration on this page represents the exterior view of a building 700 feet in length, erected for the exhibition of the American Percheron Horse-breeders' Association, to be held in Chicago in connection with the Illinois State Fair, Sept. 6th to 11th. The building itself is one of the best evidences that the Percheron exhibit has been planned and is being executed on a broader scale than any draft-horse show that has ever before taken place in the world, and no one who takes interest in any breed of horses should miss this, the opportunity of a lifetime, for certainly no such collection of draft horses has ever yet been seen together as this show will call out, and it may probably be many years before another such a grand exhibition will take place.

We are informed that nearly 300 pure-bred Percherons will be exhibited by about 50 breeders of the United States and Canada, and that a display of several hundred grade Percherons in harness will be made, showing the different purposes for which they have demonstrated their superiority over all other breeds of horses, thus giving the farmers and stock-breeders of the country an opportunity to see in large numbers the kind of horses that meet ready sale at the most remunerative prices. The State Agricultural Society and the Percheron Association are together offering about \$7000 in prizes, and a large number of gold, silver and bronze medals for Percheron horses.

The jury of awards has been appointed by the highest official representatives of agriculture in three great nations, the Minister of Agriculture of France having appointed Marquis de la Motte Rogné, Inspector-General of the National Studs; Commissioner Colman having appointed the Hon. George B. Loring, ex-Commissioner of Agriculture; and the Minister of Agriculture of Canada having appointed Prof. Andrew Smith, President of the College of Veterinary Surgery at Toronto.

Great interest is being taken throughout the world in the Percheron breed. The Governments of nearly every European country are buying pure Percherons to improve their native breeds, especially Russia, Germany, Italy, and Egypt. Large numbers have also been sent to Great Britain, and the South Americans are importing them in considerable numbers. One of the features of this show will be an exhibit of Percherons bred in the United States, that are to be sent to Japan, and the Japanese Embassy is expected to visit the exhibition and inspect this stock before its shipment.

The Chinese Minister and his suit, also the French Minister to the United States, at Washington, having expressed themselves as desirous of seeing this show, have received invitations, and will probably visit the grounds as guests of the Percheron Horse-breeders' Association.

#### Infant Smokers.

The Oakland City Council has passed and the Mayor approved an ordinance to prevent the smoking of cigarettes by minors in public, as follows:

Section 1. It is hereby declared unlawful for any minor under the age of 16 years to smoke any cigarette in any railway car, street, square, public building or public place in the city of Oakland.

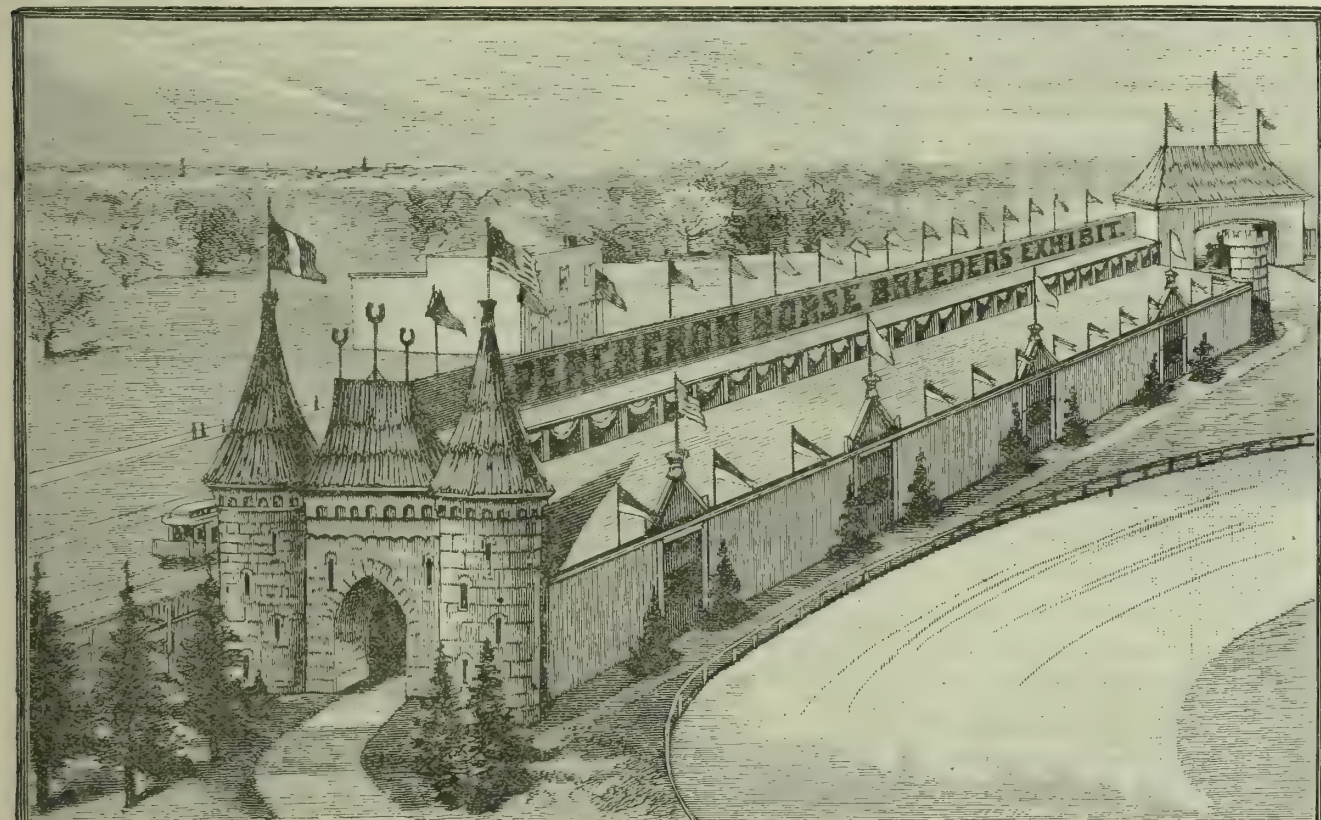
Sec. 2. Any person violating any of the provisions of this ordinance shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be fined not exceeding fifty dollars; and in case said fine be not paid, then the person or persons so fined may be imprisoned in the city prison of the city of Oakland at the rate of one day for every two dollars of the fine so imposed.

Sec. 3. This ordinance shall take effect immediately upon its approval.

Nothing is said as to pipes and cigars, and the practical use of the ordinance, as at present worded, is questionable.

The following, which has been adopted as a town ordinance in Fresno, comes nearer the mark:

Any minor or under the age of 16 years, who, in the streets, or in any of the public places of this city, smokes cigars, cigarettes, or tobacco in any form, is guilty of a misdemeanor, and, on conviction, is punishable by imprisonment in the city or county jail for 10 hours for such offense. And any person who directly or indirectly sells or gives to any such minor in this city cigars, cigarettes, or tobacco in any form, or cigarette paper, is guilty of a misdemeanor.



BUILDING ESPECIALLY ERECTED FOR PERCHERON HORSE EXHIBIT AT ILLINOIS STATE FAIR, CHICAGO, SEPT. 6-11.

men's Association was held, James Shinn, of Niles, presiding; R. D. Fox, of San Jose, Secretary.

A. T. Hatch, of Suisun; R. Brunson, of Oakland; G. M. Gray, of Chico; E. C. Clowes, of Stockton; W. W. Smith, of Vacaville; Luther Burbank, of Santa Rosa; T. C. Baxter, of Haywards; E. Bouguignon, of San Jose; C. M. Silva & Son, of Newcastle; Thomas Meherin, of San Francisco; J. F. Kennedy, of Los Gatos; S. Newhall, of San Jose; James Waters, of Watsonville; James Hutchinson and O. Dickinson, of Oregon, were admitted to membership.

Considerable discussion arose as to the advisability of holding a meeting later in the year, it being finally decided to do so, the matter of arrangements to be left to the Executive Committee. It was specified that such meeting should take place at Sacramento in November, during the session of the Fruit-growers' Convention.

It was ordered, upon motion, that the secretary withhold the tabulated amount of stock sold by members of the organization from all such members as do not send in their individual reports.

The remaining business of the meeting was principally in relation to perfecting the plan of organization.

#### Dishonest Tree Agents.

The following paper was read before the association by Mr. O. Dickinson, of Salem, Oregon, and referred to a committee with power to add to it or eliminate from it such remarks as they deemed proper. Believing that such could not be done without making an almost entirely new paper, the committee concluded to submit it, as read, with the remarks that while the strictures made by Mr. Dickinson are true to a great extent, so far as they apply to agents

shrubby, calling them Russian, Japan, Australian, as the case may be, to induce the buyer to pay the enormous prices which they demand.

4th. Some of these men pay no attention to rightly naming their trees, being as willing to lie and cheat about this as about anything else. A number of these tree agents were through our part of the country last year and took large orders for trees. To fill these orders they bought trees of a nurseryman with whom I am well acquainted, and who will bear testimony to what I say. This nurseryman brought the trees out of his field, all rightly labeled. The first thing these agents did was to take off all his labels and throw the trees promiscuously into one pile. They then went to work and filled their orders out of that pile, and this gentleman told me that they actually filled a family order, when a man wanted early fall and late winter-keeping apples, out of a large pile of sweet June apple trees, which he had thrown down for them as he brought them out of the nursery, so that this unsuspecting farmer actually got about 50 sweet June apple trees, tied in 10 or 12 different bunches, and named according to his order—Red Astracan, Fall Pippin, Northern Spy, Yellow Newtown, etc., to meet his family wants for early and late apples for the year's supply.

Now, it seems to me that this association is not acting improperly, nor unduly intermeddling with other people's business, when it puts forth these warnings to stop such nefarious business. It seems to me that each man is to some extent his brother's keeper, and that in putting forth these warnings we are doing no more than we ought to do—no more, in fact, than a neighbor does who stops a thief from stealing your horse.

These tree agents call it business, no doubt, when they lie and cheat, and call things by wrong names to get your money, and I have heard that the pickpocket calls his work busi-

ness to his pal, after a successful day among the pushing, jostling crowd. It is a business, however, that this association does not wish to patronize or help forward. As nurserymen and fruit-growers we denounce all such proceedings. We regard it as the meanest kind of dishonesty to lie and cheat the unsuspecting. To be willing to sell fruit trees under false names is unworthy the character of any man. We believe in right names, honest prices and just dealings with all, and we believe the course of tree agents has been, and continues to be, contrary in all these respects to the interests of the fruit-growers of the country, and we sincerely hope our orchardists will have nothing more to do with them. They have no good name to sustain, no interest whatever to consult, except to get your money. They are not like the nurseryman, whose whole future reputation is tarnished by the least carelessness as to the names and character of the trees he sells. It is therefore hoped that we, as an association, will henceforth do all we can to stop the evils which the people suffer from the practices of these men.

President, G. W. Ford, Santa Ana; Secretary, Byron O. Clark, Pasadena; Treasurer, J. L. Howland, Pomona; Executive Committee, T. A. Garey, Milton Thomas, of Los Angeles; L. H. Michener, Pasadena; T. S. Ingham, San Bernardino; Andrew Snyder, Los Angeles.

On motion of Byron O. Clark, the society then took up the discussion of "The best varieties of deciduous fruits for propagation and planting," and the following are recommended as the most reliable croppers and best suited to planting in Southern California, it being the general sentiment that we should plant fewer kinds than in the past, and those which had been tested and proved themselves profitable. For apricots it was unanimously decided that Large Roman (or what is known as Early Moorpark in some locations) was the best apricot grown in Southern California, and had always proved a reliable bearer. The Royal was indorsed as second best, and the Turkey was indorsed as a good apricot for home use, coming after all other apricots were gone, but were too juicy for market and canning.

The following kinds of peaches were indorsed for market and canning:

Early Crawford, Bergens Yellow, Foster, Late Crawford, Orange Cling, Sellers' Golden Cling, Salway and Smock. For family use the following, ripening about in the order named: Alexander, Early Strawberry, Early Hale, George Fourth, Stump the World, Old Mixon Free, and Morris White. For nectarines the Hardwick was the only one which had proven a satisfactory bearer. Of apples, the following are recommended: Yellow Newtown Pippin, White Winter, Pearmain, Yellow Bellflower, Ben Davis and Jonathan, for market; for family use, Early Harvest, Red Astracan, Fall Pippin, Skinner's Pippin, Gravenstein and R. I. Greening. The following list of pears were all considered good in their respective season: Bartlett,



## THE STABLE.

## State Fair Racing Entries, 1886.

Following is a list of the entries made for the State Fair races of 1886. It represents the best horses in the State, and in every race there will be so many contestants that the "glorious uncertainty" of the turf will no doubt be frequently exemplified:

## First Day, Sept. 9—Trotting.

No. 1—Occident stake for foals of 1883. Closed in 1884 with 16 nominations.

No. 2—Trotting; purse, \$1000; 2:24 class.

L. E. Clawson, San Francisco, blk. g. La Grange, by Sultan-Georgiana.

J. W. Donathan, San Francisco, blk. g. B. B. by Bellfounder, dam unknown.

J. A. Goldsmith, Oakland, ch. h. Dawn, by Nutwood-Countess, by Whipple's Hambletonian.

John Williams, Stockton, b. g. Wormwood, by Nutwood, dam by Belmont.

Palo Alto Stock Farm, br. m. Carrie C, by Electioneer-Maid of Clay.

E. H. Miller, Jr., Alameda, blk. m. Pansy, by Berlin-Lady Hubbard.

No. 3—Pacing; purse, \$600; 2:35 class.

Eugene Hart, Pleasanton, b. g. Fred Ross, sire and dam unknown.

H. G. Cox, Pleasanton, gr. g. Tony Lee, by Jim Lick, dam by Belmont.

W. M. Billups, Colusa, b. s. Almont Patchen, by Juanita, dam by Gladiator.

Albert Hiller, Woodland, b. g. Yolo, by Victor, dam by St. Clair.

James Lyndon, Sacramento, b. h. Pedro, by Kidder's Rattler-Democrat mare.

V. R. Raymond, Oakland, b. m. Patti, by Chrisman's Patchen, dam by General Knox.

L. H. Todhunter, Sacramento, b. g. Mink, sire and dam unknown.

Dan McCarty, San Francisco, b. g. Peruvian Bitters, by Electioneer-Nellie Walker.

T. Kennedy, San Francisco, gr. g. Peacock, by Whipple's Hambletonian-Patchen mare.

## Second Day, Sept. 10—Running.

No. 4—Introduction stakes, for two-year-olds, \$25 each, \$10 forfeit, \$250 added; \$50 to second, \$25 to third. Winner of any two-year-old race after August 1st to carry 3 lbs.; of two or more, 5 lbs. extra. Dash of six furlongs.

H. Lowden, San Francisco, b. f. Leap Year, by Norfolk-Lady Jane.

W. M. Murry, Sacramento, b. c. Del Norte, by Flood-Ester.

W. M. Murry, Sacramento, b. c. Oro, by Norfolk-Golden Gate.

W. M. Murry, Sacramento, c. h. Voltigeur, by Bullion-Jessamine Porter.

L. H. Todhunter, Sacramento, b. c. Safe Ban, by King Ban-Herzogovina.

Theo. Winters, Sacramento, b. f. Miss Ford, by Enquirer-Bribery.

Thos. Atchison, San Francisco, ch. c. Robson, by Joe Hooker-Roseland.

Albert Morine, Los Angeles, b. f. Carmelita, by Hardwood-by Shiloh.

W. B. Todhunter, Sacramento, ch. c. Jim Duffy, by Joe Hooker-by Wildidle.

M. F. Tarpey, West End, Alameda, ch. f. Not Idle, by Wildidle-Bonanza.

W. L. Pritchard, Sacramento, b. f. Lady Leinster, by Leinster-Addie A.

W. L. Pritchard, Sacramento, ch. f. Idalene Cotton, by Jim Brown-Lizzie P.

M. Johnson, Sacramento, ch. f. by Enquirer-Analyne.

W. L. Appleby, Santa Clara, ch. c. C. H. Todd, by Joe Hooker-Rosa B.

C. Dorsey, Oakland, ch. c. Fred Archer, by Thad Stevens-Brown Bess.

Matt Storms, Oakland, br. f. Narcela, by Norfolk-Addie C.

B. C. Holly, Butte City, Montana, br. c. Corrigan, by imp. Kyrle Daly-Daisy Miller.

No. 5—California Breeders' Stakes, for foals of 1883, \$50 entrance p. p., \$300 added; \$100 to second, \$50 to third. Closed in 1885 with five entries. Dash of one mile and a quarter.

No. 6—Capital City stakes, for four-year-olds, \$50 each, \$25 forfeit, \$15 if declared on or before September 1st; \$300 added; \$100 to second, \$50 to third. Weights five pounds below the scale; winner of any race over one mile after August 1st to carry rule weights. Dash of one mile and five furlongs.

W. M. Murry, Sacramento, b. h. Billy Ayres, by Shannon-Lady Clare.

Wm. Boots, Milpitas, blk. g. Index, by Thad Stevens-Gypsy.

S. C. Tryon, Sacramento, b. g. Jim Long, by Shannon-Florence Anderson.

T. G. Jones, Pleasanton, b. c. by Joe Daniels-Queen Emma.

Chas. A. Brown, West Berkeley, ch. m. Alameda, by Springbok-Alma.

B. C. Holly, Butte City, Montana, ch. c. Doubt, by St. Martin-Perhaps.

No. 7—Free purse, \$250. Winners of any race after August 1st, or the value of \$300, to carry five pounds; maidens allowed, if three years old, five pounds; if four years or upward, 15 pounds. Mile heats.

Lee Shaner, Salinas, b. m. Daisy H, 4, by Wheatley-Black Maria.

Kelly & Lynch, Sacramento, b. g. Jou Jou, 5, by Monday-Plaything.

J. C. Simpson, Oakland, b. g. Sir Thad, 5, by Norfolk or Thad Stevens-Lady Amanda.

F. Depositer, b. h. Albermarle, a., by Shannon-by Ashland.

W. B. Todhunter, Sacramento, blk. h. John A, 5, by Monday-Lady Clare.

T. Hazlett, Sacramento, ch. g. Fred Collier, a., by Joe Hooker-Puss.

J. R. Ramsey, Meridian, b. h. Monarchy, 5, by Monarch-St-Notable.

T. G. Jones, Pleasanton, ch. g. St. Patrick, 5, by Hubbard by Monday.

H. J. Robinson, Gridley, b. m. Emma T, 5, unknown.

Hill & Gries, San Buenaventura, b. f. Allie Hill, 3, by Wildidle-May Wade.

D. Bridges, Los Angeles, b. h. Dublin Boy, 5, by Grinstead-Amanda Fortune.

P. A. Finnigan, San Francisco, b. g. Edwin F, by Norfolk-Marian.

## Third Day, Sept. 11—Trotting.

No. 8—Four-year-old trotting stake; \$100 entrance, of which \$25 must accompany nominations, \$25 payable July 1st, and the remaining \$50 payable August 10th; \$400 added. Closed April 15th with eight nominations. Mile heats, 3 in 5.

No. 9—Trotting; purse, \$800; 3:00 class.

Palo Alto Stock Farm, Menlo Park, b. c. Daly, by General Benton-Dolly.

John Surgeon, Colusa, ch. m. Daisy S, by Tilton Almont-by Rattler.

Nathan Coombs, Napa City, b. m. Lily Stanly, by Whippleton-Dolly McMahon.

W. S. Ray, San Francisco, b. h. Perihelion, by Admiral-Flora.

R. Hughes, San Francisco, ch. g. St. David, by George M. Patchen, Jr.-Matty Howard.

Gus Walters, Oakland, b. m. Belle S, Wm. Henry, Oakland, b. h. Romeo.

M. McManus, Oakland, br. g. Lot Slocum, by Electioneer-a Mohawk mare.

A. L. Hinds, Oakland, b. g. Gus Wilkes, by Mambrino Wilkes-by Bonner.

D. M. Reavis, Chico, ch. g. Ned Forrest, by Blackbird-unknown.

C. S. Lowell, Sacramento, b. h. Fallis, by Electioneer-Felicia.

James M. Learned, Stockton, b. m. Reality, by Reliance-Ernestine.

John Williams, Stockton, b. m. Lottie M, by Nephew-by Chieftain.

No. 10—Trotting; purse, \$1200; 2:20 class.

J. C. Simpson, Oakland, br. h. Antevolo, by Electioneer-Columbine.

A. Waldstein, San Francisco, b. h. Albert W, by Electioneer-by John Nelson.

J. A. Goldsmith, Oakland, b. m. Manon, by Nutwood-Addie.

J. R. Hodson, Sacramento, b. g. Bay Frank, by Tornado-by State of Maine.

## Fourth Day, Sept. 13—Running.

No. 11—Premium stake, for all ages, \$50 each, \$25 forfeit; \$15 if declared on or before September 1st; \$300 added; \$100 to second horse; \$50 to third. Maidens, if three years old, allowed five pounds; if four years old or over, seven pounds. Dash of six furlongs.

B. P. Hill, San Diego, blk. f. Minnie, 3, by Reveille-unknown.

B. P. Hill, San Diego, gr. g. Johnny Grey, a., by Shiloh-Margery.

Kelly & Lynch, Sacramento, ch. g. Tom Atchison, 4, by Joe Hooker-Bay Kate.

Kelly & Lynch, Sacramento, b. g. Jou Jou, 5, by Monday-Plaything.

F. Depositer, Sacramento, br. f. Edelweiss, 3, by Joe Hooker-Yolona.

M. F. Tarpey, Alameda, ch. f. Not Idle, 2, by Wildidle-Bonanza.

T. Hazlett, Sacramento, b. g. Panama, 6, by Shannon-Abbie W.

James H. Muse, Sacramento, gr. g. Stoneman, 6, by Kirby Smith-Hunky Dory.

W. L. Pritchard, Sacramento, ch. m. Lizzie Dunbar, 5, by Bazaar-Tibby Dunbar.

S. C. Tryon, Sacramento, b. h. Pat Haydon, 4, by Leinster-by Norfolk.

W. L. Appleby, Santa Clara, b. m. Neilson, 5, by Wildidle-Susie Williamson.

W. P. Eshon, Weiser City, Idaho, g. h. Tom Collins, 5, by Winkski-unknown.

L. A. Blasingame, Fresno, ch. c. Confidence, a., by Walnut Bark-Dolph.

A. C. Smith, Plymouth, b. g. Bodie, a., by Bodie.

B. C. Holly, Butte City, Montana, br. f. Irish Lass, 4, by imp. Kyrle Daly-Daisy Miller.

No. 12—California annual stakes, for foals of 1884, \$100 entrance; \$25 forfeit, \$250 added; \$100 to second, \$50 to third. Closed in 1885 with 15 nominations. Dash of one mile.

No. 13—La Rue stakes, a handicap for all ages, of \$100 each, \$50 forfeit, \$500 added; \$150 to second, \$100 to third. Weights announced September 2d. Declaration \$20, to be made with the secretary by 8 o'clock P. M., September 4th. In no event will declaration be received unless accompanied with the amount fixed. Dash of two miles and a quarter.

J. C. Simpson, Oakland, b. g. Sir Thad, 5, by Norfolk or Thad Stevens-Lady Amanda.

A. D. West, Grass Valley, b. g. Billy the Kid, a., by Leinster-Lily Simpson.

Kelly & Lynch, Sacramento, b. f. Moonlight, 3, by Thad Stevens-Twilight.

Caleb Dorsey, Oakdale, br. h. Birdcatcher, a., by Specter-Pet.

W. B. Todhunter, Sacramento, blk. h. John A, 5, by Monday-Lady Clare.

T. Hazlett, Sacramento, ch. g. Fred Collier, a., by Joe Hooker-Puss.

W. Boots, Milpitas, blk. g. Index, 4, by Thad Stevens-Gypsy.

T. G. Jones, Pleasanton, b. h. 4, by Joe Daniels-Queen Emma.

James Foster, Chico, b. h. A. Walrath, for Heenan, by Norfolk-Ada C.

No. 14—Selling purse, \$250; \$50 to second. Fixed valuation, \$1000; two pounds off for each \$100 below two pounds added for each \$100 above fixed value. Dash of one mile and one furlong.

W. M. Murry, Sacramento, b. h. Billy Ayres, 4, by Shannon-Lady Clare.

H. J. Robinson, Gridley, b. m. Emma T, 5, James Foster, Chico, b. m. Lady Foster, a., by Norfolk-Lady Jane; \$500.

Lee Shaner, Salinas, b. g. Belshaw, a., by Wildidle-Nettie Brown.

A. D. West, Grass Valley, b. g. Billy the Kid, a., by Leinster-Lily Simpson.

Kelly & Lynch, Sacramento, b. g. Plato, 3, by Shannon-Planetia.

J. C. Simpson, Oakland, b. g. Sir Thad, 5, by Norfolk or Thad Stevens-Lady Amanda; \$500.

T. Hazlett, Sacramento, ch. g. Joe Chamberlain, 5, by Rifleman-by Norfolk; \$500.

W. L. Pritchard, Sacramento, b. h. Frank Rhoads, a., by Leinster-Abbie A; \$500.

M. Johnson, Sacramento, b. m. Leda, 3, by Nathan Coombs-Gypsy; \$1500.

S. C. Tryon, Sacramento, b. h. Pat Haydon, 4, by Leinster-by Norfolk; \$500.

J. B. Ramsey, Meridian, b. h. Monarchy, 5, by Monarchist-Notable; \$500.

W. L. Appleby, Santa Clara, ch. f. Laura Gardner, a., by Jim Brown-Avail.

T. G. Jones, Pleasanton, ch. g. St. Patrick, 5, by Hubbard by Monday; \$500.

Gus Pacheco's b. m. Dairy Maid, 6, by Shannon-Myrtle; \$500.

B. P. Hill, San Diego, gr. f. Mollie Capron, 3, by Reveille, dam unknown.

Hill & Gries, San Buenaventura, b. f. Allie Hill, 3, by Wildidle-Mary Wade; \$1000.

P. A. Finnigan, San Francisco, b. g. Edwin F, by Norfolk-Marian; \$300.

## Fifth Day, Sept. 14—Trotting.

No. 15—Three-year-old trotting stake. Conditions same as No. 8. Closed April 15th with eight nominations.

No. 16—Trotting; purse, \$1000; 2:36 class.

P. Garrett, Chico, ch. g. Wallace G, by Plumas-Princess.

Ariel Lathrop, San Francisco, b. g. Spry, by General Benton-Sprite.

T. W. Barstow, San Jose, b. m. Jennie B, Palo Alto Stock Farm, b. c. Azmoor, by Electioneer-Mamie C.

J. N. Ayres, Oakland, b. h. Bay Rose, by Sultan-by The Moor.

J. D. Carr, Salinas, b. g. Merchant, by Carr's Mambrino-Accident.

J. M. Learned, Stockton, b. m. Reality, by Reliance-Ernestine.

John Williams, Stockton, b. m. Lottie M, by Nephew-by Chieftain.

M. McManus, Oakland, ch. h. Como, by St. Elmo-Juno.

No. 17—Trotting; purse \$1200; free for all.

E. H. Miller, Jr., Alameda, b. g. Adair, by Electioneer-Addie Lee.

San Mateo Stock Farm, b. h. Guy Wilkes, by George Wilkes-Lady Bunker.

Santa Rosa Stock Association, b. h. Anteeo, by Electioneer-Columbine.

## Sixth Day, Sept. 15—Running.

No. 18—Sunny Slope stakes, for two-year-old fillies, \$25 each, \$15 forfeit; \$10 if declared on or before September 1st, \$150 added; \$25 to second. Those not having run first or second in any race this year allowed three pounds. Dash of five furlongs.

H. Lowden, San Francisco, b. f. Leap Year, by Norfolk-Lady Jane.

Albert Morine, Los Angeles, b. f. Carmelita, by Hardwood-by Shiloh.

Theo. Winters, Sacramento, b. f. Miss Ford, by Enquirer-Bribery.

M. F. Tarpey, Alameda, ch. f. Not Idle, by Wildidle-Bonanza.

M. Johnson, Sacramento, ch. f. by Enquirer-Analyne.

Ed. Hooman, Oakland, ch. f. Ellen E, by Wheatley-by Joe Daniels.

No. 19—Shafter stakes, for three-year-olds, of \$50 each, \$25 forfeit, \$15 if declared before September 1st, \$300 added; \$100 to second, \$50 to third. Winner of any three-year-old race after August 1st to carry five pounds; of two or more, 10 pounds extra. Dash of one mile and a quarter.

Kelly & Lynch, Sacramento, b. f. Moonlight, by Thad Stevens-Twilight.

L. H. Todhunter, Sacramento, ch. c. Monte Cristo, by King Alfonso-Galanthus.

Theo. Winters, Sacramento, b. f. Miss Courtney, by Norfolk-Ballinette.

F. Depositer, Sacramento, br. f. Edelweiss, by Joe Hooker-Yolona.

M. Johnson, Sacramento, b. f. Leds, by Nathan Coombs-Gypsy.

R. S. Fallon, Haywards, br. f. Harriet, by Flood-Hattie Hawthorne.

Caleb Dorsey, Oakdale, ch. c. Pickpocket, by Joe Daniels-Mattie C.

Hill & Gries, San Buenaventura, b. f. Allie Hill, by Wildidle-Mary Wade.

No. 20—Del Paso stakes, for all ages, \$50 entrance, \$25 forfeit, \$25 if declared on or before September 1st, with \$300 added; \$100 to second, \$50 to third. Three-year-old maidens allowed five pounds; four-year-olds, seven pounds; five-year-olds and upward, 10 pounds. Three-quarter mile heats.

B. P. Hill, San Diego, ch. g. 4, by Reveille.

W. L. Appleby, Santa Clara, b. m. Neilson, 5, by Wildidle-Susie Williamson.

Kelly & Lynch, Sacramento, ch. g. Tom Atchison, 4, by Joe Hooker-Bay Kate.

Kelly & Lynch, Sacramento, b. g. Jou Jou, 5, by Monday-Plaything.

J. C. Simpson, Oakland, b. g. Sir Thad, 5, by Norfolk or Thad Stevens-Lady Amanda.

T. Hazlett, Sacramento, b. g. Panama, 6, by Shannon-Abbie W.

C. A. Brown, West Berkeley, ch. m. Alameda, by Springbok-Alma.

D. Bridges, Los Angeles, b. h. Dublin Boy, 5, by Grinstead-Amanda Fortune.

B. C. Holly, Butte City, Montana, ch. c. Doubt, 4, by St. Martin-Perhaps.

No. 21—Free purse, \$300; \$50 to second horses that have not won this year allowed five pounds. Winners this year of any race of the value of \$400 to carry five pounds extra. Winner of No. 7, 10 pounds extra. Dash of one mile.

W. M. Murry, Sacramento, b. h. Billy Ayres, 4, by Shannon-Lady Clare.

Lee Shaner, Salinas, b. m. Daisy H, 4, by Wheatley-Black Maria.

H. J. Robinson, Gridley, b. m. Emma T, 5, James Foster, Chico, b. h. A. Walrath, for Heenan, by Norfolk-Ada C.

James Foster, Chico, b. m. Amy B, a, by Ballot Box-Lula Riggs.

Hill & Gries, San Buenaventura, b. h. Allie Hill, 3, by Wildidle-Mary Wade.

T. G. Jones, Pleasanton, b. m. Dairy Maid, 6, by Shannon-Myrtle.

T. G. Jones, Pleasanton, b. h. 4, by Joe Daniels-Queen Emma.

Caleb Dorsey, Oakdale, ch. c. Pickpocket, 3, by Joe Daniels-Mattie C.

Caleb Dorsey, Oakdale, ch. c. Fred Archer, 2, by Thad Stevens-Brown Bess.

A. D. West, Grass Valley, b. g. Billy the Kid, a, by Leinster-Lily Simpson.

R. S. Fallon, Haywards, br. f. Harriet, 3, by Flood-Hattie Hawthorne.

W. L. Appleby, Santa Clara, ch. f. Laura Gardner, 2, by Jim Brown-Avail.

D. Bridges, Los Angeles, b. h. Dublin Boy, 5, by Grinstead-Amanda Fortune.

B. P. Hill, San Diego, gr. f. Mollie Capron, 3, by Reveille.

J. B. Ramsey, Meridian, b. m. Lady Cleveland, 5, by King Alfonso-Barrio.

T. Mazlett, Sacramento, ch. g. Joe Chamberlain, 5, by Rifleman-by Norfolk.

T. Gault, San Jose, b. h. Wild Eye, by Wildidle-Alpha.

Matt Storms, Oakland, ch. h. 3, by Monday-Robin Girl.

L. A. Blasingame, Fresno, ch. h. Confidence, by Walnut Bark-Dolph.

Theo. Winters, Sacramento, b. f. Miss Courtney, 3, by Norfolk-Ballinette.

W. L. Pritchard, Sacramento, ch. f. Lizzie Dunbar, 5, by Bazaar-Tibby Dunbar.

W. B. Todhunter, Sacramento, blk. h. John A, 5, by Monday-Lady Clare.

Kelly & Lynch, Sacramento, b. g. Plato, 3, by Shannon-Planetia.

Kelly



\$50 entrance, \$15 forfeit; \$300 added, of which \$100 to second, \$50 to third; \$200 additional if 1:41½ is beaten. Stake to be named after the winner if Nighthawk's time (1:42½) is beaten. One mile.

H. Lowden, San Francisco, b. f. Leap Year.  
W. L. Appleby, Santa Clara, b. m. Nielsen.  
D. Bridges, Los Angeles, b. h. Dublin Boy.  
B. P. Hill, San Diego, ch. g. by Reveille.  
W. L. Pritchard, Sacramento, ch. m. Lizzie Dunbar.  
T. Hazlett, Sacramento, b. g. Panama.  
W. B. Todhunter, Sacramento, blk. h. John A. Kelly & Lynch, Sacramento, b. g. Jou Jou.  
W. M. Murry, Sacramento, b. c. Del Norte.  
B. C. Holly, Butte City, ch. c. Doubt.

No. 29—Free purse, \$250, for all ages, of which \$50 to second. Horses not having won at this meeting allowed 5 pounds. Horses that have not run second or better at this meeting allowed 10 pounds. One mile and a sixteenth and repeat.

Lee Shaner, Salinas, b. m. Daisy H.  
Jas. Foster, Chico, b. m. Lady Foster.  
M. Johnson, Sacramento, b. f. Leda.  
Kelly & Lynch, Sacramento, b. g. Plato.  
J. C. Simpson, Oakland, b. g. Sir Thad.  
T. Hazlett, Sacramento, ch. g. Fred Collier.  
T. G. Jones, Pleasanton, ch. g. St. Patrick.  
C. A. Brown, West Berkeley, ch. m. Alameda.  
Hill & Gries, San Buenaventura, b. f. Allie Hill.  
B. C. Holly, Butte City, br. f. Irish Lass.  
P. A. Finnigan, San Francisco, b. g. Edwin F.  
W. Boots, Milpitas, blk. g. Index.

Ninth Day, Sept. 18—Trotting.

No. 30—Champion stallion trotting purse, \$1500; free for all stallions.

Santa Rosa Stock Association, b. h. Anteeo.  
M. McManus, Oakland, ch. h. Como.  
San Mateo Stock Farm, b. h. Guy Wilkes.  
J. C. Simpson, Oakland, br. h. Antevolo.

No. 31—Trotting; purse, \$1000; 2:22 class. did not fill.

No. 32—Trotting; purse, \$1000; 2:30 class.

A. L. Hinds, Oakland, b. g. Gus Wilkes.  
Jas. M. Learned, Stockton, b. h. Adrian.  
Ariel Lathrop, San Francisco, b. c. Norval.  
A. T. Jackson, Chico, b. g. Ed.  
T. W. Barstow, San Jose, b. m. Jennie B.  
D. M. Reavis, Chico, ch. g. Ned Forrest.  
S. K. Trefry, Sacramento, b. h. Apex.  
J. H. Tennant, Pinole, b. m. Twinkle.  
G. Walters, Oakland, ch. m. Maid of Oaks.  
J. R. Hodson, Sacramento, blk. m. Kate Bender.  
J. Spurgeon, Chico, ch. m. Daisy S.  
N. Coombs, Napa, b. m. Lily Stanly.  
M. McManus, Oakland, ch. h. Como.  
J. B. Kelly, Los Angeles, br. g. Valentine.

### Relative Strength of Wet and Dry Timber.

In reply to a statement by the *American Miller*, that "wet timber is not as strong as dry; in some cases it has not half the strength of dry," a correspondent of that paper writes as follows: "In September, 1876, the Lanesboro Mills, Lanesboro, Minn., were burned, and that fall we rebuilt them, and began making flour the next March. We used sawed pine (taken out of the Mississippi river) for joists, 3 by 12 inches, 12 feet long, and sized them, laying them on top of the girders, to get their full strength, and then used ½-match flooring. The joists were placed 12 inches from center to center, leaving nine inches between them. In the fall of 1877 we piled wheat on the floor 26 feet deep in the bins, and the joists, yet wet and green, only sagged a trifle, and carried the immense weight safely. Two years later the same joists were dry from the heat of our very large stove. We loaded the floor with 24 feet of wheat and six joists broke off nearly square in the middle, and others were cracked. In the first instance the bins held 360 tons of wheat while the joists under them were green; when the joists were dry 300 tons or less broke several of them. This shows that green pine is stronger than dry pine, as the wood becomes brash, or brittle, on drying, and is not as strong as when green. This is caused by the sap drying and leaving only solid matter in the capillary tubes, and they cannot move one on another, while if the timber is green the tubes are full of water, and can bend or move one on another. I know of but two kinds of wood that are stronger dry than green, and they are maple and white oak."

**ANIMAL POWER VS. STEAM.**—Mr. A. Sanson, in an article in a recent number of the *Revue Scientifique*, states that from a comparison of animal and steam power, in France at least, the former is the cheaper motor. In the conversion of chemical to mechanical energy, 90 per cent is lost in the machine, against 68 in the animal. He finds that the steam horse power, contrary to what is generally believed, is often materially exceeded by the horse. The cost of traction on the Montparnasse-Bastille line of railway he found to be for each car, daily, 57 francs, while the same work done by the horse cost only 47 francs; and he believes that, for moderate powers, the conversion of chemical into mechanical energy is more economically effected through animals than through steam engines.

A BLACK SNAKE, measuring four feet three inches in length, has been captured in Tasmania, which, on opening, was found to contain the unprecedented number of 109 young ones. The greatest number ever found in a similar snake was 32.

### Irrigation Map of California.

In view of the great interest which the subject of irrigation is now awakening, and as the possibility is hinted at of a commission to examine the State and report on the feasibility of a general system of irrigation and the laws to secure it, we have thought it would be timely to present in this issue a sketch of a study of the subject and a report made upon it some years ago by a commission appointed by the United States Government. No doubt if the subject be taken up anew the conclusions of the early report will have fresh interest. This report is not available to the general public, as copies of it have long been scarce. By sketching the conclusions reached, and reproducing upon the following pages the map used by the commission to illustrate its points, we give information which we trust will be acceptable to our readers. The map shows only the great central valleys of the State and the adjacent country as they then existed. Since then, it will of course be understood, certain changes have taken place. Railroad lines have been extended, many new irrigation canals have been constructed, and perhaps the most notable geographical change is the vast decrease in the area of Tulare lake, owing to the taking out of the river water near the mountains for irrigation. To-day much of the area which was within the margin of the lake when the map was made is high and dry and forms a part of the famous artesian well region of Tulare county. The reproduction of the map and reduction in size to come within our pages has disarranged the scale to which it was originally drawn. The township lines which cross the map at right angles are six miles apart and can be taken as the basis of any measurement which the reader may desire to make.

Some years ago the President of the United States, by authority of Congress, appointed a Board of Commissioners on the irrigation of the San Joaquin, Sacramento and Tulare valleys of the State of California. This board consisted of the late Col. B. S. Alexander, Corps of Engineers, U. S. A., Col. Geo. H. Mendell, Corps of Engineers, U. S. A., and Prof. George Davidson, U. S. Coast and Geodetic Survey. This board made an examination of the rivers and lakes in these valleys, and submitted a report to Congress on the subject, accompanying which were several maps. One of these we reproduce on the following pages, as it shows the system proposed in the "great valley of California."

The map embraces the San Joaquin, Tulare, and Sacramento valleys, and shows the Sierra Nevada mountains on the east side of the valleys, and the Coast Range of mountains on the west side, to the summits of the respective ranges. It shows the great valley of California and the foothills and mountains by which it is surrounded; all the lakes, rivers, and principal creeks, with their catchment areas; the overflowed or swamp lands, of which there are about 1,225,000 acres; the division into counties, and the railroads and principal towns.

On this map the canals that had already been constructed when it was drawn are laid down, and also the canals that had been projected and actually surveyed. The main feature, however, is the hypothetical system of irrigating canals, shown in dotted lines.

On the eastern side of the great valley, all the way from the southern end of Tulare valley, south of Kern Lake to Red Bluff, the ground rises from the lowest depressions or central lines of drainage in a gentle inclined plain, swelling then into undulations, and then into foothills, which, as we proceed eastward, rise into mountains culminating in the Sierra Nevada.

On the western side of the valley, the ground rises in plains of gentle slope, then swells into foothills, then mountains, culminating in the Mount Diablo range on the west side of the San Joaquin and Tulare valleys, and in the Coast Range on the west side of the Sacramento valley.

The ascent from the foothills to the summit of the mountains is much steeper on the western side of the great valley than it is on the eastern side, and the drainage area is much smaller on the western side than it is on the eastern.

Again, the Sierra Nevada being much higher than the Coast Range or the Mount Diablo range of mountains, the consideration of moisture, or amount of rainfall and snow in a year,

lower mountains to the westward. An inspection of the map shows a marked contrast as regards the water supply of the eastern and western sides of the valley.

This great valley of California contains in one body an area of almost level plains equal in aggregate to the States of Massachusetts, Connecticut and Rhode Island, and greater than that of Maryland, or of New Jersey and Delaware.

The examination by the Board took them over the entire valley and foothills, and they visited all the principal and most of the small streams of the eastern and western sides. From rough measurements they became satisfied that with well-constructed main irrigating canals to receive and conduct the waters of its streams and lakes with the secondary, tertiary and other ditches leading therefrom, and with a proper system of distribution of water, there is ample water to irrigate a large part of the whole valley; and, moreover, that if the waters were properly stored in those localities where large areas of good land exist with the smallest amount of rainfall, there would be sufficient water to irrigate the whole valley. But the system of irrigation would have to be of the highest character to attain this end; with some exceptions the disjointed canals now constructed could not be made to approximate such a result, and when others are added in similar defiance of sound engineering, the result will be a partial good for only part of the valley, and will lead to an intricacy of endless legal troubles. Those canals that have been properly consolidated with an extensive system

#### The System of Irrigation.

We see from the topographical features of the eastern slope of the great valley that although water for irrigation is abundant, yet there cannot be any long or continuous canal on that side, because all main rivers and many smaller streams flow down from the Sierra Nevada mountains and enter the plains in a direction more or less perpendicular to the Sacramento and San Joaquin rivers, into which nearly all of these rivers finally empty. No continuous canal can, therefore, be built, without great cost, along the foothills on the east side of the valley, because such a canal would cross the rivers escaping from the Sierra Nevada mountains, generally at right angles. The expense of bridging these streams with aqueducts or siphons to carry an irrigation canal in this country, with the present price of labor and material, would be enormous. The system of irrigation on the eastern side of the great valley must, therefore, be by many short canals, so as to avoid crossing the different rivers and smaller streams by aqueducts. Each river may have one or more dams thrown across it in the most favorable places.

#### Dams.

All other considerations being the same, the higher up the stream the dams are placed the better, because it will always be desirable that the location and plan of the canal should be adapted to the irrigation of the largest area practicable at reasonable cost; and, besides, by the keeping the canals which draw their supplies of water from the main rivers on a higher level, we will be enabled to draw water from them to supply those canals which are fed from the smaller streams, such as the Fresno, Chowchilla, Calaveras, Cosumnes, and Bear rivers, as well as many others still smaller, which do not head in the high mountains, and whose water will, therefore, fail in the dry season. These dams across the larger rivers, as a general thing, will not be for the purpose of storing the river water, however desirable such storage might be, but for the purpose of raising the surface of the water to such a height as will enable it to be carried out over or through the banks of the rivers and get the canals into the plains which are to be irrigated at the least possible expense.

Each main river on the east side of the valley may thus have two canals, one on its right bank, the other on its left bank, and these main canals may be carried along on the proper grade, so as to intersect the similar canals of the adjacent rivers to the right and left, supplying water, also, where it is wanted, and where it can be made available to those smaller canals on a lower level, which draw their supplies from the streams that do not head high enough in the mountains to have a perennial supply.

The proper location of the dams across the main rivers, and of the head-works and alignment of the main exterior canals, will present the most difficult and important problem which the hydraulic engineer undertaking the irrigation of the eastern side of the great valley will have to solve.

The dividing line between a cost too great, in order to embrace more land, and the sacrifice of land that should be irrigated, will often have to be carefully determined by financial considerations.

It may be remarked that the banks of the rivers as well as of the smaller streams, as they flow through the lower plains, are, in many cases, higher than the plains to the right and left. The increased elevation of the banks of the rivers and creeks is usually discernible by the naked eye; but where instrumental levels have been taken, the increased height of the banks in some cases appears to be marked. Thus, on the Sacramento river, a few miles south of Colusa, the bank on the west side of the river was found by accurate levels to be 21 feet higher than the land at a distance of two and a half miles westward from the river on the lower parts of the plains. Where the river banks are higher than the adjacent country, it will be necessary to carry the primary or secondary canals along on these banks in order that the adjacent plains may be irrigated.

#### Influence on Navigation.

From observations of the board they believe that if a general system of irrigation of the San Joaquin, Tulare and Sacramento valleys is carried out, the effect of such irrigation will have very little influence on the navigation of the Sacramento and San Joaquin rivers, which are the only navigable rivers in the great valley of California.

It should be observed that the quantity of water that will be used for the irrigation of the valleys mentioned above will be only a portion of the flow of these two rivers at and below the points at which they are now navigable; and of this portion a certain quantity will find its way back into the rivers again by percolation and underground drainage after it has done its work of irrigation. This will be particularly true of the San Joaquin river, where the greatest amount of irrigation is required.

This river is navigable for steamboats in its high stage only as high as the mouth of Fresno Slough, where the head-works of the San Joaquin and King's River canal are located, and in its lowest stages only as high as Stockton Slough, which is below the influence of the tides. Now, during its high stages, when water is always abundant in the rivers flowing from the Sierra Nevada, the San Joaquin river receives the drainage of the whole Tulare valley through Fresno Slough, a few miles below Watson's ferry. The irrigation of the great valley above this point can therefore have very little influence on the navigation below it, for it is only the quantity of water which is taken up by the increased evaporation due to irrigation, and that going to form a component part of the increased vegetation of the country, that is lost to navigation.

After once wetting the soil down to the water-bearing strata, all the remainder of the water of irrigation will be carried off by underground drainage, and will find its way into the river at or above the point where winter navigation ceases. Indeed, it may well be questioned whether the irrigation of the southern end of the great valley will not tend rather to improve than to injure the navigation of the river; for the water of irrigation will be held back during the floods, when it is not wanted for navigation, and that portion of it which finds its way again into the river by underground drainage will do so in a great measure when the river is falling, and at the time, therefore, when it is wanted for navigation.

It is the belief of the Board of Engineers that the irrigation of the great valley of California in the general manner sketched on the map will have no injurious effect on the navigation of the San Joaquin and Sacramento rivers except for a short time, at a certain stage of the waters, and for a short distance below the points where the proposed canals leave them, viz., the mouth of Fresno Slough, on the San Joaquin, and Red Bluff on the Sacramento. Even here they do not think that the injury to navigation will be at all serious.

The canals for irrigation on the western side of the valley, owing to the necessity of giving them a gentle slope, may easily be made navigable. The San Joaquin and Kings river canal, as far as constructed, is navigable, and its continuation as projected will furnish a more certain and cheap navigation than that of the Upper San Joaquin river.

A canal from the Sacramento river, leaving it at Red Bluff, on its western side, may readily be made navigable. Thus these two navigable canals would afford compensation to any supposed or real injury they might do to the navigation of the rivers. When it is considered that no canal for navigation could be proposed in this or any other part of the United States without the possible or supposed injury of some railroad—and, in fact, that no great public work of any kind can be carried into execution without injuriously affecting some existing interests—the engineers think, if a comprehensive scheme for the irrigation of the great valley of California is ever undertaken, the effect of such irrigation on the navigation of its rivers may be disregarded.





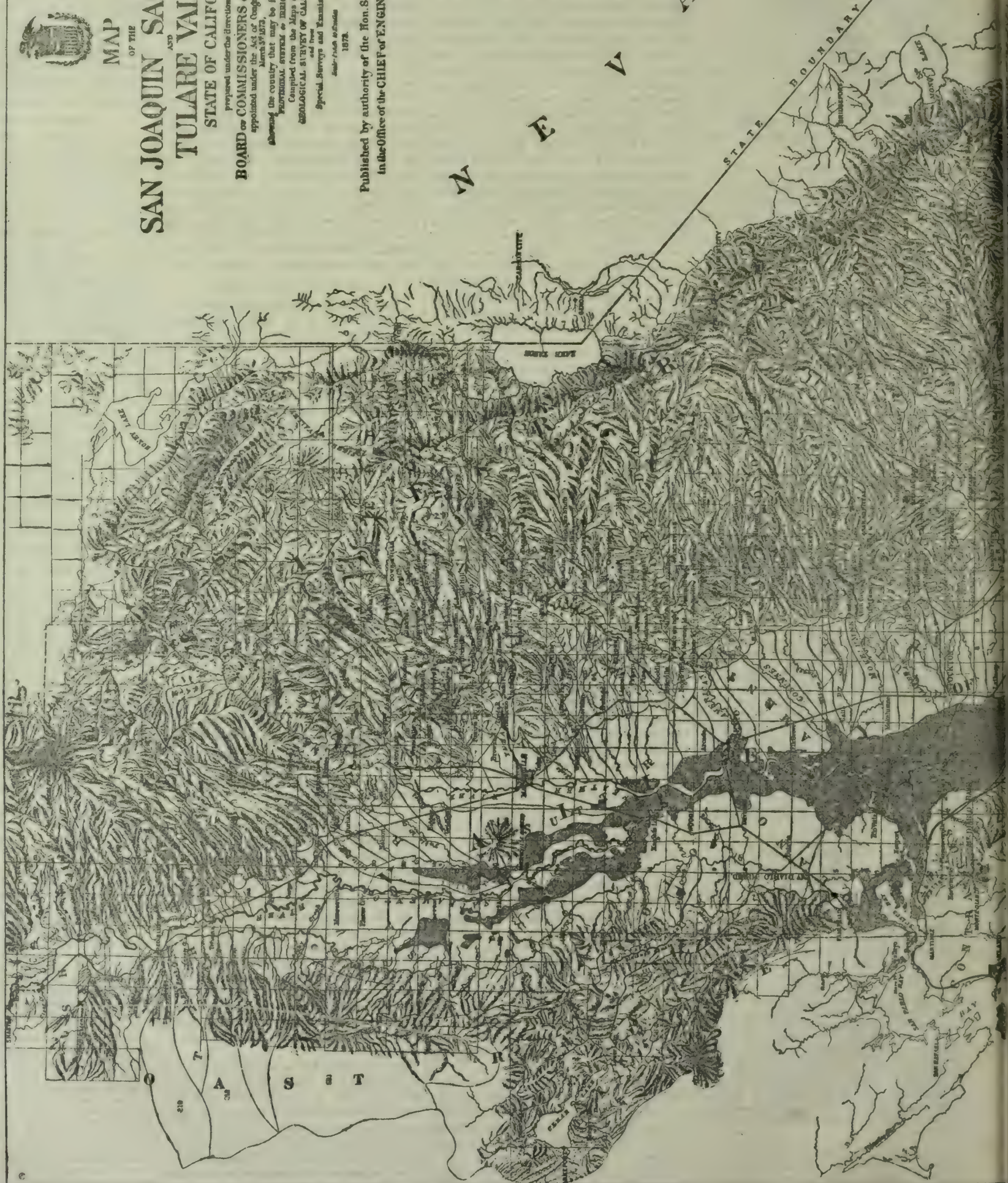
MAP  
OF THE

# SAN JOAQUIN SACRAMENTO AND TULARE VALLEYS STATE OF CALIFORNIA

Prepared under the direction of the  
**BOARD OF COMMISSIONERS OF IRRIGATION**  
appointed under the Act of Congress approved  
March 3, 1872,  
showing the country that may be irrigated and a  
"PERMANENT" SYSTEM OF IRRIGATION  
Compiled from the Maps of the  
"GEOLOGICAL SURVEY OF CALIFORNIA"  
and from  
Special Surveys and Examinations

Author: JOHN W. GARDNER  
1872.

Published by authority of the Hon. SECRETARY OF WAR  
in the Office of the CHIEF OF ENGINEERS U.S. ARMY.









## GOOD HEALTH.

### Disease Germs in Milk.

It is a well-recognized fact that the mother who is nursing her child is obliged to be very careful about her diet, for whatever she eats or drinks has its effect upon her milk, and consequently upon the health of her child. The most acute symptoms, and even death, may be produced by dietary indiscretion. But it is less appreciated that similarly alarming results may be produced in both children and adults by the use of milk taken from improperly fed cattle. There have recently been a number of mysterious poisoning cases, that after a great deal of random speculation have finally been traced to diseased milk. In spite, however, of these warnings, the subject has not yet received the sanitary attention to which it is entitled. Particularly is the danger of such contamination great in the neighborhood of large cities, where the absence of wholesome pasturage is a temptation to the less scrupulous to substitute all grades of organic refuse, the most of which should properly be consigned to the garbage crematory. In addition to this danger, however, it is discovered that even in the presence of abundant and suitable food, cattle are not discriminating in their selection, but exhibit frequently the most depraved tastes. In the neighborhood of large distilleries, it has been observed that the cattle become utterly demoralized by feasting on the refuse from the stills. In time they come to have the dull, stupid appearance characteristic of an opium eater. It is hardly possible that the milk produced by animals permitted to feed on such abominable stuff can be either wholesome or agreeable.

In other places the case is even worse, for the cattle have been observed to feed with evident relish upon unadulterated animal excreta and other highly pernicious food. Aside from the disgust which the practice excites, it is a source of actual and grave danger. When it is remembered that the fatal plague at Plymouth, Pa., was directly traceable to the careless disposal of the excreta of a single typhoid-fever patient, it can readily be seen that milk may become in this manner a vehicle for the distribution of the most malignant disease germs.

So large are the possibilities for evil which may result from the use of milk taken from animals improperly fed, either through design or carelessness, that it is not too much to ask that all public dairy farms should be placed under sanitary supervision, and that the food and quarters of all cattle whose milk is offered for sale should be regularly inspected by officials appointed for the purpose.—*Scientific American*.

**GALEN ON THE TREATMENT OF OBESITY.**—"The best method of getting thinner consists in gradually withdrawing from the body that whereof there is superfluity, and in strengthening at the same time those parts which had been expanded. Bodily exercise will undoubtedly prove very advantageous, as we see stout horses getting lean by heavy work. Thus, likewise, those will never grow fat who are obliged continually to toil with hard labor. This, however, requires great precaution, it being certain that fat people frequently run danger of death when attempting violent bodily exercise." And Galen says: "Regular alvine motions, energetic bodily exercise, a moderate life, a diet which, although satiating, yields but limited nourishment; which explains why Hippocrates advises stout people wishing to grow thin to dine on vegetables cooked with fat, in order that they may become satiated by a small quantity of food."

**MEDICINAL QUALITIES OF OYSTERS.**—It is not as generally understood as it should be that oysters have medicinal qualities of a high order. They are not only nutritious, but wholesome, especially in cases of indigestion. It is said "there is no other alimentary substance, not even excepting bread, that does not produce indigestion under certain circumstances; but oysters, never." Oyster juice promotes digestion. By taking oysters daily, indigestion, supposed to be almost incurable, has been cured; in fact, they are to be regarded as one of the most healthful articles of food known to man. Invalids, who have found all other kinds of food disagree with them, often discover in oysters the required aliment. Raw oysters are highly recommended for hoarseness. Many of the leading vocalists use them regularly before concerts and operas, but their strongest recommendation is the remarkably wholesome influence exerted upon the digestive organs.

**NEW TREATMENT FOR CONSUMPTION.**—The *Lancet* explains in a recent number a new treatment for consumption, as injecting carbonized iodine into the lungs by means of spray of the warmed fluid. The diseased cavities of the lungs are first localized by percussion; then a fine tubular needle, having openings at the point and attachment to a proper syringe, is introduced between the ribs, and the well-known antiseptic qualities of combination are relied upon to effect the healing of the affected parts. It is used once a week. So far, the treatment is quite satisfactory.

**A LINIMENT FOR EARACHE.**—According to the *Canada Medical Record*, Pavoni recommends a liniment composed of camphorated chloral 2½

parts, pure glycerine 16½ parts, and oil of sweet almonds 10 parts. This is to be well mixed, and preserved in a hermetically closed bottle. A pledget of very soft cotton is to be soaked in the liniment, and then introduced as far as possible into the affected ear, two applications being made daily. Frictions may also be made each day with the preparation behind the ear. It is claimed that the pain is almost immediately relieved, and even in many cases the inflammation is subdued.

**WHY DID THEY ESCAPE?**—Mr. D. F. Newsom, of Newsom's Springs near Arroyo Grande, San Luis Obispo Co., Cal., states that during the cholera season of 1850-51, while that disease was prevailing in New York City to an alarming extent, he was employed in the brass finishing establishment of Dietz Bros. & Co., in that city; that there were about 100 employes around the factory, none of whom were at all affected by cholera symptoms, while others were dying by hundreds around them. Mr. Newsom thinks this highly suggestive, and that the hint given by the fact recited might afford good foundation for medical experiment with a tincture of the metal indicated.

**THE SMALL BOY WHO ATE SORREL.**—It was a very curious and almost unprecedented chain of causes, we imagine, which brought about the death of a little boy at Birmingham the other day. The poor child ate during the day a quantity of sorrel which he found near his mother's house. In the night, feeling thirsty, he drank freely of some soapy water which stood near his bed-side. Next day he died, and an inquest being held, the medical evidence was to the effect that the alkali of the soap acting upon the sorrel had formed oxalic acid, a poisonous compound by which the child had been killed.—*London Globe*.

**HEART DISEASE.**—Dr. A. L. Loomis, in a paper read before the American Climatological Association, says that in four cases which he details persons with heart disease were fatally affected by visiting elevations of about 2000 feet. Two went to the Adirondacks, one to the Catskill mountains and one to Colorado. In 26 cases of his immediate experience, he concludes that the removal from a lower to a higher level is in this disease detrimental. The diseases of the Swiss Alps are largely those of the heart, brain or the larger blood-vessels. There is more oxygen at sea-level than at a higher level.

### Fairs to Come.

For the information of our readers, we give below a list of the coming exhibitions on this coast in the order of their occurrence:

Mechanics' Institute Fair, San Francisco, Aug. 24th to Sept. 25th.

Golden Gate Fair, Oakland, Aug. 30th to Sept. 4th.

Thirteenth District—Sacramento, Yolo, Yuba and Sutter counties—Marysville, August 31st to September 4th.

Eighth District—El Dorado, Amador, Alpine and Mono counties—Placerville, August 31st to September 4th.

Contra Costa Agricultural Society, Pacheco, Sept. 6th to 10th.

State Agricultural Society, Sacramento, September 6th to 18th.

Oregon State Agricultural Society, Salem, September 13th to 18th.

Eleventh District—Plumas, Lassen, Sierra and Modoc counties—Greenville, September 20th to 24th.

Second District—San Joaquin, Calaveras, Tuolumne, Stanislaus, Merced, Mariposa, Fresno, Tulare and Kern counties—Stockton, Sept. 21st to 25th.

Ninth District—Del Norte and Humboldt counties—Rohnerville, Sept. 21st to 24th.

Fifth District—San Mateo and Santa Clara counties—San Jose, Sept. 27th to Oct. 2d.

Seventh District—Monterey, Santa Cruz, San Benito and San Luis Obispo counties—Salinas City, Sept. 28th to Oct. 2d.

Tenth District—Siskiyou, Trinity and Shasta counties—Yreka, Sept. 29th to Oct. 2d.

Nevada State Fair, Reno, Oct. 4th to 9th.

Santa Barbara Agricultural, October 5th to 8th.

Twelfth District—Lake and Mendocino counties—Lakeport, Oct. 5th to 8th.

Los Angeles County Fair, Downey, Oct. 5th to 9th.

Santa Cruz Pavilion Fair, Oct. 6th to 9th.

San Diego Horticultural Society, Oct. 6th to 8th.

Sixth District—Los Angeles, Santa Barbara, Ventura, San Diego, San Bernardino and Inyo counties—Los Angeles, Oct. 11th to 16th.

Ukiah Park Association, Ukiah, Oct. 14th to 16th.

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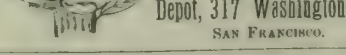
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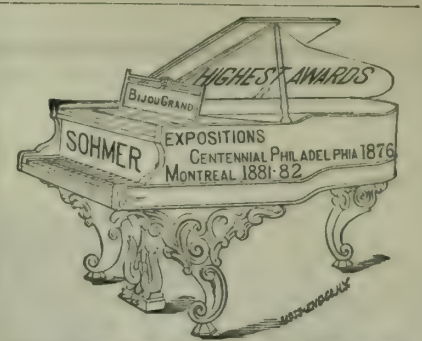
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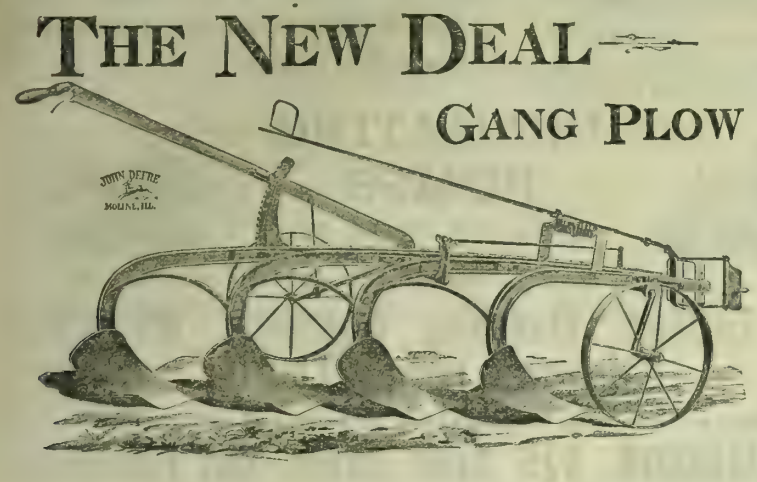


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DUNNIGAN, CAL.—We have a 3 and 4-Gang New Deal Plow; have used them in gravel, adobe and the ash hill land, and we find the Plow equally adapted to each kind of soil, and consider them the "Boss" Plow for the California farmer.—BOOTH BROS.

VIRALIA, CAL.—Having been extensively engaged in farming for a number of years, I can safely recommend the "New Deal" Plow to be superior to all others, for lightness of draft, quality of work, and adjusting facilities.—JOHN TUOHY.

MERCED, CAL.—I have the four 3-Gang, 10-inch "New Deal" Plows at work, and for completely turning the ground over and lightness of draft, they are the best Plows I ever saw.—V. C. W. HOOPER.

HUENEME, CAL.—The "New Deal" Plows have given entire satisfaction in our part of the country, and have plowed weeds under which no other Plow could have done. Mr. N. S. Cook, who had a "Stockton" Plow to use on the side-hill, could not do anything with it, and had to use the "New Deal," which worked satisfactorily.—WOLFF & LEHMAN.

YOLO, CAL.—The "New Deal" Plow is the best Plow that ever was made, excepting none. I have got "Brown's," "Cassady's," and "Eureka's," and the "New Deal" will do more work and better than any of them; furthermore, it can be worked in any kind of soil.—GEORGE WOODWARD.

LIVERMORE, CAL.—The 3 Gang, 10-inch "New Deal" Plow bought of you works first class. If I can sell my other gangs, I will use the "New Deal" altogether, as they do the work better and run much easier than any gang plow I have used or seen.—DETLEP LA FRENZ.

We can furnish one hundred more Testimonials, if desired.

For Lightness of Draft, Ease of Management, Strength, Durability and Quality of Work,  
**The "NEW DEAL" is without a Parallel.**

3-Gang, 8-inch.....	\$75 00	4 Gang, 8-inch.....	\$80 00
3-Gang, 10-inch.....	80 00	4-Gang, 10-inch.....	90 00

All with Extra Points.

## PERKINS' WIND-MILL.

EVERY MILL WARRANTED.

The Genuine Perkins' Wind-Mill has earned a reputation for excellence that will be maintained. It is unquestionably the most perfect and beautiful Wind-Mill in the market.

These Mills are reliable and always give satisfaction. Simple, strong, and durable in all parts. Solid wrought iron crank shaft with double bearings for the crank to work in, all turned and run in adjustable babbitted boxes. These Mills are perfectly noiseless, easy and graceful in all their movements. Positively Self-Regulating, with no coil springs or spring of any kind, no little rods, joints, levers, or balls to get out of order, as such things do. Mills in use six to twelve years in good order now, that have never cost one cent for repairs.

## The Hoosier Grain Drill.

The HOOSIER Force-Feed Grain Drill is universally acknowledged to have no superior. It is strongly built, handsomely finished, and has many improvements which no other Drill possesses. A POSITIVE FORCE-FEED, REGULATED WITHOUT CHANGE OF GEAR WHEELS OR STOPPAGE OF DRILL. Every Drill has a Force-feed Grass Seeder Attachment, constructed and regulated on the same principle as the Grain Feed. The Hopper is placed so as to balance weight that would otherwise rest on the necks of the team. This, in connection with the double-tree, being attached beneath the tongue, so that the pull is inclined upward, makes the weight very light on the horses. All HOOSIER Drills sold by us are especially constructed with heavily built wheels, with three-inch tires, which is of great advantage for the soft soil of this section. For Prices and further information, send for Catalogue.

Also Agents for the JOHN DEERE MOLINE GANG, SULKY and SINGLE PLOWS, SOUTH BEND CHILLED PLOWS, SCHUTTLE FARM and SPRING WAGONS, KEYSTONE DISC HARROWS, all kinds of Large and Small Farming Implements, HOWE SCALES, Etc.

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EASIEST SIMPLEST.

Best Stand,  
Best Feed,  
Best Shuttle,  
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Best Woodwork,  
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AGENTS WANTED. IN UNOCCUPIED TERRITORY.

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TAKES THE LEAD. Why? At last, to Perfection.

Imitation of hand rubbing the principle.

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It only needs to be seen to be appreciated. See your neighbor's. Try it before buying another.

Office, 612 J St. P. O. Box 312 SACRAMENTO, CAL.

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E. W. MELVIN, Proprietor and Manufacturer.

## "The Great Carriage Firm"

# M. P. HENDERSON & SON

MANUFACTURERS AND DEALERS IN

## Finest Grades of Carriage Work,

HARNESS ROBES AND CARRIAGE MATERIAL.

Specialties: Work to Order, and Henderson's Pat. Buckboard; also Agents Studebaker M'g Co. Farm Wagons, Etc.

OFFICE AND FACTORY:

CORNER MAIN AND AMERICAN STS., STOCKTON, CAL., U. S. A.

## Italian Sheep Wash.

EXTRACT OF TOBACCO. Free from Poison.

Cures thoroughly the SCAB OF THE SHEEP. The BEST remedy known. Costs less than 1 cent per head for dipping. Reliable testimonials at our office. For particulars apply to

CHAS. DUSENBERG & CO., Sole Agents, No. 314 Sacramento St., San Francisco.

## ALMOND HULLERS

FOR SALE BY

# A. O. RIX,

Washington Corners, California.

PRICE \$5. The PERFECTION ELECTRIC BELT, for male or female, with all the latest improvements, will be sold until further notice at the remarkably low price of \$5. Call or address J. H. WIDBER, Druggist, 701 Market St., corner Third, San Francisco.



## The Combined Harvesters.

A representative of the PRESS who recently visited Stockton assures us that the Stockton Combined Harvester Works have had a very satisfactory season in 1886. They sold nearly all the machines they manufactured, and if any have not given satisfaction the fact has not been reported to them. Our reporter was told that no one had expressed even a desire to return a harvester. The Minge pattern did good work, but the works will, however, rely upon the Houser as a standard for a "pull" machine, and they are now getting in the stock for an increased manufacture of Housers this winter and spring. The Houser for 1887 will have an increased capacity in cylinder and separator, and the manufacturers assure us that the "best cleaner that has yet been put on a harvester" will add to the attractions of the Houser of next season. The Houser has made a most enviable record for itself, and is commended by hundreds who have had experience with it. The Shippee harvester has been reported as doing good work this season, and in its special field has a good outlook.

These combined machines have come in just in time to demonstrate how wheat can be profitably grown even at a low price, and comprise one of the most signal contributions made by our inventors and mechanics to the general prosperity of the State.

## Solano.

EDITORS PRESS:—The writer of the very interesting article in the last issue of the PRESS entitled "California Names" makes "Solano" in the name "Solano county" mean a potato, but in this he is mistaken. The name is derived from the Spanish and means primarily the "east wind," hence the "east," "the dawn," then "the morning," "the time of the rising sun." The county so called might be appropriately called "The County of the Rising Sun;" and this reminds the writer that the Japanese name for their country means the same—"The Land of the Rising Sun."

It is true the potato family is called botanically *Solanaceae*, and that the common potato is known as the *Solanum tuberosum*, the solanum in this case being Latin and derived from the deponent verb "solor," I soothe, because of the narcotic effects of several species of the *Solanaceae*. "The County of the Rising Sun" is a far more poetic idea than "The Potato County." GRANVILLE F. FOSTER.

Sunol Glen, Cal.

## The Armour Packing Company.

The combined packing of the Chicago and Kansas City houses foots up in round numbers about 1300 head of cattle and 5500 hogs daily for every working day of the year.

Their goods find a market all over the world, and they have filled a single order for 5,000,000 pounds of canned beef. It is a national pride to know that foreign nations are paying tribute to the enterprise, thrift and sagacity of an American plant managed by American citizens who have seized the opportunity to become masters in this branch of the provision trade.

A little over a year ago the managers arranged to make San Francisco a distributing point for the Pacific Coast. To carry out that policy James McCullough, whose many years' experience in the provision trade has evidently qualified him to take the management of an enterprise of this character and magnitude, was selected as the San Francisco representative of the Armour Packing Company.

The finest exhibition that was ever made in this line of goods can be seen in the Mechanics' Fair. This line of goods is a sample that is furnished in all the great markets of the world. There is a special selection for the Pacific Coast of bacon and ham known as the "49" brand that has no superior. At this exhibit may be seen a fine lithograph of the inside working of their great plant.

The standard and excellent quality of their goods has become so well established that the affable agent from his office, No. 123 California St., fills orders for all distributing centers on the Pacific Coast, to meet the growing demand. Their business has assumed large proportions, running up into tens of thousands each month, and with their commercial advantages and the trade of the Northwest, extending to Sitka and "islands of the sea," this distributing agency will be one of great importance.

For the sale and consumption of their provisions they rely on their merit. It is a fact worth knowing that all their goods are in original packages direct from their packing houses, and any provisions with the stamp and trade-mark of Armour Packing Company are warranted to the trade and the consumer.

CHOOSING SAN DIEGO.—We learn from the National City Record that our wide-awake friend, Prof. W. A. Henry, whose recent vacation-trip to California, from the Agricultural Chair of the University of Wisconsin, we noted from time to time, has purchased of the Kimball Brothers a ten-acre tract for himself and one for his foreman, Mr. Leslie Adams. These tracts are located across the Sweetwater in full view of the city and bay.

## Don't Fail to Write.

Should this paper be received by any subscriber who does not want it, or beyond the time he intends to pay for it, let him not fail to write us direct to stop it. A postal card (costing one cent only) will suffice. We will not knowingly send the paper to anyone who does not wish it, but if it is continued, through the failure of the subscriber to notify us to discontinue it, or some irresponsible party requested to stop it, we shall positively demand payment for the time it is sent. LOOK CAREFULLY AT THE LABEL ON YOUR PAPER.

## The Grangers' Store, Sacramento.

A representative of the PRESS in Sacramento sends us the following: The Grangers' store at Sacramento, Tenth and K streets, is doing a fine business. They carry a full line of groceries and provisions, hardware and all kinds of agricultural implements. They also have a large stock of the celebrated Studebaker wagons, buggies, and carriages, which are so well known in this market. The central location of the Grangers' store gives a very great advantage in business. The association owns its own storehouse and warehouse, which is one of the best and most substantial in Sacramento. Their trade is largely with the farmers, and is steadily increasing and spreading out over Middle and Northern California. Farmers as well as patrons feel at home when they call at the Grangers' store, believing they will be fairly dealt with, and they seem to have confidence in the way and manner the business is conducted there. Everything is done on a cash basis. E. Greer, who has had many years' experience in merchandizing, has the management of the store. I found him a perfect gentleman, and his book-keeper and clerks are very courteous and gentlemanly. The store was in good order and the work well systematized. The Grangers' store is largely supported and patronized by members of the order. Judging from our observation, it merits the favor it receives.

## Wagon Axles.

EDITORS PRESS:—We noticed in your last week's issue of the RURAL a communication in regard to the iron axles used on wagons and suggesting remedies to cover defects which have been plain to every one in all solid iron axles made in the United States. It is impossible not to break and crystallize at the shoulders if made in the old style solid form which manufacturers have been using ever since wagons were made. There is only one factory in the United States which has struck the key-note of solving the problem of broken axles. The invention was patented and is now used by the Milburn Wagon Co., of Toledo, Ohio, who own the exclusive patent for the United States. They make a wagon with hollow iron axles; this gives a large bearing, great strength and makes them very light, and it is impossible to break the axles. There have been sold in California within the last two years over 4000 of these wagons, and only one axle has been broken; in fact, the manufacturers give an axle free of charge for every one that is broken. These wagons are sold at an advance over the ordinary old-style axles, because the patent is controlled by one who has made an immense fortune in manufacturing and selling these hollow axles, and has licensed but one wagon manufacturer in the United States to use them. We have been told that there are upward of 50,000 of these axles now in use and less than 10 have broken. It is a well-known mechanical fact that hollow iron columns will sustain more weight than if made solid, and the same with beams and girders. The reason why the hollow iron axle is so much stronger and runs so much lighter than any other wagon is because it has a larger bearing and more elasticity, carrying the load, as it were, on springs. TRUMAN, ISHAM & HOOKER.

San Francisco.

## Complimentary Samples.

Persons receiving this paper marked are requested to examine its contents, terms of subscription, and give it their own patronage, and, as far as practicable, aid in circulating the journal, and making its value more widely known to others, and extending its influence in the cause it faithfully serves. Subscription rate, \$3 a year. Extra copies mailed for 10 cents, if ordered soon enough. If already a subscriber please show the paper to others.

## Situation Wanted.

A married man, recently from the East, wishes a situation as coachman or to do general work. Understands management of horses thoroughly. Best of references given. Address, JOHN CRANDALL, Davisville, Cal.

## BUTCHERS' MACHINERY DEPOT,

120 Front Street, San Francisco.

DRAW, CUT, HAND, and POWER MEAT CHOPPERS, SAUSAGE STUFFERS, LARD COOLERS, LARD PRESSES, STEAM JACKET KETTLES, FAT CUTTING MACHINES, TANKING OUTFITS and HOG SCALDERS, and other BUTCHER TOOLS. STEAM ENGINES.

JAMES LINFORTH,

GENERAL AGENT FOR THE PACIFIC COAST FOR

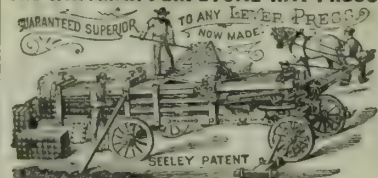
Butchers' Machinery, "Victor" Sorghum Mills, Blymyer Bells, Zimmerman Fruit Evaporators, Etc.

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HYDE & MOORE, Visalia, importers and breeders of Shorthorn cattle. Young stock for sale.

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Write to me at once. I am Agent for this Press. BYRON JACKSON. HAY STACKERS, RAKES, THRUSHERS, WINNERS, PUMPS, HARROWS, ETC. 625 Sixth Street, San Francisco.

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Send for Circular and Prices of the various styles of Mills I make.

## IRRIGATING PUMPS.

WRITE FOR PRICES, ETC.

I MANUFACTURE

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Complete Catalogues Free. Address

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SEE MY IRRIGATING PLANT ON EXHIBITION AT MECHANICS' FAIR.

## WEST COAST LAND COMP'Y.

SAN LUIS OBISPO, CAL.

Incorporated March 27, 1886.

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\$500,000.

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JOHN L. HOWARD,  
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OFFICERS.

JOHN L. HOWARD, President.  
ISAAC GOLDBERG, Vice Pres't.  
R. E. JACK, Treasurer.  
C. H. PHILLIPS,  
Secretary and Manager.

## THE PASO ROBLES, SANTA YSABEL, and EUREKA RANCHES,

Recently purchased by the West Coast Land Company, are now offered for sale in subdivisions.

This immense body of land, including 12,000 acres unsold of the Huerfano ranch, belonging to C. H. Phillips, comprises 64,000 acres of rich, virgin soil. It lies in a compact body, in the center of San Luis Obispo county, and is within from 9 to 20 miles of the sea coast. It is covered with white and live oak timber, is one of the most picturesque bodies of land in the State, and requires

## NO IRRIGATION.

It has an abundance of living water, and where not sufficient for domestic use, good water can be had at a depth of from 10 to 40 feet. It has an average annual rainfall of 21 inches, exceeding by six inches that of Santa Clara county, one of the most prosperous counties in the State.

The extension of the Southern Pacific Railway from Soledad southward traverses these lands for 15 miles throughout their entire length, placing the property within eight hours of San Francisco.

These lands are offered at from \$10 to \$30 an acre, and are all susceptible of the highest cultivation. In salubrity of climate, productiveness of soil and location as to market, they are equal to lands in Los Angeles and other counties, which readily bring from \$100 to \$200 and upward; and as to price and terms offer the best inducements to those seeking homes on any part of the Pacific Coast.

The field work of the subdivision of the famous

## PASO ROBLES RANCH

Has been completed. The maps and catalogues are now being prepared, and will be sent free on application. This ranch, containing 20,400 acres, has been subdivided into 230 lots. It is 12 miles from the sea coast, and is 20 miles north and west from San Luis Obispo city.

This ranch was one of the earliest granted by the Mexican Government and having been held by the same party for 30 years, has never before been offered for sale. It consists exclusively of land of the choicest character, and is second to none in the State for the production of wheat, wine, fruits, raisins and olives.

## TERMS OF SALE.

One-third cash; balance in 4 equal payments at 2, 3, 4 and 5 years; interest, 6 per cent per annum. The mortgage tax paid by the mortgagee makes the interest about 4 per cent net to the purchaser. A deposit of \$25 will be required in all cases to cover expenses of sale.

C. H. PHILLIPS, Manager,

West Coast Land Co., San Luis Obispo, Cal.

Send for Catalogue and Map.

## STEARNS MANUFACTURING COMPANY,

SAN FRANCISCO, CAL.

Sawmill, Woodworking and Shingle Machinery.

DETROIT BLOWER CO.'S DRY KILNS.

Circular, Band, Scroll and Crosscut Saws.

SAW TOOLS, KNIFE and TOOL GRINDERS.

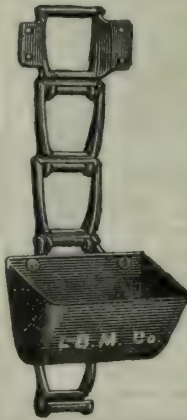
Emery Wheels, Files, and Belting.

LUBRICATING OILS and MILL SUPPLIES.

ALL SIZES OF THE

Ewart Detachable Chain

CARRIED IN STOCK.



## TO GRANGERS' ASSOCIATIONS.

A Book-keeper, now holding an appointment in a city wholesale house, and having experience also as a salesman in the hardware and agricultural implement line, offers his services; good references. Salary moderate. Address, A. P. O. Box 2841, San Francisco.



## \$10.00 will buy the DAISY

New Style Corn Sheller. The Fan cleans the Corn as it comes out. The Question is Asked why we sell our Shellers so cheap. Answer: We build them in winter. All are warranted to do good work or no sale.

NEWARK MACHINE CO., COLUMBUS, OHIO.



# BATCHELOR & WYLIE,

SOLE AGENTS FOR THE PACIFIC COAST FOR THE

## ACME STEAM HEAT EVAPORATOR COMP'Y, of Charlotte, Mich.

When any person investigates the different processes by which fruit is evaporated, with a view of making it a profitable business, he ought to look to the following vital points, to-wit:

- Absolute Safety from Fire.**
- Greatest Capacity with Least Labor and Fuel.**
- Quality that Brings the Highest Price, Produced with the Least Skill.**
- A Machine that is Durable, the Capacity of which can be Increased at Will, with a Proportionately Decreased Cost.**

We KNOW that all these qualities are embraced in our Acme process.

The subjecting of fruit to a high degree of heat, and forcing the moisture through fruit partially dried, is wrong. On the contrary, the true theory is—a direct, low degree of heat that will not burn or scorch, with good ventilation. Sufficient heat to force the moisture out of the article dried is all that is necessary, if the moisture is carried away immediately. Our machine does this in such a manner that the moisture from one drying chamber does not go through or interfere with the contents of the other chambers, and this is accomplished without cooling the steam chambers.

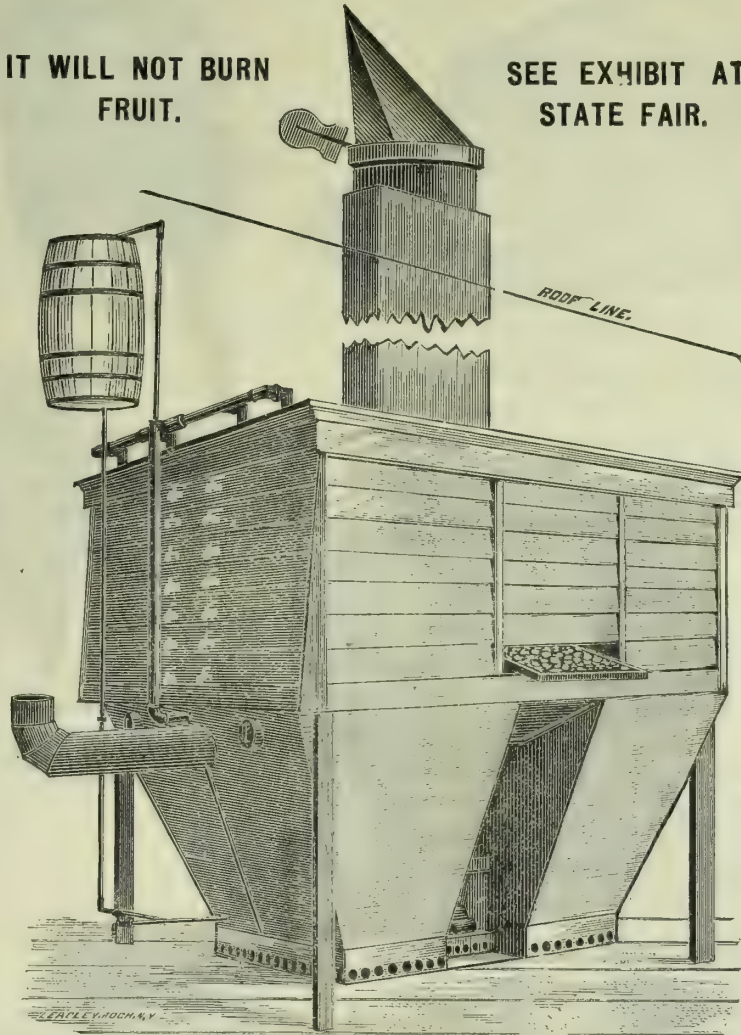
We have two sizes of the Acme Steam Heat Evaporator. The one shown here is the No. 2, which is only about half the size of the No. 4, and can be operated with heated water in the chambers instead of steam if desired. In using heated water we also use the heated air from the furnace in combination with the heat from the water. We believe we have the most perfect process of evaporating fruit yet introduced, and would be pleased to send catalogues to any persons interested in fruit evaporating. Address

**BATCHELOR & WYLIE,**

Dealers in Agricultural Implements,  
37 MARKET ST., SAN FRANCISCO.

IT WILL NOT BURN  
FRUIT.

SEE EXHIBIT AT  
STATE FAIR.



### THE MACHINE

By which the foregoing results are attained consists of a succession of flat steam chambers, placed one above the other, in close proximity, leaving room between them for the introduction of trays of fruit.

These chambers are filled with steam, or heated water, by a continuous current of even pressure, which imparts a uniform heat to the machine, thus securing even drying.

As the moisture is expelled from the fruit it is carried away from the machine, without coming in contact with any other fruit, thus preventing cooking or steaming, and also hastening the process.

Moisture thus removed does not need to be disposed of by evaporation, thereby avoiding the necessity for intense heat; while, by applying heat of the same temperature from both above and below, we dry the fruit on both sides (which no other machine does), thus inclosing, in a measure, the juice, which a further subjection to heat so cooks as to render it fixed and safe, so far as keeping is concerned, as jelly.

Thus we retain the flavor, so essential to good fruit, but impossible by any other process.

In these machines two tiers of steam chambers are placed side by side with a space between them.

The steam chambers are inclined toward the outside, which causes all water from condensation to flow to the outer edge, whence it finds its way out, through the lower connections. This arrangement enables us to have the spaces of uniform width, and leaves the second connection free at all times for the passage of steam.

Through the devices attached to the machine, the degree of heat is under the control of the operator; but it is also true that the immediate removal of moisture is as important as a high degree of heat.

The hood gathers the heated vapor which rises through the center of the machine, conducting it to the flue, from whence it passes out of the building.

In use there is a constant flow of vapor through the drying chamber into the space between the tiers of chambers, thence up through the hood and flue above it. So perfect is the operation that no moisture escapes into the room where it is operated.



## The Leading Institution of Business Training on the Pacific Coast.

Its teachers are competent and experienced. Its pupils are from the best class of young men in this State. It is under the very best discipline. Its Scholarships are good in the THIRTY-SIX Bryant & Stratton Colleges. It employs four of the best penmen in the State. It has the largest rooms, the largest attendance and most complete system of business training, of any commercial school on the Pacific.

### YOUNG MEN AND WOMEN

Wishing to prepare themselves for the practical duties of life, will find this the best school. Pupils learn just what they need to accomplish success, and do not meddle with superfluous studies. Each student receives separate instruction and can thus advance as rapidly as desired, not being kept back by those more deficient. All persons passing the final examination in a satisfactory manner, will receive our finely-engraved GRADUATING DIPLOMA. Graduates of this College are in demand among business men, and can readily find good positions. Such as are in good standing are assisted in obtaining situations, if desired.



### OUR BUSINESS COURSE

Is especially adapted to the wants of young and middle-aged men, who wish to prepare for the active duties of life, whether as book-keepers, salesmen, merchants, bankers, professional men, or even farmers or mechanics.

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Where all the branches of an ordinary English education are taught, for those who are too young or not sufficiently advanced for the Business Course. Visitors are always welcome at the College.

### HEALD'S COLLEGE JOURNAL,

Which is issued monthly, by the College, contains full particulars regarding the Course of Studies, Expenses, etc.; also, a large amount of interesting reading. It can be obtained, free of charge, either at the College Office, No. 24 Post St., or by addressing

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SAN FRANCISCO, CAL.

### HEALD'S BUSINESS COLLEGE

Has been established for nearly a quarter of a century. This College includes more than offered by any other school in America under one tuition fee. Changed to suit the times. Full Business Course for six months, seventy-five dollars. This includes Short Hand, Type Writing, Telegraphy, Single and Double Entry Book-keeping, as applied to all departments of business, Commercial Arithmetic, Business Penmanship, Mercantile Law, Business Correspondence, Lectures on Law, Business Forms, Actual Business Practice, Railroadings, Brokerage, and Banking, English Branches, Drawing, and instruction in French, German, and Spanish. SEND FOR CIRCULAR.

**C. S. HALEY, Secretary.**

**E. P. HEALD, President.**



## The Latest Fashions.

## Ladies' Costume.

FIG. 1.—A simple and pretty costume is this, and the material and decoration here chosen render it especially dainty and summery. The material is pale blue linen lawn, and the decoration includes embroidered linen lawn, edging and flouncing. The upper part of the skirt, at the front and sides, is a deep, smooth-fitting yoke, to the lower edge of which is gathered the lower portion, which is overlaid with two rows of the flounce embroidery; the upper row being gathered in with the upper edge, while the lower row falls in points, even with the lower edge. The flounce embroidery may be continued across the back breadth, if desired. This breadth extends to the belt—its upper edge being gathered—and is finished without decoration.

The waist is a pretty novelty. In front it presents the effect of a baby waist, having a deep yoke upper part, and a full, loose lower part, the lower part being shirred twice across the top from the closing nearly to the arms' eyes and also for a similar distance at the bottom. The closing is made with buttons and button-holes in a fly, and the yoke is overlaid at each side of the closing with three forward-turning rows of the embroidered edging that slightly overlap. At the back the waist shows a pretty fullness down the center, and this fullness is produced by shirrings at the neck, and is disposed in gathers at the lower edge. The shirrings are sewed to a fitted stay arranged underneath, and a graceful close adjustment is achieved at the sides by back side gores. A belt

trimmed all round with rows of velvet or fancy ribbon or braid. The waist-yoke may be of contrasting material or of embroidered goods, and the skirt-yoke may correspond. Nun's-vailings, cashmeres, serges, chambrays, gingham, seersuckers, China silks, Surahs, foulards, piques, nainsooks, India muslins, etc., are

of a full vest and is very becoming. At the left side the front-drapery is raised high on the hip by a group of five deep plaits and curves away below the plaits to the left side, where the drapery falls straight almost to the edge of the skirt below a cluster of three upturning plaits. The back-drapery also falls straight below a



Fig. 4.—LADIES' HAT.

among the favored textures for costumes of this style.

## Misses' Polonaise Costume.

FIG. 2.—In this instance embroidered chambray is used for the polonaise and plain chambray for the skirt, which is in the popular four-gored style. The gores are deeply trimmed with rows of deep embroidered chambray edging alternating with deep folds of the plain



Fig. 3.—LADIES' BONNET.

cluster of four deep plaits at the right side, and is raised high on the hip at the left side by six deep plaits. At the center a handsome seamed

pongees, serges, nun's-vailings, cashmeres and plain and figured dress goods of all varieties, the mode will make up stylishly in this way. The skirt may be finished plainly or it may have only a narrow plaiting for its edge decoration. For thin goods a flounce of lace all round the skirt is very dressy and pretty. Lace nets and embroidered goods of all kinds, white and in colors, are especially suited to a polonaise of this style, and lace or embroidered edging may trim the edges of the front drapery.

The hat is a stylish shape in fancy straw. Its brim is faced not quite to the edge with velvet, and velvet ribbon and plumage trim it quite elaborately.

## Ladies' Bonnet.

FIG. 3.—Fancy yellow braid forms this bonnet, which, while a *capote* in general effect, is yet a little odd, inasmuch as it is flat just on top. As it is trimmed high, however, this is only noticeable in the outline. The ribbon used for the bows is dark blue grosgrain, with a *picot* edge of yellow that looks like straw work. The loops are brought sufficiently high on one side, and on the other is a mass of yellow wild roses. This arrangement of ribbon and flowers constitutes all the trimming, unless, indeed, the ties are counted as such. The latter are fastened at each side in a plait and then flare; they are of the ribbon and sufficiently long to tie in a graceful bow either under the chin or at one side, as is thought most becoming. For illustration see this page.

## Ladies' Hat.

FIG. 4.—This hat is made of dark-blue braid, a fancy weave adding to its beauty. The shape is not unlike the sailor, save that the brim is rather broader. A band of blue and scarlet grosgrain ribbon is drawn smoothly around the crown, the full width of the ribbon not being shown, as it is folded. On one side of the front are loops of the ribbon held by a silver pin; on the other is a blue tip, which is fastened at the top and drawn down and securely caught to the lower part of the crown. Between the ribbon and the feather is a *jabot* of lace, which emphasizes the contrast in the decorations. If a



Fig. 1.—LADIES' COSTUME.

finishes the bottom of the waist. The collar is of the standing style and is covered with an upturned row of the embroidered edging. The coat sleeves are shortened a little, and very dressily completed with a frill of the edging headed by an upturned row of the same. A ribbon belt is worn and is fastened under a pretty bow of flowing loops and ends of ribbon a little to the left side of the closing.

Lace flouncing may be used instead of the embroidered flouncing, or the entire lower skirt-section may be of either variety of flouncing. For washing goods particularly the mode is very pretty, and all standard and novel varieties will be selected for it. Sometimes the skirt will be

material, which is cut bias and put on to suggest deep tucks. The back-breadth is plainly finished.

The polonaise is an attractive and stylish novelty. Its front drapery is in one piece with the front, which is finished to a suitable depth for a closing at the center. At the neck and waist-line of the front are clusters of shirrings, which are secured to smooth-fitting lining-sections that pass under the fronts to the under-arm darts in with which they are sewed; and the adjustment is rendered smooth and graceful back of the shirrings by bust darts taken up in the lining and outside together. Between the clusters of shirrings the front is given the effect

*bourneous* is arranged below the center seam, contributing to the full, *bouffant* effect; and side seams are placed far to the back so that a close adjustment results without the use of side-back gores. A pretty bow of ribbon is fastened to the left end of the shirrings at the neck, and a bow of long flowing loops and ends of ribbon is fastened to the left end of the shirrings at the waist-line, with dressy and youthful effect. The high standing collar is covered with an upturned row of edging, and a row of edging turns upward in cuff fashion from the wrists of the coat sleeves.

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plainer hat be desired, the entire garniture could be of the ribbon.

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Fig. 2.—MISSES' POLONAISE COSTUME.



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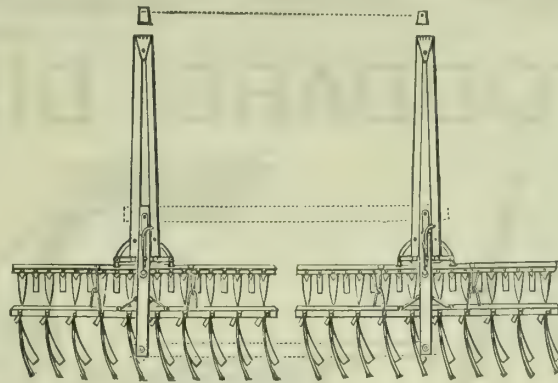
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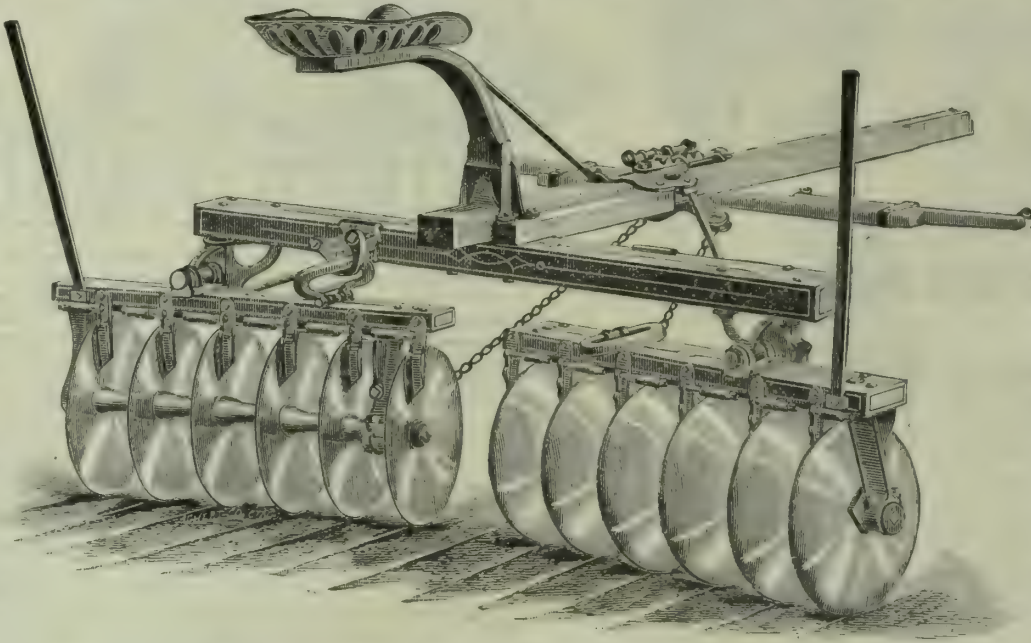
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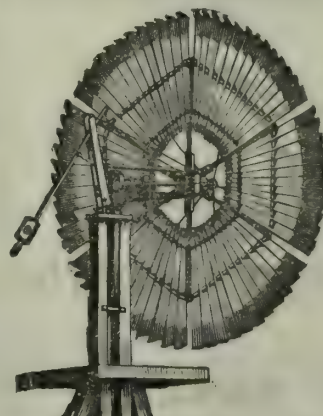
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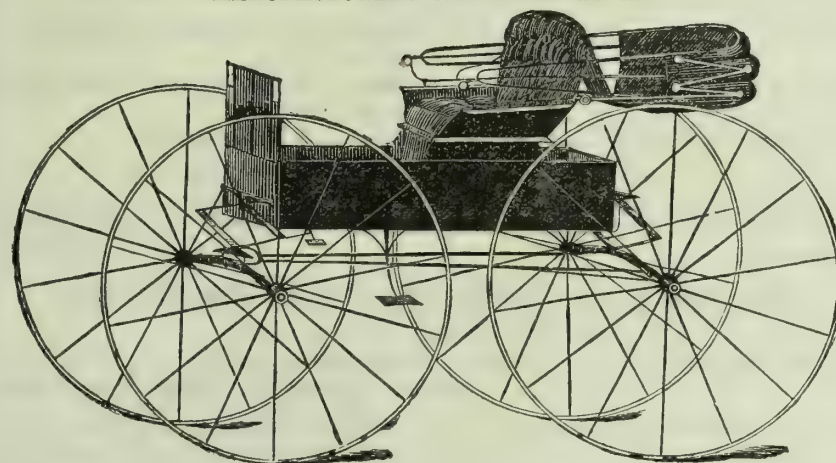
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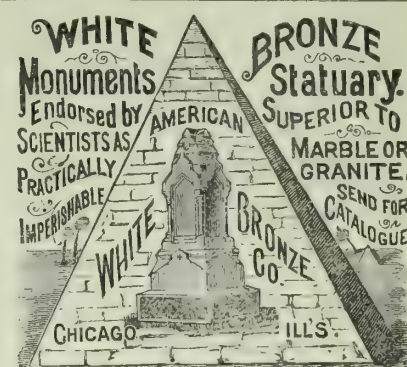
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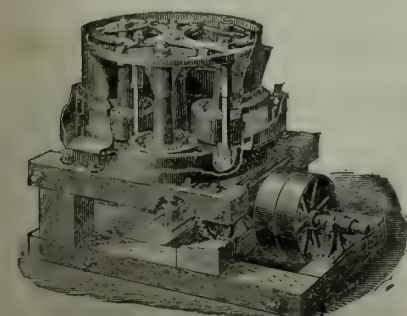
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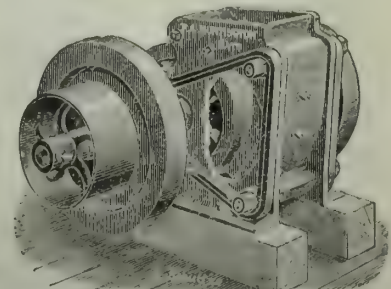
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I. L. DICKINSON, Lone Oak Farm, Sonoma, Tuolumne Co., Cal., breeder of thoroughbred Essex Hogs. Pigs now ready for sale. Prices reasonable.

### SHEEP AND GOATS.

R. H. CRANE, Petaluma, Cal., breeder and importer. South Down of Long John Wentworth herd for sale.

E. W. WOOLSEY & SON, Fulton, Sonoma Co., imports and breeds Thoroughbred Merino, & Jersey Cattle.

J. A. BREWER, Centerville, Alameda County, Cal. Shorthorns and Grades. Young stock for sale.

EASTON MILLS, Lakeville, Sonoma Co., thoroughbred Spanish Merino Sheep. Choice rams for sale.

J. B. HOYT, Bird's Landing, Cal., importer and breeder of Shropshire Sheep; also breeds cross-bred Merino and Shropshire Sheep. Rams for sale.

L. U. SHIPPEE, Stockton, Cal. Importer and breeder of Spanish Merino Sheep, Durham Cattle, Red Duroc and Berkshire Swine. High graded Rams for sale.

JULIUS WEYAND, breeder of pure-blooded Angora Goats, Little Stony, Colusa Co., Cal.

KIRKPATRICK & WHITTAKER, Knight's Ferry, Cal., breeders of Merino Sheep. Rams for sale.

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J. D. ENAS, Napa, Cal., breeds pure Italian Queens. The best honey and wax extractor; manufactures comb foundation, sections & hive material; send for circulars.

## Engraving

Superior Wood and Metal Engraving. Electrotyping and Stereotyping done at the office of this paper.

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That the public should know that for the past **Fourteen Years** our **Sole Business** has been, and now is, importing **(Over 100 Carloads)** and breeding improved Live Stock—Horses, Jacks, Short Horns, Ayrshires, and Jerseys (or Alderneys) and their grades; also, **all the varieties** of breeding sheep and Hogs. We can supply any and all good animals that may be wanted, and at **very reasonable prices** and on **convenient terms**. Write or call on us. **PETER SAXE and HOMER P. SAXE.** San Francisco, Cal., Oct. 22, 1884. **PETER SAXE & SON, Lick House, S. F.**

MARTINEZ, } **ALHAMBRA POULTRY YARDS** { JASPER J. JONES  
CAL. } Proprietor.



### HIGH-CLASS POULTRY.

Clean sweep on Plymouth Rock Chickens at Great California Poultry Show at San Francisco, Jan. 11th to 16th, 1886. The Best is the Cheapest. Illustrated Catalogue sent free on application; worth \$1 to any breeder of poultry. Send me your name on a Postal Card; 5000 copies of fine Illustrated Catalogue for free distribution.

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Storage Capacity, 100,000 Tons. Regular Warehouse for S. F. Produce Exchange Call Board.

These Warehouses are the largest on the Pacific Coast, and are furnished with the latest improvements for the rapid handling and storing of Grain. A mill attached, supplied with the best and newest machinery for cleaning foul and smutty wheat.

Money advanced at lowest rates of interest on Grain stored in Warehouses, Insurance effected at lowest rates in first-class companies, or Grain sold, if desired, at current rates.

**STORAGE, 25 cents per ton per month. Total Storage for Season ending June 1, 1887, \$1 per ton.**

**Grading Wheat, 50 cents per ton. Cleaning Wheat, 75 cents per ton. Cleaning and Smutting, \$1.50 per ton.**

Information regarding Storage or other business can be obtained at the office of the Company,

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1886.

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## Mission Rock Grain Dock and Warehouses,

SAN FRANCISCO.

Regular Warehouse for S. F. Produce Exchange Call Board.

Storage Capacity for 75,000 Tons of Grain.

THE CALIFORNIA DRY DOCK CO., Proprietors.

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Freight paid, fire insurance and loans effected, and proceeds forwarded free of commissions. Money advanced at lowest rates on grain in warehouse, interest payable at end of loan. Storage season, ending June 1, 1887, at reduced rates. On all wheat shipped to Mission Rock by barges, freight rates guaranteed the same as to Port Costa. All applications for storage or other business addressed to CHAS. H. SINCLAIR, Superintendent.

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WINDMILL

Is recognized as  
THE BEST.



Always gives satisfaction. SIMPLE, STRONG and DURABLE in all parts. Solid Wrought-iron Crank Shaft with DOUBLE BEARINGS for the Crank to work in, all turned and run in adjustable babbitted boxes.

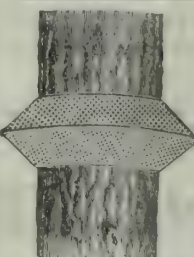
Positively Self-Regulating.

With no co. springs, or springs of any kind. No little rods, joints, levers, or anything of the kind to get out of order, as such things do. Mills in use 6 to 12 years in good order now, that have never cost one cent for repairs. All genuine Enterprise Mills for the Pacific Coast trade come only through this agency, and none, whether of the old or latest pattern, are genuine except those bearing the "Enterprise Co." stamp. Look out for this, as inferior mills are being offered with testimonials applied to them which were given for ours. Prices to suit the times. Full particulars free. Best Pumps, Feed Mills, etc., kept in stock. Address,

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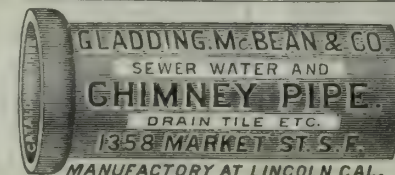
GENERAL OFFICE AND SUPPLIES (as always before)  
LIVERMORE, ALAMEDA CO., CAL.

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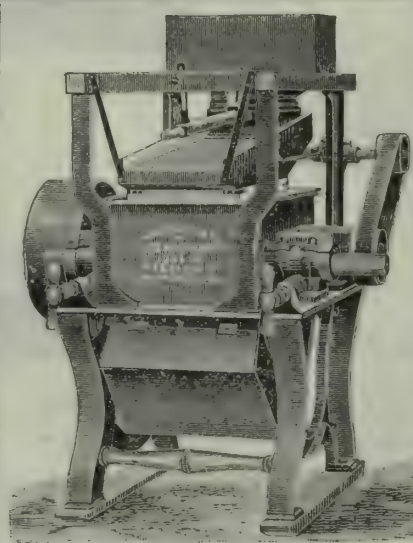


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Will destroy every Codlin Moth Larva that crawls up or down the tree. The best, cheapest and simplest trap now invented. No orchardist can afford to do without this trap. It is a sure cure for the codlin moth. For further information, address G. W. THISSELL, Winters, Yolo Co., Cal.



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SEWER WATER AND  
GHIMNEY PIPE.  
DRAIN TILE ETC.  
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WITH SHAKING SCREEN.

These Mills are constructed in the least complicated and most substantial manner possible, with rigid iron frame, long bearings, adjustable boxes, with coil springs to allow any chance obstruction, such as nails, screws, etc., to pass through without injury to the rolls. This feature is found on no other roll made on this Coast. Send for prices to

**JOS. WAGNER & CO.,**

MILL MACHINERY AND SUPPLIES,  
101 to 107 Mission St., San Francisco.

## THE GOAT-BREEDERS' ANNUAL MEETING

Will take place on Thursday, September 16, 1886, at Pioneer Hall, SACRAMENTO, at 8 o'clock P. M. of said day. All Goat-breeders invited to attend at that meeting, and also requested to exhibit specimens of their flocks at the State Fair. C. W. SCHLEIFER, Chairman. July 23, 1886.

## HORSES AND CATTLE.

### Cattle and Horses for Sale.

The undersigned proposes to sell at AUCTION, during the SAN JOSE FAIR, which holds from September 27th to October 2d, a lot of

### HIGH-GRADE HOLTSEIN BULLS.

I shall also offer for sale my

Thoroughbred Holstein Bull, Ansonia,

At the same time and place.

I also have for sale some

Fine Roadsters and well-bred Speedy Stallions,

That may now be seen on my farm. If not sold before they will also be offered at the San Jose Fair. W. L. Johnson has charge of my stock there.

EMILY D. KNOTT.

La Honda, San Mateo Co., Cal.

### FOR SALE.

### HOLSTEIN-FRIESIAN CATTLE

FROM THE HERD OF

HON. LELAND STANFORD.

On his Ranch at Vina, Tehama County, Cal.

For prices and catalogue address

MR. ARIEL LATHROP.

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### FRENCH DRAFT STALLIONS,

Kentucky Jacks and Jennets,

Work Horses and Mules

FOR SALE.

Some of the Stallions were imported from Europe, others from Illinois, and some young ones were bred in California from imported stock. The prices will be less than animals of equal value can be purchased elsewhere.

Call at or address Patterson's Ranch, Hueneme, Ventura County, or Patterson's Ranch, Grayson, Stanislaus County, or for further information call on or address JAMES M. PATTERSON, No. 8 Davis St., San Francisco.

JOHN D. PATTERSON.

### BADEN FARM HERD Of Short Horn Cattle and Dairy Cows.

Catalogues and Prices on application to

ROBERT ASHBURNER,

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For Sale at our Farm at Mountain View.

From our Thoroughbred Berkshire Boar and Sow, which we imported from England in 1880. Pigs from Imported Boar and Sow, \$25 each; from Imported Boar and Thoroughbred Sow, \$10 to \$20. Our Imported Pigs are as nice Pigs as there are in the State. Address

I. J. TRUMAN, San Francisco, Cal.



From imported stock direct from England, bred by Russell Swanwick, President Royal Agricultural College Farm, England, from the Celebrated STUMPY and SALLIE FAMILIES. Young stock always for sale at lowest possible rates. Address ANDREW SMITH, Redwood, or 218 California St., S. F.

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Registered and Thoroughbred.

My herd consists of the best strains that can be found. Stock all recorded in A. P. C. R. I have a fine lot of spring, summer and fall pigs, also a few choice yearling sows, for sale. Prices to suit the times.

J. MELVIN, Davisville, Cal.

### IMPROVED RELIEF WIND-MILLS.

Durable, Practical, Safe, and Efficient.

### Pumps and Wooden Tanks

OF ALL SIZES.

JOHN STOWELL, Prop'r and Manufacturer  
N. E. cor. California & Market Sts., Stockton, Cal.  
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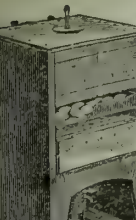
### 600 ACRES. 13 GREENHOUSES. TREES AND PLANTS

We offer for the Fall trade a large and fine stock of every description of FRUIT and Ornamental TREES, Shrubs, Roses, Vines, SMALL FRUITS, Hedge Plants, Fruit Tree Seedlings and Forest Tree Seedlings. Priced Catalogue, Fall 1886, mailed free on application. Address BLOOMINGTON PHOENIX NURSERY Established 1862. BLOOMINGTON, ILL.




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Pure-Bred Southdowns,

From the Celebrated Sheep of Long John Wentworth, Chicago, Ill. Address

R. H. ORANE, Petaluma, Cal.

THOROUGHbred

SPANISH MERINO SHEEP.



Have taken the First Premiums at the State Fair for the last three years.

CHOICE BUCKS and EWES FOR SALE.

ORDERS PROMPTLY FILLED. Address FRANK BULLARD, Woodland, Cal.

LITTLE'S CHEMICAL SHEEP DIP.

Price Reduced to \$1.25 PER GALLON.



Twenty gallons of fluid mixed with cold water will make 1,200 gallons of Dip. It is superior to all Dips and Dressings for SCAB in Sheep; is certain in effect; is easily mixed, and is applied in a cold state. Unlike sulphur or tobacco, or other poisonous Dips, it increases the growth of the wool, stimulates the fleece, and greatly adds to the yield. It destroys all vermin. It is efficacious for almost every disease (internal and external) sheep are subject to.

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FOR SALE.

40 head SPANISH MERINO BUCKS

Bred by Mr. J. H. Spier. Sired by his Imported Vermont Registered Buck, and out of his premium flock of breeding ewes.

TERMS REASONABLE.

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Recommended by Professors Hilgard, Cooke, etc.

Powdered Potash & Caustic Soda

KILLS GOPHERS, INSECTS, Etc.

Makes a pure Soap at a cost of \$1 per 125 lbs. Send for directions to T. W. JACKSON & CO., 304 California St., S. F.

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After dipping the Sheep, is useful for preserving wet hides, destroying the vine pest, and for wheat dressings and disinfecting purposes, etc. T. W. JACKSON, S. F., Sole Agent for Pacific Coast.

A NEW COLONY

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Warehouse and Wharf at Port Costa.

CONSIGNMENTS OF GRAIN, WOOL, AND ALL KINDS OF PRODUCE SOLICITED.

Money advanced on Grain in Store at lowest possible rates of interest. Full Cargoes of Wheat furnished Shippers at short notice.

ALSO ORDERS FOR GRAIN BAGS, Agricultural Implements, Wagons, Groceries and Merchandise of every description solicited.

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Authorized Capital, - - \$1,000,000

In 10,000 Shares of \$100 each.

Capital Paid up in Gold Coin, \$645,360.

Reserved Fund and Paid up Stock, \$21,178.

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LOANS ON WHEAT and country produce a specialty. COLLECTIONS throughout the Country are made promptly and proceeds remitted as directed.

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CERTIFICATES OF DEPOSIT issued payable on demand.

BILLS OF EXCHANGE of the Atlantic States bought and sold.

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Active, honest persons all over the country, with or without team.

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MRS. JOSEPH SWIFT, State Center, Iowa: The most useful article about the kitchen. ANNA RANNEY, Milton, Tex.: Have thoroughly tested it on articles from two collars to bed quilts, given entire satisfaction.

ST. CLAIR INKSTER, JR., Egypt, Washington Terr.: Sells itself and can not be spoken of too highly. JOHN DETTON, Bangor, Ark.: Have given it several severe tests and it came out triumphant every time.

JNO. B. WHEELER, Kansas City, Mo.: They have proved treasures to the families who secured them. A. P. SHIPLEY, Toledo, Nev.: Gives entire satisfaction. Rather bristle the Washer than anything I have seen.

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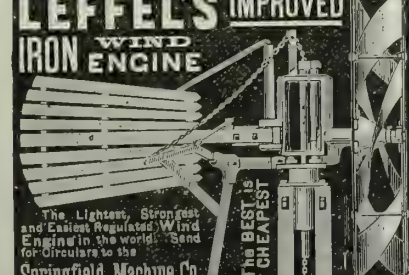
MRS. M. C. DUBBINS, Galveston, N. J.: Gives perfect satisfaction. I do my washing alone in same time I used to wash with help. MRS. W. WOODS, Newbern, Va.: Will do more than I say, especially washing flannels.

MRS. F. G. SINDEN, Sherman, N. Y.: Would not take \$50 for mine if I could not get another. Washes quicker and better than it can be done by hand. MRS. FRED H. HARRIS, Brattleboro, Vt.: Is all that is claimed. Would not be without one for twice its price. MRS. ISAAC B. POND, Northfield, Conn.: Have used nearly four months. Am perfectly satisfied. I freely recommend it to all housekeepers. MRS. MARY E. VAIL, Patoka, Ill.: Saved me \$5.00 per year for 12 months I've had it.

MRS. C. W. TALBOT, Northfield, Conn.: I have thoroughly tested it for five months with entire satisfaction. EDNA J. HUNT, Stanton, Mich.: I had rather give up my Jersey cow than part with my Washer.

I will ship a sample to those desiring an agency on a week's trial on liberal terms. A thousand per cent the best washer in the world for saving labor, clothes and soap. Pays capable agents BIG MONEY. Write for particulars. Address J. WORTH, Box 516, St. Louis, Mo.; or Box 1968, San Francisco, Cal.


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The Lightest, Strongest and Easiest Regulated Wind Engine in the world. Send for Circulars to the Springfield Machine Co. SPRINGFIELD, O.

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35 Fine Engravings showing the positions and actions of sick horses. Gives the cause, symptoms and best treatment of diseases. Has a table giving the doses, effects and antidotes of all the principal medicines used for the horse, and a few pages on the action and uses of medicines. Rules for telling the age of a horse, with a fine engraving showing the appearance of the teeth at each year. It is printed on fine paper and has nearly 100 pages, 7x5 inches. Price, only 25 cents, or five for \$1, on receipt of which we will send by mail to any address.

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RANSOME, 402 Montgomery St., S. F. Send for Circulars

CALIFORNIA STATE FAIR—1886.

At Sacramento, Sept. 6th to 18th. TWO WEEKS.

The Attention of the Farming Community of this State is particularly called to the Liberal Awards, and advantages offered for COUNTY EXHIBITS.

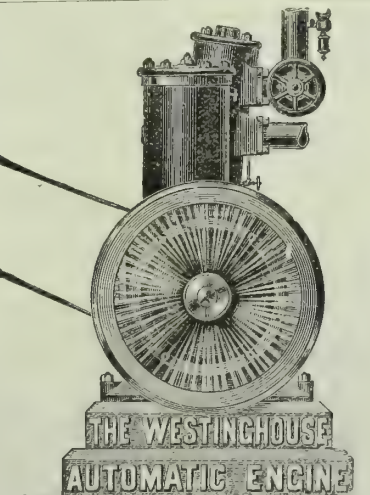
The importance of an exhibit made by separate counties, showing the productive qualities of the various sections of our State, has become more apparent each year since the system was inaugurated by this Board. Recognizing the interest made manifest in the past by both the public and the exhibitors, through whose energy and enterprise valuable agricultural lands have been brought to the notice of the world, and counties with small populations have increased in a manifold degree, by reason of the producer having come forward with his products that were of such quality as to enable him to meet all competitors, the Board have deemed it proper to increase the premiums in this Department, and to that end have appropriated \$2000 to be distributed among the various counties making displays under the following provisions: To those who may have charge of the exhibits, we would call their attention to the fact that these awards will be made for the most extensive, perfect, and varied exhibit of Farm Products (exclusive of live stock) exhibited as a County Production. Thus it will be seen that it is to be wholly devoted to the products of the farms located in the county where the exhibit is made from, and does not include manufactured goods of any kind or character except those grown and raised in the county from whence the display comes.

For the best display, as per explanation above, First premium of \$500, cash. The remaining exhibits shall receive premiums in proportion to their excellence, as compared with that receiving the First Premium. Competition to be between counties only. That is to say, that the entire exhibit made by one county must compete against the entire exhibit of another county. The premium awarded to each county exhibit will be paid to the committee in charge of said exhibit.

The State Board of Agriculture earnestly desires the hearty co-operation of the various subordinate Granges throughout the State, in making this exhibition of California's products a success, whereby the varied products of different localities may be fully shown. We would ask the appointment of a committee from the Grange in each county to call upon and urge the patrons to make a display representing their respective counties.

Address the Secretary at Sacramento for Premium Lists and other information.

JESSE D. CARR, President. EDWIN F. SMITH, Sacramento.



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1,300 Engines now in use.

40,000 Horse Power now running.

Sales 2,000 H. P. per month.

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RED CLOVER.



Needham's Red Clover Blossoms and Extracts prepared from the blossoms, cure Cancer, Salt Rheum and all diseases arising from an impure state of the blood. It will also clear the complexion of all pimples, eruptions, etc. Is a sure cure for Constipation, Piles and many other diseases. Is both laxative and tonic. For full particulars, address W. C. NEEDHAM, Box 422, San Jose, Cal. Needham's Red Clover cures after everything else fails.

C. SANBORN, ARCHITECT,

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Receive consignments of Produce for sale in San Francisco, New York, Boston, Philadelphia, England, Australia, etc. Make advances on approved consignments. Fill orders for staple goods in New York and other markets. Effect fire and marine insurance in best offices. Charter vessels and engage freights for all trades. Agents for line clipper ships from Philadelphia, China, etc. All business has faithful and watchful attention.

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A MAGIC CURE—FOR—Rheumatism, Neuralgia, Pneumonia, Paralysis, Asthma, Sciatica, Gout, Lumbago, and Deafness. Everybody should have it. G. G. BURNETT, Ag't. 327 Montgomery St., S. F. Price, \$1.00. Sold by all Drug Gists. Call and see DR. CHAS. ROWELL. Office—428 Kearny St. San Francisco.

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Domestic Produce.	
WEDNESDAY, Sept. 1, 1886.	
BEANS AND PEAS.	
Bayo, cti.....	1 40 @ 1 50
Butter.....	1 25 @ 1 50
Castor.....	— @ —
Pea.....	1 75 @ 1 80
Red.....	1 10 @ 1 12
Pink.....	1 07 @ 1 12
Large White.....	3 00 @ —
Small White.....	1 75 @ 1 80
Lima.....	2 00 @ 2 25
Old Peas, blk eye	— @ 1 50
do green.....	1 00 @ 1 12
do Niles.....	1 25 @ —
BROOM CORN.	
Southern.....	— @ —
Northern.....	— @ —
CHICORY.	
California.....	4 @ 4
German.....	6 @ 4
DAIRY PRODUCE, ETC.	
BUTTER.	
Cal. fresh roll, lb.	21 @ 24
do fancy brands	25 @ 27
Pickle roll.....	20 @ 21
Firkin, new.....	15 @ 18
Eastern.....	8 @ 11
CHEESE.	
Cheese, Cal. lb.	7 @ 9
Eastern style.....	10 @ 13
EGGS.	
Cal. ranch, doz.	29 @ 30
do store.....	20 @ 26
Eastern.....	10 @ 17
Picked here.....	— @ —
Utah.....	20 @ 21
FEED.	
Bran, ton.....	15 50 @ 16 00
Cornmeal.....	25 @ 27 00
Hay.....	5 00 @ 11 00
Middlings.....	16 00 @ 17 00
Oil Cake Meal.....	26 50 @ 28 50
Straw, bale.....	35 @ 50
FLOUR.	
Extra, City Mills	4 12 @ 4 50
do Country Mills	4 00 @ 4 37
Superfine.....	3 00 @ 3 50
GRAIN, ETC.	
Barley, feed, cti.	82 @ 90
do Brewing.....	1 50 @ 1 65
do new.....	1 10 @ 1 15
Chevalier.....	1 35 @ 1 45
do Coast.....	— @ —
Buckwheat.....	1 00 @ 1 10
Corn, White.....	1 35 @ 1 40
Yellow.....	1 35 @ 1 40
Small Round.....	1 35 @ 1 40
Nebraska.....	1 10 @ 1 25
Oats, new.....	— @ —
do No. 1.....	1 30 @ 1 35
do No. 2.....	1 20 @ 1 25
do black.....	1 12 @ 1 15
do Oregon.....	1 25 @ 1 45
Eye.....	— @ 1 22
Wheat, No. 1.....	1 33 @ 1 36
do No. 2.....	1 30 @ 1 32
Choice milling	1 37 @ 1 40
HIDES.	
Dry.....	— @ 18
Wet salted.....	8 @ 9
HONEY, ETC.	
Bee wax, lb.....	20 @ 22
Honey in comb.	7 @ 9
Honey in comb.	— @ —
fancy.....	10 @ 12
Extracted, light	3 @ 4
do dark.....	3 @ 4
HOPS.	
Oregon.....	30 @ 32
California old.....	17 @ 20
do new.....	30 @ 32
ONIONS.	
Red.....	— @ —
Silver skin.....	50 @ 65
NUTS—JOBBER.	
Walnuts, Cal. lb.	7 @ 9
Chile.....	7 @ 9
Almonds, hd sh.	6 @ —
Soft shell.....	10 @ 12
Brazil.....	11 @ 12
Pecans.....	10 @ 12
Peanuts.....	3 @ 4

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REGISTERED IN THE AMERICAN JERSEY CATTLE CLUB OF NEW YORK.

GUERNSEY CATTLE.

Direct Importation from the Island.

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Direct Importation from the Island.



**Winnings at the Fairs of 1885:**  
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Eleven First Prizes in Classes for Age.  
One Second Prize in Classes for Age.

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Best herd of thoroughbred Jersey Cattle over 2 years old.  
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Seven First Prizes in Classes for Age.  
One Second Prize in Classes for Age.  
Herd Prize, competing against Ayrshires and Devons over 2 years old.

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MARY ANNE OF ST. LAMBERT, 36 lbs., 12 1/2 ozs., 1 week, A. J. C. test; 867 lbs., 14 1/2 ozs., in 11 months.  
IDA OF ST. LAMBERT, 30 lbs., 2 1/2 ozs., 1 week, A. J. C. test.

**Blood Relatives of the above Cows, Young Animals of Both Sexes, for Sale.**  
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IF NOT, WHY NOT?

NOTE.—Eggs have now doubled in price and will continue to advance to 50 or 60 cents per dozen, and from this time on every one should feed this Egg Food in order to have plenty of Eggs to sell at those profitable prices.

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NOTE.—This is the only Incubator in the world which is run literally without any expense whatever, saving the full price of the machine every year used in oil alone. We use NO LAMP, no oil, no heating apparatus with the machine, and guarantee it to run strictly to any degree.

**EGG TESTER.** The long-needed Tester just a time, as quick as one at a time by the usual process, and six times as effectually.

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# Houser Combined Header & Thresher

IN THE HARVEST FIELD FOR 1886.



280 Houser Harvesters in Field Work.  
300,000 Acres of Grain Harvested this Season with the Houser Machines.

No Failures. No Dissatisfaction. All did Good Work. They are Pull Machines. Our Standard make is a "Belt," but will build them "Geared" to Order.

The Houser for 1887 will have an increased capacity of Cylinder and Separator, and the Cleaner will be the BEST that can be made. AN IRON STRAP BRAKE will be put on the Drive Wheel, rendering a runaway impossible, and every improvement added to the Harvester which the experience of the season of 1886 has proved practical.

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**BEWARE OF EXPERIMENTS. BUY THE "OLD RELIABLE" HOUSER AND YOU TAKE NO CHANCES.**

EXTRAS WILL BE FURNISHED FOR 1887 AT REDUCED PRICES.

WE ALSO BUILD TO ORDER THE MINGES, SHIPPEE, AND POWELL COMBINED HARVESTERS. Send for Circulars, see, or correspond with those who have run the "Houser." Address

**STOCKTON COMBINED HARVESTER and AGRICULTURAL WORKS, Stockton, Cal.**



## Educational.

## MILLS SEMINARY.

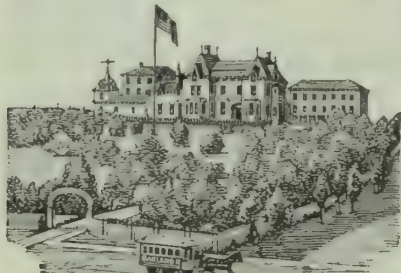
The next term of this well-known Institution will commence on

Wednesday.....August 4, 1886.

For Circulars giving particulars, address

MRS. C. T. MILLS,  
Mills Seminary P. O., Alameda Co., Cal.

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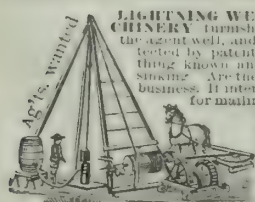
Next Term will begin Monday, Aug. 2, '86

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Address MRS. R. G. KNOX, Proprietor, or MISS FRANCES A. DEAN, Principal.

THE FIFTEENTH YEAR WILL BEGIN  
Wednesday.....July 28, 1886



Dewey & Co. { 252 Market St. } Patent Ag's

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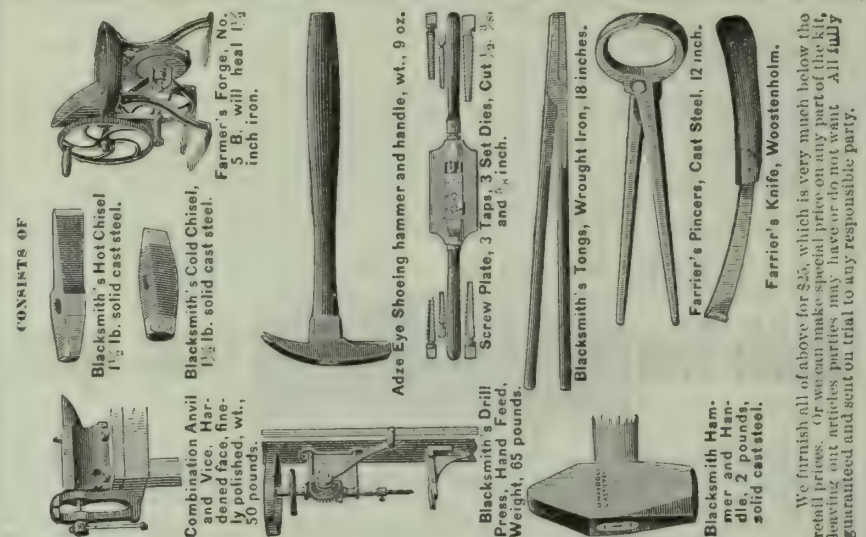
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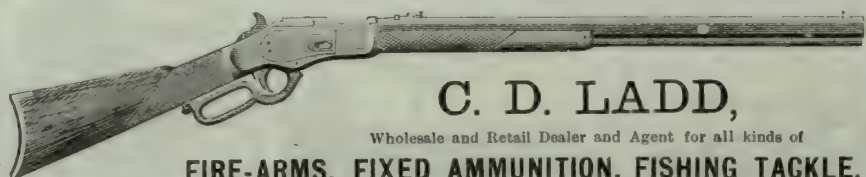
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N. B.—Upon timely notice, intending purchasers will be taken from Cottonwood to the ranch and returned free.

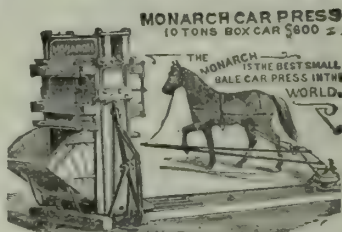
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BARGAINS in ORCHARDS and VINEYARDS, STOCK and Grain Ranches in every County in the State. Send Stamp for Catalogue. We can find quick sale for your farm, large or small, if it is cheap and you will send us full description. If you want to buy, tell us what you want, and we can suit you.

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Our Fertilizers lessen cost of irrigation, increase the yield, improve the quality of crop, and are cheaper than barn-yard manure.

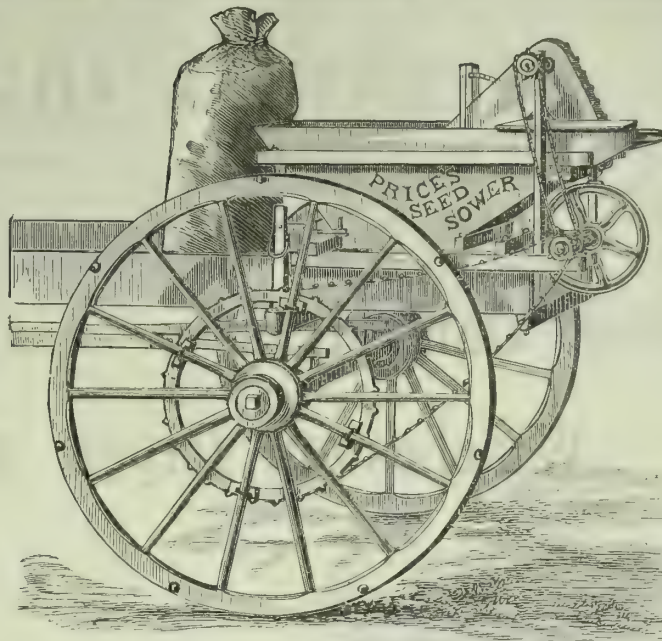
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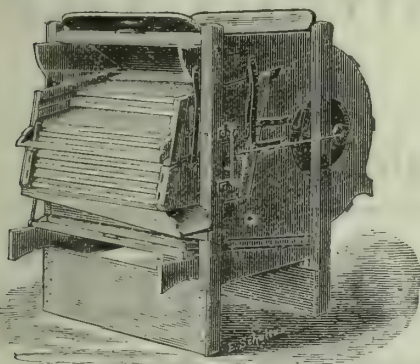


Sows a strip 100 feet wide at each passage (working width in wheat, 80 feet). Sows as evenly as a Force-feed Drill.

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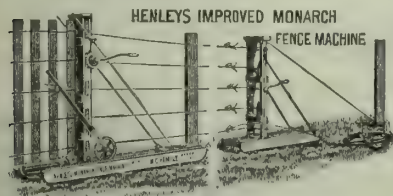


OUR IMPROVED HAND SEPARATOR is a double combined machine, possesses two shoes (instead of one, as in machines of other manufacturers), nine riddles and a large independent screen. Each shoe is equal in power and capability to the one in any other mill, and by the operation of the two, double efficiency is secured. Our 28-inch mill will clean from 400 to 600 bushels of seed grain per day, according to the condition of the grain, and we guarantee that all barley, oats, or other foul seed will be thoroughly removed with complete satisfaction.

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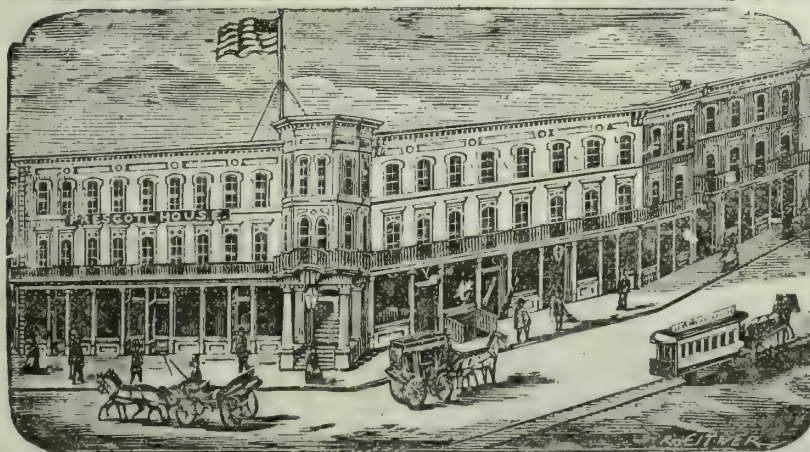
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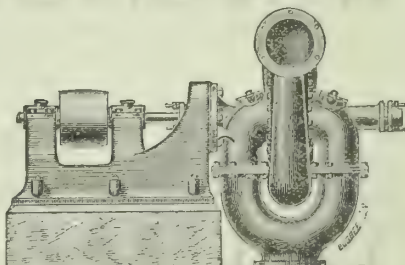
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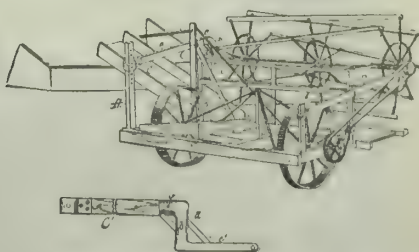
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### \$1000 REWARD THE VICTOR

For any machine lifting and cleaning fit for market as much Clover seed in ONE DAY as the

VICTOR DOUBLE HULLER.

Illustrated circular mailed free.

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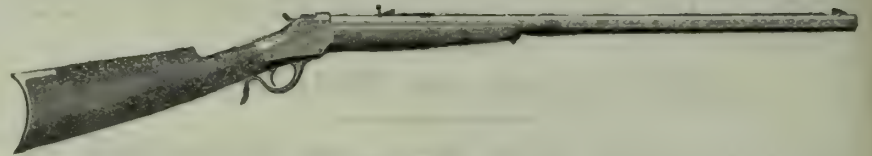


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REPEATING AND SINGLE SHOT.

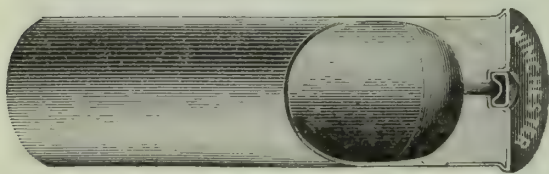
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Winchester Gun Wads,

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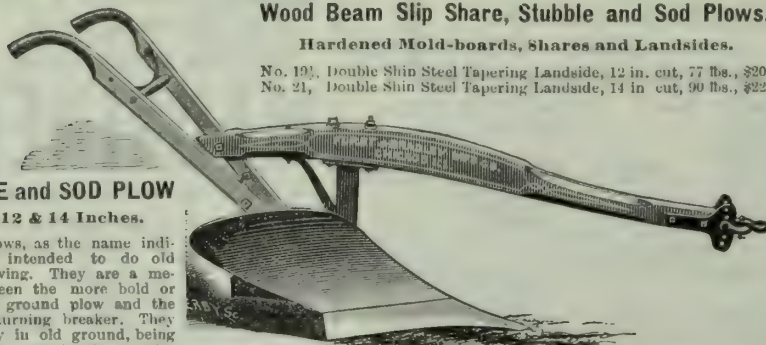
Wood Beam Slip Share, Stubble and Sod Plows.

Hardened Mold-boards, Shares and Landsides.

No. 19, Double Shin Steel Tapering Landside, 12 in. cut, 77 lbs., \$20.  
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**STUBBLE and SOD PLOW**  
Sizes, 12 & 14 Inches.

These Plows, as the name indicates, are intended to do old ground plowing. They are a medium between the more bold or abrupt old ground plow and the long, slow-turning breaker. They work nicely in old ground, being preferred by some to the regular Stubble Plow, and turn tame sod, such as Blue Grass, Timothy, or Clover, admirably. They are numbered 19 and 21. We make with them steel beam, also. The numbers of the steel beam plows of this style are 519 and 521.



THE CELEBRATED MONARCH POTATO DIGGER.

Twelve Smart Boys Required to Pick up Potatoes as fast as it can Dig.

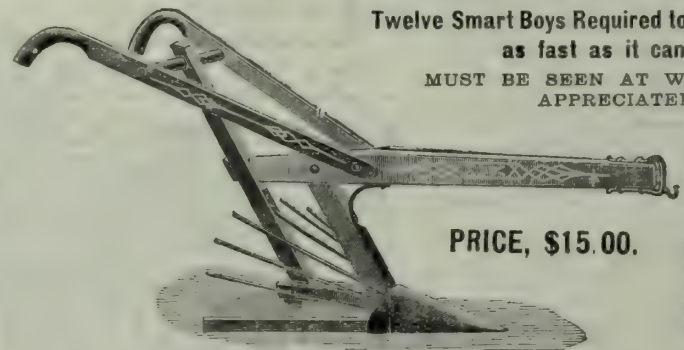
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DIGS

IRISH and SWEET POTATOES.

A boy 16 years old can handle it with ease, and with a span of horses, in ordinary ground, can dig 600 bushels of potatoes in a day.

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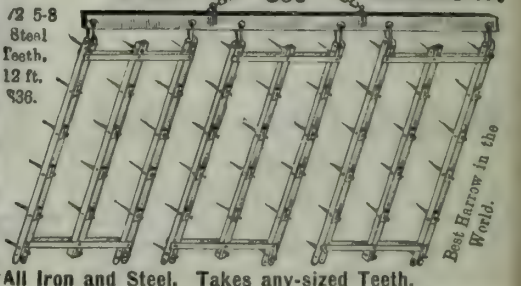
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Vol. XXXII.—No. 11.]

SAN FRANCISCO, SATURDAY, SEPTEMBER 11, 1886.

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### Admission Day.

Thursday marked the thirty-sixth annual mile-stone of the State. The story of the admission of California into the Union constitutes too important a page in our country's history to be neglected. We are glad the Native Sons of the Golden West have taken it into their special keeping.

On the 13th of February, 1850, President Fillmore transmitted to Congress, by message, a copy of the Constitution of California. A motion was made to refer it to a special committee. Many of the Southern Senators were opposed to a consideration of the matter. They said it was contrary to all precedent to allow a people to organize themselves into a government without the previous authority of Congress. On the 17th of April, after a long and stormy debate, the question of admitting California was referred to a select committee of thirteen, Mr. Clay, chairman, and on the 8th of May the committee brought in a series of resolutions, humorously called the "omnibus bill," because it was loaded down with so many different objects. It was the ingenious work of Mr. Clay. It was an effort, amicably, to arrange the great slave controversy. The principal points were: That California should be admitted as a State, without slavery; that appropriate government ought to be established for the territory acquired from Mexico, without the restriction of slavery; that it was inexpedient to abolish slavery in the District of Columbia, and that more effectual provisions ought to be made for the restitution of fugitive slaves. Mr. Clay, although 75 years old, led the debate that followed with all the ardor and fire of his youth. He was anxious to crown the evening of his life with one more brilliant triumph. His speech on this occasion was the last great effort of his eventful life. In the long debate that ensued, continuing till the last of July, the bill was so trimmed and pared down with amendments that the clause providing for "the Territorial Government of Utah" was all that was left. This dismemberment of Mr. Clay's pet scheme was facetiously called "upsetting the omnibus." Subsequently, however, the other portions of the bill were passed in separate bills. The bill to admit California as a State passed the Senate August 13th, 34 to 18; the House on the 17th, 150 to 56. The Fugitive Slave Bill was immediately taken up and passed the Senate August 23d, by a vote of 27 to 12. In the House, the bill passed under the action of the previous question, without debate, 109 to 75. The Fugitive Slave Bill was the price paid by the North for the admission of California. As the witty John P. Hale said, "it was an effort to split the difference between God and the devil," and no good could come of it. By the unerring logic of events the legislation of that Congress led to John Brown and the Border war, the election of Abraham Lincoln, the bombardment of Fort Sumter, the Emancipation Proclamation, the Fifteenth Amendment, and a regenerated Union.

**CORN CROP IN THE NORTHWEST.**—The summary of the *Farmers' Review*, telegraphed from Chicago, 5th inst., indicates that while drouth and continued hot weather seriously injured the general prospects of corn, it also accelerated ripening the grain; and in sections of Missouri, Kansas, Iowa and Minnesota a portion of the crop has sufficiently matured to be beyond danger from frost. The general prospects for

the output of corn show no marked improvement. The tenor of the reports from all States, except Ohio, Indiana, Michigan and Minnesota, continue to predict a short crop.

**KERN AND TULARE FAIR.**—They are talking up the project, in Tulare and Kern, of holding a joint exhibition of the agricultural, mining

### Cascara Sagrada.

The last report of the Commissioner of Agriculture has an interesting article on "Native Medicinal Plants," by Dr. Geo. Vasey, botanist of the Department. In this we find an account of the Cascara Sagrada (*Rhamnus Purshianus*), pictured upon this page. This



CASCARA SAGRADA—*Rhamnus Purshianus*.

three in width, with very fine teeth on the margin, which indeed is sometimes almost entire. The petiole or stem of the leaf is half an inch to an inch long, and covered, as are also the young twigs and the under side of the leaves, with a fine brownish down or pubescence. Upon the leaf there are 10 or 12 pairs of strong ribs or veins on each side of the central midrib. The flowers are small and appear in clusters of 10 or 12, proceeding from the axils of the leaves. There is one common stalk or peduncle and a more delicate pedicel for each flower. The blossoms are of a greenish hue, with five acute sepals and as many smaller, hooded petals divided at the point. They also have each four or five stamens, and a short style, three to four cleft. The flowers are followed by small black berries, as big as a pea, which consist of three bony seeds or nutlets, with a thin, pulpy covering. (At the lower left-hand corner of the cut are shown a flower, enlarged, and a cross-section of the fruit.)

The bark possesses active cathartic properties, and has been lately introduced into medical practice, large quantities for the drug trade being annually gathered in Oregon. The bark of *Rhamnus catharticus*, of Europe, has been thus employed since long ago, and these purgative qualities are probably common to many species. There is in this State a species called *Rhamnus Californicus*, whose bony seeds have been used now and then as a substitute for coffee; but they contain no caffeine, the peculiar principle of the true coffee.

### The Three-mile Line.

It was reported some time ago that Mr. Phelps was preparing a brief for the use of the State Department in its negotiations with England on the fisheries question, in which he strenuously opposed the position taken by the British Foreign Office in regard to the three-mile limit. Whether anything will come of the rumor remains to be seen. The attempt of two Canadian tide-waiters the other day to seize the schooner *Legal Tender*, in Barrington bay, shows how important it is to fix the line in dispute. And what is this three-mile line, about which we hear so much? By the treaty of 1818 it was declared that within the limit of three miles the Dominion fishermen should have the exclusive right to fish. But unfortunately, the basis of measurement was not defined. The Canadian authorities have arbitrarily assumed that it is a line stretching from headland to headland. For instance, there is a bend 30 miles long from North Cape to East Point, Prince Edward's island. They claim that under the provisions of the treaty they have the exclusive fishing privilege within a line three miles out from each headland, though at the intermediate points the line may be 23 miles or more from shore. The Americans, on the other hand, claim that the three-mile line should be considered as following the indentations of the coast; that the three miles from shore means three miles from shore, and not 15, 20 or 30 from the headlands, as terminal points.

THE San Miguel Inland Messenger says: Baron Von Schroeder, who has, without regard to expense, been fitting up a place in the mountains west of Cashin's station, has now 26,000 French prune trees over a year old. He has also a variety of other choice fruits, all inclosed with a rabbit-proof fence which is said to be four miles long.

and manufactured products of those counties some time this autumn, at Visalia. The two constitute practically a single district, whose inhabitants have interests so much in common that almost anything advancing the prosperity of the one is likely to inure to the good of the other. But, as the *Delta* observes, it will be necessary to move quickly if anything is to be done, for the fall is upon us, and the first rains may not be long delayed.

plant grows on the Pacific slope from Northern California to Oregon and Washington Territory, and also occurs sparingly in Idaho and Montana. It varies much in size according to location, being found in some places only as a shrub 10 or 12 feet high, in others becoming a tree 20 to 40 feet in height, with a trunk a foot or more in diameter.

The leaves are elliptical in form, undivided, from two to six inches in length and from one to



## CORRESPONDENCE.

Correspondents are alone responsible for their opinions.

## Napa County.

EDITORS PRESS:—Napa county lies north of San Francisco about 50 miles, and borders the northern side of San Pablo bay. It is bounded on the west by Sonoma, on the north by Lake and on the east by Yolo and Solano counties. Topographically it is made up of mountains and valleys. Mt. St. Helena rears its towering head at the northwestern extremity of the county, and branches of the Mayacamas range shoot out to the southeastward, dividing into long ridges extending the whole length of the county, falling away into foothills near the southern boundary.

Between these ranges lie broad sweeps of beautiful and fertile valleys. Beginning at the eastern side we come first to Berryessa valley, which is justly noted as a grain-producing section. Next we come to Pope and Chile valleys, which are, in reality, one, there being only a slight divide between them. Here also grain is grown extensively. Passing over Howell mountain, we come down into the queen valley of the county—fair Napa. This extends from Mt. St. Helena at the north to the bay at the south, a distance of nearly 40 miles, with an average width of four miles.

These valleys are all filled with happy homes, fine orchards, thrifty vineyards and broad grain fields, and laugh with joy under their burden of crops every year. In the mountains lovely homes are springing into existence on every hand, for vine and fruit trees thrive even better there than in the lower valleys. Here, also, is found fine pasturage for stock and large droves of cattle, and flocks of sheep and goats may be seen quietly grazing and fattening for the ever-ready market.

Much indeed has been written of the beautiful climate of California, and yet nothing can be said of any portion of the State that cannot be truthfully asserted of Napa county. At Napa city, and south of it, the cool, moisture laden sea-breeze sweeps in from the bay, making the climate somewhat similar to that of San Francisco. Further north, and in the interior valleys, it is warm and dry. Thus can be found any kind of climate desired. The heat of summer is never excessive, and the cold of winter is modified by its nearness to the ocean. At a given height upon the mountain-sides lies the thermal belt in which all kinds of tropical fruits thrive luxuriantly. Lemons, oranges, olives, and such kinds of fruit do remarkably well in that belt, this being proven by the fact that at the citrus fair held at Sacramento last winter oranges grown at the Napa Soda Springs captured a blue ribbon.

The soils of Napa county are well adapted to the production of grain, fruits, vegetables, and grapes. No finer orchards or vineyards are to be found in the world than can be seen by riding through Napa valley. The wines of Napa valley have a reputation which extends far beyond the confines of our own country.

For pleasure and health resorts Napa county is unsurpassed. Soda and sulphur springs abound on every side, while there are many of other chemical combinations.

At the head of Napa valley is situated Calistoga, which is a flourishing place of 500 or 600 inhabitants. It is the terminus of the Napa Valley Railroad, and is surrounded by a good fruit, grape, and grain-growing section. There are also several mines in that vicinity.

Farther south some dozen miles is St. Helena, a beautiful town of 1500 to 2000 inhabitants. It is located in the heart of the wine-growing section of Napa valley, its surroundings being one vast vineyard.

At the lower end of the valley is the county seat, Napa City, a place of 5000 inhabitants. It is growing rapidly and many industries are springing into existence. These are represented at present by two tanneries, one woolen mill, two flour mills, one glue factory, one fruit cannery, one tile factory, one planing mill, five wine-cellars and a number of smaller industries, such as a macaroni factory, fruit crystallizing, etc.

The churches and schools of Napa are the pride of her citizens. The Presbyterian, Methodist and Catholic denominations are represented by stately and handsome edifices, and others by neat and commodious buildings. Beside the public school system, which is most ably conducted, and which occupies four buildings, there is a young ladies' seminary, a college and a private school for boys.

Napa City offers every inducement to industries and manufactures—it being so very accessible to market. The river opens an outlet by water, the run to San Francisco being but a few hours, while by rail it is in communication with the whole United States. The fruit cannery and the cellar of the Napa Valley Wine Company, which is just in course of construction, and the woolen mills, are so favorably located that they practically have the railroad at one door and the river at the other.

There is no more desirable location in California for homes than Napa county, and the rapid filling up of the valley by new-comers attests the fact that this truth is recognized by those seeking for homes. L. L. PALMER, Napa, Cal.

## Codlin Moth vs. Sweet Lures.

EDITORS PRESS:—Capt. D. B. Austin, of Los Gatos, one of the commissioners for inspecting orchards, fruit packages, nursery stock, etc., for insect pests in Santa Clara county, has tried to catch codlin moth with cans of sweetened water, with lanterns suspended near, and caught 25 distinct varieties of moth, but not one codlin moth. He would be glad to ascertain if others have experimented in the same direction, and if so, with what results.

MCD.

[With much the same results.—EDS. PRESS.]

## THE APIARY.

## Handling Bees.

EDITORS PRESS:—If it were not for the dread and occasional danger of stings, many more people would no doubt keep bees, at least to supply sufficient honey for their own use. The bee is, as everybody knows, provided with a formidable weapon, formidable in proportion to its size and effect; but this weapon, the sting, is very seldom used, except as a means of defense. The honey bee is naturally a peace-loving insect, and has no desire to molest anybody as long as it is left to pursue its industrious calling without interference. While flitting from flower to flower, or sipping the water at the bank of a babbling brook, the bee has no more thought of warfare than the man who peacefully works to provide for his loved ones at home. But let an evil-disposed person try to injure this home or its occupants, or rob it of its hard-earned stores, and the man is immediately on the defense with the best means at his disposal. Can you blame the bee, the most industrious and intelligent insect, for what you commend in man? Its sagacity and courage are to be admired rather than deplored. Without these qualities the bee and its precious stores would be a prey for numerous enemies, all too fond of insect-food and honey, and but little of the latter would fall to the share of him to whom the Creator gave "dominion over every living thing that moveth upon the earth." It then devolves upon man to learn the nature and traits of the bees, and to use this knowledge that he may reap the fruits of their industry without pain or danger to himself, and without unnecessary annoyance or harm to these humble servants. The time of cruelly submitting a colony of bees to a horrible death over the brimstone-pit, for the purpose of obtaining a scant supply of honey, is past. As well might we kill the sheep to obtain its wool, or the goose for her feathers. By proper precautions there is no more danger in obtaining the honey than the wool and feathers. Certain rules must be observed, to be sure; but by means of these rules the bee-keeper is as safe at his work as a workman in any other occupation.

## Aversions of Bees.

Bees dislike all black, dark or iron-gray colors; fur, hair and wool are an abomination to them. The bee-keeper should therefore avoid clothing of such material and colors when in the apiary. He should also keep his hair and beard covered; and as the eyes and nostrils present dark spots in the face, more liable to attack than the smooth skin, it is generally safest to keep the whole head protected by some kind of a bee-cap. This may be simply a sack of dark-blue mosquito-bar or tarlatan, or it may be a flour-sack with a piece of wire cloth inserted in front of the face. The best bee-hat is made by sewing a cylinder of wire cloth to the rim of a straw or calico hat, and adding a broad strip of cloth to the bottom of the cylinder. The cloth falls over the shoulders or may be tucked under the coat-collar. The hands should never be protected. Any kind of glove which may be worn will be more objectionable to the bees than the bare hands. If the bees are particularly irascible, singe the hair off the back of the hands and dip them frequently in cold water.

Quick motions and sudden jars to the hive should be avoided. Hives should therefore never be opened in cold weather, when the propolis, with which the cover and frames are fastened, is hard, and when everything comes apart with a snap. The breath of some persons is objectionable to the bees; but in hunting for a queen on the comb, I frequently blow hard on the bees to make them disperse and move around, and I find that such a blow of cool air is less objectionable and less irritating to them than smoke.

## Fright of Bees.

Bees have a natural fear of smoke. Taking advantage of this trait, smoke is the principal weapon in the hands of man with which to control, subdue or direct the bees. By judicious use of smoke the bees may be made to move in any direction desired, as they will always retreat from it. A roll of cotton rags of the size and shape of a bologna sausage makes a very good smoker. The rags should be rolled as hard as possible to prevent blazing, and tied every two inches. The bellows-smoker, now so commonly used by bee-keepers, is, however, a far superior implement, as it will burn anything that will burn in a stove, and avoids

danger of fire, which is often caused by the cotton roll. In the

## Manipulation

Of combs, great care should be used not to pinch or crush any bees, as the odor of poison exuded by such is exceedingly irritating to the other bees in the hive or to those flying about. If a bee is crushed or stings the hand, a few puffs of smoke on the spot will generally neutralize and conceal the odor of the poison.

When it is necessary to remove the bees from a comb, the best way is to shake them off, holding the frame so securely that it will not slip out of the fingers. As, however, some bees will hold on with the tenacity of a kitten, they must be brushed off. For this purpose nothing is better than a single, large eagle feather. This should be frequently dipped in water to keep it soft and pliable. A wing or brush is not desirable, as the bees may get entangled in the feathers, hair or fibers, which is very exasperating to them. If a comb contains queen cells, which it is desirable to save, such a comb must, however, not be shaken, as the sudden motion is liable to injure the embryo queens. The bees must then all be brushed off, and to dampen their possible ire at this proceeding it is advisable to sprinkle them slightly, and frequently dip the feather in water. This prevents them from taking wing immediately, and getting the impression that a shower is coming up, they are more desirous of taking care of themselves than of attacking their owner.

WM. MUTH-RASMUSSEN.

Independence, Cal.

## HORTICULTURE.

## Care of Orchards.

EDITORS PRESS:—There seems to be a good deal of complaint in various parts of the State respecting the condition of fruit trees. Some ascribe this condition to one thing, and some to another; but so far as my observation extends, I think the little word "neglect" will explain the whole matter. If the advice which Christ gave concerning the barren fig-tree were more generally practiced, there would be less complaint in this respect. If those having orchards would dig about and dung them more than they do, a far different aspect would be presented.

While plowing my orchard last spring I noticed that the soil around the trunks of the trees was almost as dry and hard as a sandstone. I dug all this hard, dry soil away to the depth of some 18 inches, leaving a hole about two feet in diameter. After two or three weeks all the weeds and grass in the vicinity of each tree were collected and thrown into each hole, and the loose soil hauled back over them, leaving the ground level and mellow. The trees soon showed the beneficial effects of this treatment in their healthy appearance and vigorous growth. In pruning an orchard adjoining mine, I noticed several of the trees had a scrawny, sickly appearance, and some of them appeared to be dead. While plowing in this orchard I found knotty excrescences on the roots of these trees, and on examination I ascertained this was caused by the woolly aphis puncturing the roots. I advised the owner to dig about all these trees and remove these knots. He did so, getting in some instances an oil-can full of knots from each tree. The result was that in a little while these sickly trees revived, and are now well loaded with fruit. Subsequently I whitewashed both of these orchards, and I doubt if any other two orchards can be found in the State presenting a healthier or cleaner appearance, or that have made so vigorous a growth both in wood and in fruit. There are 250 trees in these two orchards, and 10 days' work would cover all the time spent in digging about the trees and whitewashing them. J. S. TIBBITS.

Santa Rita, July, 1886.

[No doubt many unhealthy trees become so by neglect; but that does not meet the general trouble complained of this year. Great mortality has been observed even in the best cultivated orchards.—EDS. PRESS.]

## Codlin Moth.

"Prof. A. J. Cook tells, in the New York *Weekly Tribune*, that his students to the number of 30 or 40 secure hundreds of nocturnal moths for their collections by placing bright lights in front of their windows, making the institute halls look like a grand illumination. They also place sweets, scented with all kinds of odors, sweetened water, sour milk, etc., to attract moths, and, while hundreds of the latter, including cut-worm moths, are thus gathered, not a single codlin moth has been taken. The professor, therefore, feels justified in pronouncing the advice to entrap the codlin moth by any device in which sweetness or light is used as bait, stale and spurious. The reader who is not acquainted with the codlin moth can easily become so by putting a live, full-grown apple in a box, and when it develops he will find a little gray moth with copper-colored spots at the end of the front wings, but never its like in the molasses trap."—Ex.

James Waters, commenting on the above in the Santa Cruz *Sentinel*, says: If the above be true, those who are engaged in trapping the codlin moth in vessels of sweetened water, and by hanging bright lights in their orchards at night, have evidently been deceived by captur-

ing moths other than the codlin moth. This season so far has been exceptionally favorable for the increase of the codlin moth in our valley. The bright, warm days, freedom from fogs, with the pleasant, warm evenings, is just such weather as will bring to perfection every egg deposited in the apple or pear; hence it behooves every one who has an apple or pear orchard to be on the alert in the search for this great pest and destroyer of the apple and pear. Remember, it is much easier to keep them out of your orchards at the start than it will be to get rid of them after they have been allowed to increase in vast numbers. The apples grown in the Pajaro valley so far have been almost entirely free from worms, which has given profit to the growers. The codlin moth once in possession of our orchards, we will no longer find a profit but a job on our hands for perhaps all time to come. How much better will it be, then, if every owner of an orchard will use his every effort to prevent the increase of this fell destroyer of his fruit. Make thorough search in your orchards for wormy apples; see that every one found is immediately destroyed. The best trap to capture larvae is by banding your tree; cut old grain sacks in strips six or eight inches wide, have them long enough to go around the tree and top one or two inches, turn the edge of this cloth under and fasten it around the body of the tree one and one-half or two feet from the ground, with a tack in the upper edge of the cloth, leaving the lower edge loose, or, if preferred, place a strong string in the folds and tie tightly. This band should be examined every seven or ten days and all larvae found destroyed. If your trees are old and have rough bark on the bodies, scrape it off on to a cloth and burn it, for under the rough bark if there is codlin moth in your orchard, you will be almost certain to find the larvae. Hogs are excellent scavengers in an orchard, for they not only destroy all wormy fruit, worms and all, but by rooting up the ground near the tree will destroy whatever larvae may have found a home there. A small piece of old cloth or sack placed in the crotches of the trees is an excellent harbor for the larvae. These cloths should also be examined every seven days and all worms found destroyed and the cloths replaced. The practice of taking return boxes into your orchards is almost sure to carry with them the larvae of the codlin moth. By this means the insects have been generally distributed throughout the State. Free boxes are now furnished so cheap that they should take the place of the return box entirely and thereby avoid the great risk run in the use of return packages.

It is to be hoped that all orchardists in this valley will look closely after the codlin moth and use their best efforts to prevent it from obtaining a foothold in their orchards; for, once here, it comes to stay, to the destruction of the best fruit suited to our valley.

The *Sentinel* adds: One of our present Bug Commissioners, after experimenting in an orchard badly infested with the codlin moth, demonstrated some months since that they were not attracted by a light or tins of sweetened water, and could not be caught in this way, the results of his experiments being published at the time in this paper.

## THE STOCK YARD.

## Cattle Outlook in Nevada and Elsewhere.

A Reno *Gazette* reporter has had an interesting interview with J. T. Davis, of Texas, a gentleman of great experience and wide information, on the subject of the supply and the prospects for the cattle market. He reports prices for range cattle in Texas to be very low on account of the scarcity of feed, produced by drouth in the past two years. Good range cattle are the lowest they have been for years, and although there have been big "die-ups," he looks for heavy losses this winter. Feed is very scarce now, and there is no hope or chance for any until it is brought up by the spring rains. Before that a great many will be gone. There is no way to fatten steers for market, so that Texas will furnish very little beef this fall.

As to future prices, Mr. Davis thinks that the next few years will see beef bringing the highest figures ever reached in this country. The death rate is heaviest among female cattle and yearlings, and heavy losses will make the calf crop short for some years, and in addition to that, cattlemen have spayed and sold a great many cows to butchers and to cannery men when they were not in condition to bring any price at all. The same thing applies in less degree to Colorado, Nevada, and Wyoming. Feed is scarce on some of the best ranges in Central and Eastern Nevada, and with even such a winter as last, the loss will be heavy. The most intelligent cattlemen are preparing to relieve their ranges as much as possible. Scott & Co. have sent large drafts of cattle north. Russell & Bradley sold about a quarter of a million dollars worth, and Sparks & Tinnin are selling 9000 head of yearlings and two-year olds, besides their regular beef shipment. They are also shipping to their Cheyenne range all the two-year-old heifers they have room for there. For these reasons men like Mr. Davis confi-



dently expect to see beef scarce and high for several years to come.

The reporter asked Mr. Davis' opinion of Nevada from a cattleman's standpoint. He expressed it freely as his unqualified opinion that Nevada was almost the safest part of this continent for cattle. Nowhere is the loss by drouth or disease so little. There seems to be a certainty of snow in the mountains even in the worst years, so there are no such "die-ups" as there are in other countries by drouth. Texas sometimes goes two years without a drop of rain on the range lands. Nevada escapes the northern winters by having grease wood, willows, sagebrush and other bushes for cattle to browse on when the grass is snowed under for a week, which often happens in Wyoming and elsewhere. There may be a little poison among the weeds, but not much, and excepting a little black leg, Nevada seems to be almost absolutely free from disease, and with the high altitude, pure, bracing air, and excellent water, such plagues as pleuro pneumonia, Texas fever, etc., have no terrors for the cow-man. The increase seems to be certain, and the loss in young calves very light. The country, however, seems to be adapted to small ranges. From 5000 to 10,000 head of cattle seem to be about the limit that the ranges can safely carry. Many men own more, of course, but they divide them up and keep them on separate ranges. Sparks & Tinnin have five or six separate outfits for their 100,000 head, and the same with others who carry 20,000 to 25,000 head.

Mr. Davis thinks Texas is an easier country to handle cattle in. With the exceptions of the precipices 400 or 500 feet high that break off the table-lands from the plains it is very level and the round-up is much lighter work than it is among the broken mountains of Nevada. These same mountains, however, are forever secure to the cattle or sheep men because they can never be made into farms, while the Texas country will sooner or later be farming lands. With trees and crops being cultivated, the rains will be heavier and the necessities of population will press people out on to the dry lands. It is easier and cheaper to raise cattle in Texas, also, because no one puts up hay as they do in Nevada. It is cheaper while there is feed, but when a drouth comes there is heavier loss; but even to fatten beef for the butcher or wean calves, no one feeds hay. The grass there is different, too. The mesquite is like alfalfa; it grows low and spreads out flat. It is fine feed for stock. Gramma grass grows like Nevada bunch grass and is a seed grass. Nevada cattle are larger and have better blood than Texas herds. One reason is, the climate is better. A higher altitude than that of Texas is better for beef. But one great reason is, the Nevada man has imported full-blooded sires, while his Texas neighbor has used half-breeds. This is now seen to be a great mistake. Mr. Davis is delighted with Nevada in many respects and with her people in every respect.

THE VINEYARD.

California's Raisin Industry.

EDITORS PRESS:—Probably no industry in this State boasts a more rapid development than that of the raisin. It has only been a decade since the first raisins were packed and marketed; since then it has made yearly advances, except in 1879 and 1880, when it held its own. The following table gives the pack of the State the past 10 years:

Years.	Boxes.	Years.	Boxes.
1876	15,000	1882	100,000
1877	25,000	1883	125,000
1878	70,000	1884	175,000
1879	70,000	1885	470,000
1880	70,000	1886	*600,000
1881	95,000		

\* Estimated.

Although we will probably have, this year, a crop of 600,000 boxes, yet it will meet only about one-tenth of the consumption of the United States, which ought to convince the most skeptical that the industry cannot be overdone, provided proper attention is given to packing—herein lies the true secret of its future success.

A thorough canvass of the trade, and also criticisms of leading authorities at the East on commercial subjects, allows the writer to draw the following conclusions: Our market for the raisin crop is east of the Rocky mountains, and to gain and retain this trade we must pack according to all recognized trade terms which govern there. Three grades of raisins are absolutely necessary, viz.: The Sheshias, London Layers, and Layers. The only other grade should be packed as Loose Muscatels, and should average in quality between grades of London Layers and Layers. All raisins or grapes that do not come up to the standard of grades demanded at the East should be sold as dried grapes in large 50 and 100 pound packages. It is of vital importance to the industry that these recommendations be followed out to the letter; for at the East goods are sold on their merits, and only first-quality goods in all respects find quick sales at the highest prices. California raisins are there brought in competition with the finest products of Europe, which has enjoyed a monopoly up to last year, and to successfully fight the foreign, California raisin-makers must not make a false move.

Last year's crop was very generally dis-

tributed at the East, and found favor wherever introduced; not only this, but fancy grocers kept our best-selected put up in attractive style and packages, alongside of the best quality of Spanish imported, resulting in its being demonstrated that the major portion of consumers took the California article in preference to the foreign, even with the price the same. This is a great and substantial victory, and will tell most decidedly if the standard of excellence is maintained, and if possible, still further improved. To gain this there should be thorough interchange of views and opinions, based on practical results, between raisin-makers, by which the entire crop, not a few makes, can be brought up to highest grades. The matter of curing raisins can only be learned by experience, and it is safe to say that while our principal packers have now acquired such a degree of proficiency in curing they have little to fear from foreign competition, yet there are others who have much to learn, and it is these that should be given the benefit of the former's experience, so that a few thousand boxes of indifferent, if not poor, raisins will not be packed to mar, if not destroy, our hard-earned reputation.

We enter the season with a bare market, as all stocks have been cleaned up, and therefore it is expected that the better cured California raisins will find a quick market at the highest prices ruling about Thanksgiving and during the winter months. Last year the first shipments of last year's crop to the East were made in September, the largest shipments were in November. The exports by rail to the East were as follows by months:

Months.	Pounds.	Months.	Pounds.
September	407,780	January	139,800
October	2,104,580	February	703,270
November	2,160,380	March	197,149
December	845,800	April	191,730

Total..... 6,750,489  
J. R. F.

POULTRY YARD.

Spice for September.

EDITORS PRESS:—The longer I keep fowls, the more I see to do for them, in little cares and attentions, to bring about the desired result, viz., the most coin from the least expenditure of it. I do not know of any good thing, in temporal affairs, that comes to us for the mere asking; we must either furnish coin or the sweat of our brow as our part of the exchange. To put out the least of these two commodities for the greatest returns for the same is a problem you will meet at every turn in business life—in fact, we all have to do with it.

Whoever keeps chickens will find, I think, that much is made by little; and it is a great help in the business to be forehanded, or, in other words, to be looking and providing ahead. I firmly believe that many stumble out of the business on this very point.

Indolence has no part in the business, except total destruction; so beware. Who of us but will admire the place and the fowls where everything is kept neat and comfortable, and despise the person, place and fowls where ruin seems marked on all connected with them? Draw the two pictures in your own mind and then choose the one you like best.

But to the point. This month is perhaps the best time to select the breeding fowls for the coming year; select the large, well-developed pullets, and as fine a rooster as you have, or can get; the older they are the better for breeding purposes.

See to it this month that all buildings used by poultry are well cleaned up and whitewashed inside and out, using a tablespoonful of crude carbolic acid to two gallons of whitewash for inside work, and for outside no acid, but a good large handful of rock salt.

As soon as a rain comes have the runways plowed. It will do no harm to turn under the top filth once a month, where fowls are kept. There is no such thing as being too clean about a fowl-house and yard, and yet but few strive to be even clean. If you never have tried before, try this year to do your level best by your fowls, and see what they will do for you in return.

If you intend to buy a few birds for breeders, attend to it at once, for you will get a better choice now than a month or two later, and the price is apt to increase as time goes on.

Have an eye to business at all times, better the condition of your fowls if possible.  
South Pasadena. E. C. CLAPP.

Chicken Cholera.

EDITORS PRESS:—A recent experience with chicken cholera may be of use to some of your large family of readers.

Especial care had been given to insure cleanliness in runs, drinking cups and food. They were lively and bright until five weeks old, when, by a lad, who did not reason or ask, they were fed some tainted meat. In a few hours they began to droop, and passed rapidly into the comatose stage of cholera.

The symptoms were: First, drooping wings; second, diarrhea; third, white discharges like milk or thick rice water—in three cases tinged with blood; fourth, great thirst, clear, watery

discharges and putrid odor; fifth, cramping, and in 15 minutes to half an hour, death.

The successful treatment, after trying the remedies prescribed in poultry-books, until half the flock were dead, was:

Carbolic acid, three drops; glycerine, one teaspoonful or one dram well mixed with the carbolic acid; water, two ounces or 16 teaspoonfuls; of a saturated solution of alum, 30 drops.

Of this we let them drink only moderately once in 15 minutes. It was renewed twice a day. The sick chickens were put in a box containing an inch in depth of clean, dry, warm sand, first dropping in a few drops of pure carbolic acid. The weakest chicks had their feet washed in hot water until red; then dried and wrapped in flannel and put near a bottle of hot water to rest and sleep.

Those in the box were looked after and kept warm—much of the time were covered with hot flannel to insure quietness. In a few hours there was a change, and desire for food shown by working out to the light and picking the box. We gave them graham-flour biscuit crumbs, alternating with cracker crumbs, followed by only one or two sips of the carbolicized water.

At the end of a week a cake of scalded fresh cornmeal—adding a teaspoonful each of sulphur and bicarbonate of soda, and two tablespoonfuls of sweet oil. When baked brown it was  $\frac{3}{4}$  of an inch thick and covered a medium-sized pie plate. Pulverized this cake to fine crumbs; and fed it once a day.

Three times each 24 hours the soiled sand was burned that the disease should not spread by contagion. Experimenting, we lost half the flock; under the last remedy saved all but two, some of them being in the rice-water stage of the disease and quite helpless. At no time while in hospital were they permitted to eat more than a thimbleful at a time, and no more given until this had passed out of the craw.

Lesson: Absolute cleanliness, and food as pure as you would give your children.  
Y. Berkeley.

Ridding Poultry-houses of Vermin.

EDITORS PRESS:—If "A Subscriber" wishes to rid the hen-roost of fleas I would recommend, 1st, give the chicken-house a complete clearing out of all droppings, etc.; then, 2d, mix up two or three gallons of whitewash and into it put two tablespoonfuls of crude carbolic acid; go over the coop inside and outside; get some, yes, lots of it, into every crack and hole about the coop. Don't spare the whitewash; it is cheap and so is crude carbolic acid, which costs 25 cents per pint. After this take a fine-holed garden sprinkling-pot, and to each gallon of water used to sprinkle the floor of the chicken-house, put in a spoonful of crude carbolic acid. Put crude petroleum on the roosts and into the corners and cracks of the nest-boxes, and I think if the job is well done that in less than 48 hours after you will fail to find any fleas or other small vermin.  
South Pasadena, Cal. E. C. CLAPP.

THE DAIRY.

Bandaging Cheese in the Hoop.

We find the following article, signed "Dairyman," in the Gilroy Advocate of Aug. 28th: In 1871 or '72, Mr. Samuel Cole, of Gilroy, invented and brought into local use the telescope cheese-hoop which is now generally used by California cheese-makers. He also adopted a bandage, which had been for years used by some of our leading dairymen. Mr. Cole and the parties using his style of hoop were not aware that any one claimed a patent right to either the hoop or the bandage. Mr. Hubbell, of New York, comes with this claim and demands a royalty from all dairymen for "bandaging cheese in a hoop" of one dollar per year for each hoop used. Now we are at a loss to know in what way we have infringed on any patent he may have, as he does not claim it exclusively on the hoop or the bandage, but on the two combined. We can prove that the bandages were used by us several years before 1869 or 1870, the date of Mr. Hubbell's patents. We can also prove that we used bandages when we pressed cheese in the old style of hoop. In changing the hoop we made no change in the bandage. We did not know that we were making ourselves liable to royalty in the use of a device invented, as far as we knew, in our own community.

In a report printed in American papers in 1870 by a man who had traveled over England and Scotland, we find the same article described for filling the cheese-hoops which we have now in use.

Mr. Hubbell claims that his patent is used in the hoop known as the Wilson & Frazier gang-hoop. We do not use the gang-hoop or press, nor can we see any similarity between the kind we have and the above-named hoop.

With these facts before us, and after consulting lawyers of this coast best familiar with the patent laws, we must have better proof of Mr. Hubbell's claim for royalty before we can pay it. Judge Sawyer, of the United States Supreme Court, has lately rendered a decision in which he says that where a thing had been used

before it was patented, it was no infringement to use it afterward. There are other and stronger proofs which will be introduced in the resistance of this claim if it should be pressed upon the dairymen of Gilroy. We intend to make the case a common cause, and jointly help to defend it, and we call upon all dairymen of California who are using the telescope-hoop and bandages to help us to defend what we believe to be our just rights.

Ayrshires for Cream.

C. M. Winslow, Brandon, Vermont, Secretary of the Ayrshire Breeders' Association, sends us the following: While in Burlington, Vermont, a few days ago, Mr. L. S. Drew, manager of the Van Ness and American hotels, invited me to ride to his "Lake View Farm," about three miles south of the city of Burlington, and while looking over his herd of Ayrshires I learned some facts in regard to their ability to produce cream that may be of general interest.

In 1865, Mr. Drew selected a few Ayrshires of the choicest breeding he could find in Canada, and from that foundation, with the introduction of bulls from the choicest families, he has steadily bred with a view of establishing a herd that shall retain the characteristic type of the Ayrshire, and has steadily selected as breeders such as showed a large percentage of cream, and this spring, in addition to the periodical cream tests, he has adopted the daily weighing of each cow's milk, and these figures are from the records of weighing milk and testing for cream.

In looking at the entire herd as they stand in the yard one cannot help noticing the uniformity of size, style and color, being of dark red with white patches, of fine style and fair size, with a decided milky look to them all, as you might naturally expect from over 20 years' breeding to one purpose, without the addition of any females after the first purchase. The herd as they stand to-day are, except the bulls, all of his own breeding. The cows are fed on hay and a light feed of grain in winter, and in summer on pasture only, with no grain. They are milked in the stable, and the milk weighed and record kept. The cream test was made in June by taking a portion of each cow's milk from the pail immediately after it was weighed and placing it in a set of testing tubes plunged in ice water for 12 hours.

The following is the amount of milk from the record of each cow for the month of June, with the daily average for the month, and the percentage of cream as taken from the testing glasses:

Name.	Age.	Date of Calving.	Lbs. Milk for June.	Av. per Day.	Lbs. Cr'm.
Darling of Vt.	10	March 9	1102	37	23
Frunkey	9	June 10	742	37	28
Creamy	8	April 20	979	32	18
Miss Mabel	7	March 2	909	30	24
Miss Grace	7	March 24	692	23	22
Miss Flow	7	March 14	1106	37	30
Dolly Athol	4th.	April 14	1014	34	20
Miss Cornelia	6	March 7	1066	35	24
Lady Thorpe	2d.	April 26	1106	37	20
Jewel	2d.	March 21	719	24	17
Printsteps	4	April 17	1093	36	26
Early Rose	3	March 22	721	24	20
Miss Cornelia	2d.	March 18	910	30	25
Miss Grace	2d.	June 2	461	15	24
Frunkey	5th.	May 25	734	24	20

Average pounds milk for herd, 890; average percentage of cream, 23 per cent.

Mr. Drew informed me that he felt well paid for all the time and trouble it took to weigh his milk and test for cream, as it enabled him to know for a certainty which were his most profitable cows; and it would be well if all breeders of dairy stock would adopt some systematic tests, with a view of grading up the average yield of the herd, and retaining only the more profitable ones.

FINE MELONS.—Fresno is now almost as well known as a watermelon center as Lodi, and the deliciousness of Fresno melons has caused them to bring the highest prices wherever they have been offered for sale in competition with those from other sections of the State. We have had numerous opportunities to sample fine melons this season; but among the great number we have found none more delicious than those left at our office this week by Mr. W. D. Bowen, of the Fresno colony. The cantaloupes, propagated from seed obtained from Vacaville, were larger and finer flavored than those usually shipped from that noted orchard and garden region.—Expositor.

BERKSHIRE TRANSFER.—The last record of transfers of thoroughbred Berkshire swine, which we receive from Phil. M. Springer, secretary of the American Berkshire Record Association, contains note of the sale of Duchess 12375, by Andrew Smith, of Redwood City, to C. A. Chapin, of Kibola, Hawaiian Islands. Mr. Smith has a fine exhibit of his swine at the Golden Gate Fair this week. His stock came direct from the Queen's herd of Berkshires in Great Britain, and is naturally taking a high stand on this coast.

UTILIZING ESCAPING GAS.—It is reported that the natural gas escaping from the mains in Pittsburg is to be used in illuminating the streets.



## PATRONS OF HUSBANDRY.

Correspondence on Grange principles and work and reports of transactions of subordinate Granges are respectfully solicited for this department.

## Interesting Grange Meeting.

The Tulare Grange met on Tuesday afternoon of last week in the assembly hall of the public schoolhouse in Tulare City. Although but a small number were present of this newly-organized Grange a very interesting meeting was held.

The Grange was opened in ample form by A. P. Merritt, Master. The minutes of the preceding meeting were read by J. W. Mackey, secretary. Under "Good of the Order" Bro. A. T. Dewey, of Temescal, was invited to speak. He congratulated the Grange on its leading position in Tulare county, stating his belief that there was a fine opportunity for accomplishing great good for the farmers and the whole community by their efforts. He believed the establishment of an experimental farm near Tulare City, under the auspices of the Grange, could be accomplished if an active effort was made for the same; that it would be for the interest of Tulare City and the whole county, and that contributions could be secured to support such an undertaking whereby the best varieties of fruits and other products, of that soil and climate, could be ascertained. Also the best methods of cultivation. Such an establishment would most certainly add value to land and other property. He urged the agitation of all questions of special interest to farmers, that education may be extended through better understanding, and social acquaintance, confidence, unity of action and Grange strength would follow.

Bro. Samuel Fowler made a very earnest speech, illustrating how our too numerous lawyers, big and little, throughout the country, control our politics, giving the farmers and other industrial people little or no show in elections. In his opinion legislation on monetary affairs has been adverse to the good of the people. We must study our interests and combine firmly for the protection and advancement of our interest.

Bro. I. N. Wright declared that the farmers must take part in legislative affairs. We must educate the industrial masses in this direction. Let us discuss all questions of interest, read and study subjects of importance between meetings, and cling together in our work for the advancement of ourselves and humanity. Lawyers, bankers, mercantile and professional men in the cities and towns educate their children; it is equally important that farmers give their children a sound education, also as they have to compete with the others and should stand on equal grounds. Let us teach our children to do their whole duty, fearlessly, in all things. He believed the farmers in the valley could build a railroad connection with San Francisco on such a plan that the railroad stock would be held with the land, in a similar manner that water stock is held, permanently, in connection with the land that is to be irrigated. In this manner the control of the railroad must necessarily remain with the owners of the soil—the farmers. [We should be pleased to have Bro. Wright furnish the readers of the RURAL PRESS a further statement of his ideas on this subject, which would, no doubt, be of suggestive value.] What we need is unanimity of action. We have the richest and most fruitful land in the State, and the most beautiful country. We should certainly discuss and encourage a greater diversity of products. We are governed by officers, too many of whom are unscrupulous. Most of our laws are originated by lawyers and lobbied through for the interest of anything but the farmers, while the farmers, the bone and sinew of the land, keep on working and permitting such abuses. Truly, we have great need of the Grange. With due effort we cannot but increase our numbers. Let us select good members in the beginning and we shall secure a large and permanent increase.

Sister Merritt insisted that whenever the farmers build a railroad they should hold the offices and manage it, and not elect lawyers and schemers to run it for them, as has been the case with too many ditch companies. The farmers, however, too often do the work on the ditches, and let drones and middlemen do the managing.

Brother Mackie thanked the sister for her salient remarks. Farmers rise at 3 o'clock in the morning and work until after dark, retiring immediately after their late meal, leaving no opportunity to think and reflect for their own benefit. Farmers have voted themselves into this way, and have to let others do their thinking for them. Workingmen clamor for 8 hours, while the farmers often work 16. The cities are bringing up a thinking population, and the country is not bringing up a thinking population. A change must be made or we shall become swamped, as by a whirlpool. The change should be that of doing our own thinking and business. Education brings out all that can be made of us. Are any of us samples of such education? Truly, we are too much like our volunteer crops. We should change our system. People living 500 years hence will hardly believe that so many short-sighted fools could ever have existed. Let us come together,

each with new ideas to exchange. If we are determined, we shall progress. We must act and do something. We should take oath not to vote for or be represented longer by such unfit representatives as many who disgrace our legislative halls.

Worthy Master Merritt declared there was too much talk about farmers being beasts of burden. It would seem as if the Grange was too good for farmers. They do not appreciate its full value. Too many would rather talk politics on the street than to attend. Any sensible farmer need not be so busy but that he can read and vote right. More liberality should be shown to our sisters. They work 16 hours and no grumbling, and we hear no talk of their burthens.

A sister curtly remarked that politicians pay too many farmers off in whisky for their votes and take every other advantage possible. We tried four or five years here to sustain a Grange without success. Now we are reorganized and must gather in those who are fully interested with us. We have now a new element, as it were, in our settlement to draw from. Let us stir around and get those who are well fitted for membership, and our efforts will be successful.

Brother Fowler remarked that we have too trivial work in our Legislature by lawyers who speak against time and practice other devilry to defeat every good proposition. He believed Governor Stoneman meant well in calling the Legislature together, but the lawyers had managed to baffle the honest legislation needed and the farmers have to suffer and pay for it.

Brother Maples considered that we were drifting in our consultation. Let us come to some decided conclusions and work for their accomplishment. The Grange should declare itself more emphatically on leading questions. We have all kinds among us. Many are temperate, prudent and knowledge-seeking. We are now producing more than we can use, from pumpkins to hogs, and all too cheap for profit. If we cannot be a power at the polls now, let us go on talking and combining till we can conquer corruption. Men like Stanford and Jay Gould run California and the United States. If the farmers would stop to think, and ask every industrial man to vote for the right, a movement of that kind would succeed. We should act or quit complaining. A recess being declared, he moved that delegates be appointed to the State Farmers' Convention; the motion was carried. A. P. Merritt and I. N. Wright were elected.

Brothers Joseph Merritt and Maples and their wives also took part in the deliberations of the meeting.

Although this Grange numbers few at present it was plainly shown by the earnestness and ability of those present that it has as good material within its ranks for building up a large and flourishing Grange as any in the State. We hope and trust that in the new order of things, other Granges will spring up in Tulare, Fresno and Kern counties, sufficient to form a Pomona Grange which shall hold all together in effective and permanent work.

Tulare City presented a desolate appearance at the time of our visit, owing to the late conflagration, which devastated nearly the whole place. We are sure, however, that the town will be speedily built up more extensive and substantial, after this third fire, than it has ever been before.

## The Late Mrs. H. G. Mackie.

Rev. C. Rowland Hill, writing to the Tulare Register, of Bro. J. W. Mackie's departed companion, aptly says:

At our first meeting I was much impressed with her genial manner and kindly disposition, her humility and hearty support to further any good work. Her genuine goodness and sterling worth became more apparent upon a more intimate acquaintance. It would have been impossible for any one to be in her company for even a short space of time without being charmed with her loveliness of character and incited to engage in good work. It does seem a pity to have to lose such an earnest temperance worker, such a good lady, as Mrs. Mackie. Her home, with all its comforts and many luxuries, was a home to me whenever I wished to avail myself of its privileges. I mourn her loss as that of an intimate friend. If I place so much value upon her friendship—having known her but three months—how great must be the loss sustained by her husband, by her daughter, by her two boys. We are short-sighted that we cannot see what benefit will be derived by us by God removing such a one as our friend from our midst. "God is too wise to err." There is, we may depend upon it, some good being done by His calling her away from the cares, the troubles of this life. \* \* \* In taking Mrs. Mackie He has taken one of the most cherished and choicest roses from our Tulare garden to enrich the fragrance and to beautify the garden of heaven.

LOS ALAMOS.—John Newlove writes the Patron that there are a number of loyal Grangers at Los Alamos and deems the time auspicious for reviving the Order there. He believes that with a little judicious nursing, a strong Grange could be built up in that part of Santa Barbara county. Let the old Patrons there be encouraged from all quarters.

DELEGATES ELECTED.—During an intermission at the last meeting of the Temescal Grange, E. Kelsey, Newton Sewell and A. T. Dewey were elected delegates to the Farmers' State Convention. E. Kelsey and C. Bagge were also elected representatives to the Greenbackers' Convention.

## The Coming Farmers' Convention.

In our issue of last week it was mentioned that San Jose Grange had selected 10, and Sacramento Grange 15, delegates to the Farmers' Convention, which has been called to meet at the capital on the 15th inst. We have not been advised of the action of Patrons generally in this matter, but we trust the course of the two Granges above named is but typical of what has been going on throughout the State. We hope to see a large assemblage of representative farmers at Sacramento next week, able and ready to cope with the important questions which are to come up for consideration. There is plenty of need for the farmers of this State to come together for conference and united action on matters of vital importance to themselves, to the benefit of themselves, and the good of every honest citizen.

The meeting will be held on Wednesday, September 15th, and, we presume, at Grangers' hall, over the Granger Store, corner of 10th and K Sts. The State Fair excursion rates will favor all who attend.

## State Grange Literary Exercises.

It is hoped by the Committee on Literary Exercises that many of the contributors will send in their articles early, that arrangements may be made to occupy all spare moments of the early part of the meeting, when the order of business is always less crowding than in the middle or latter part of the session. We have many able and interesting writers, and all will wish to receive some good and helpful words from every part of the jurisdiction, even if some can contribute only a short letter containing the true ring in it. By the exchange of good and original ideas we shall progress, and it is hoped that writers in every Grange will assist. Do not forget to prepare for rendering musical contributions also. We have notice that Bro. Samuel Fowler, of Tulare, will be prepared to speak on "Political and Mechanical Science for Farmers."

## Memorial Resolutions.

At a meeting of Temescal Grange Sept. 3d, the following preamble and resolutions were unanimously adopted:

WHEREAS, It has been the will of the Divine Master above to remove our loved sister, MRS. MARTHA D. EWER, from our midst; and

Whereas, We fully realize that in her death our Order has lost a warm friend and her family a devoted wife, daughter and mother; and esteeming her many virtues and endearing qualities; therefore be it

Resolved, That we extend to Bro. Ewer our heartfelt sympathy and respect.

Resolved, That our charter be draped in mourning for the period of 30 days.

Resolved, That a copy of these resolutions be sent to our bereaved brother; also to the RURAL PRESS and the California Patron for publication and placed on the minutes of the Grange.—SISTERS L. FRINK, M. A. RENWICK, N. G. BABCOCK, Committee on Resolutions.

THE NEW BADGES.—North Butte Grange has adopted the new badges in place of the old regalia.

## Stockton Notes.

[Written for the RURAL PRESS by MRS. W. D. A.]

Arid summer heat has given place to the freshening airs of September, the month of fairs, chief of which is the State Fair, beginning the 6th, ending the 18th, notable three years for county exhibits. Pomona Grange, No. 3, sent this county's contribution the 3d, although it is a hard year to make up a show; but after deciding in the promising spring to do so, the Grange and its friends collected all possible things of merit to represent the varied and good soil and the skill of an industrious people. Willingness to help Pomona Grange has been shown by most citizens, but some promised things were withheld because of the poor year. The indifferent exist here as elsewhere. This hot summer, fruit is not so good as usual (except grapes), and bugs and beetles have held high carnival.

The S. J. V. Agricultural Society offered premiums for its district of nine counties to compete for at the fair, opening the 21st. The Pomona exhibit is to be set up at this fair also. The temporary pavilion, 260x80 feet, fronts on Hunter-street square, and is to be done by the 12th; indications promise that it will be well filled. Hon. P. D. Wigginton delivers the annual address September 23d. The speed program is said to be excellent, and it is thought that the stock show will be better than any before; so visitors will certainly be repaid for coming to our breezy, agricultural city.

This county, with its few fogs and many months of sunshine, cannot be excelled in grape-raising. Nowhere else does the Sultana attain such size of berry and cluster. A bearing vineyard pays three times as much as wheat, or \$100 per acre, when five years old.

Warehouse men are busy with the fast-coming wheat, which has advanced three or four dollars a ton since harvest, to help out farmers this second hard year.

Charles and Edwin Ashley, of Stockton, have

invented a cleaner for harvesters that excels all others. Different sized screens take the grain down an incline of nine feet of zinc, so that the smallest seeds are removed without scattering any to befool the ground. They have adapted it to the famous Houser and sold it to the "Combined Harvester Co." Visitors to Stockton Fair will have a chance to examine its merits as well as the exhibit harvesters.

Thomas Sedgwick, 92 years of age, a pioneer, was killed by the cars at the French Camp crossing on the 3d. The horse got across unhurt, but the buggy was broken to pieces and the poor old man so bruised that he died soon after being taken to the city. It is thought that the horse became unmanageable. Mr. Sedgwick was a successful farmer, active in body and mind, attending personally to his farm up to the day of his sad death. He was the father of Mrs. Gen. Ketchum.

## AGRICULTURAL NOTES.

## CALIFORNIA.

## Alameda.

BLACKLEG.—Haywards Journal, Aug. 28: During the past two weeks blackleg has broken out among the cattle in Moraga valley, especially on the ranches of Tom Johnson and Wm. Fields. A number of fatal cases have already occurred. Vaccinating the cattle was at once resorted to, and the disease is now under control.

Pleasanton Star: A large number of cattle were vaccinated at Dublin last week, as a preventive against the dreaded blackleg. Mr. Dougherty had over 100, and Messrs. Green, Campbell and others also had some.

## Contra Costa.

FINE NEW SEEDLINGS.—Gazette, Sept. 4: We lately received a box of peaches from Mr. George Sellers, of Brentwood, of exceeding size and deliciousness. They are a seedling started by the Sellers family and are a valuable acquisition in the fruit line. In color they resemble the Crawford, and their period of ripening extends from August 1st to early September. The specimens sent to us—15 in number—averaged in weight 7½ ounces each. Mr. Sellers has also succeeded in obtaining an admirable seedling almond. The section of country where he resides is developing into a magnificent fruit area. The fruit raised there without the aid of irrigation equals the products of irrigated lands and has the advantage of a near market and shipping facilities. Mr. W. B. Holliday, fruit inspector for this district, is entitled to credit for originating a seedling apricot that presents the advantage of ripening very late in the apricot season. This apricot is not large, measuring only from 5 to 5½ inches in circumference, but is of good flavor. It ripens 15 days later than the Moorpark. Mr. Holliday would like to hear from other fruit-growers to learn if any possesses a variety that ripens that much later than the Moorpark. He has also a seedling plum which is earlier than any variety with which he is acquainted.

## Fresno.

FROM MINING TO FARMING.—Visalia Delta, Sept. 2: Nine miners from Calico, San Bernardino county, have recently filed on Government land in the region west of the Summit lake country, lying near the foothills, and have decided to try their lot as agriculturists for a time. The soil in that region is excellent, and if artesian water be obtainable that will be one of the best farming sections in the San Joaquin valley, but without water for artificial irrigation the land near the foothills of the Coast Range is dry in a season of light rainfall, the precipitation being lighter on the west than on the east side of the valley. We hope that some means will be provided for irrigating this vast section, which would thus become one of the most productive in the State. In the River-lawn settlement, in the Summit lake country proper, ditches will be constructed for supplying water to all the land in the settlement, and a considerable area outside.

NOVEL MELON.—Expositor, Sept. 1: T. W. Borchers has left a curiosity at this office. He calls it the "pumpkin muskmelon," from the fact that it represents in shape and outward appearance a pumpkin. It is a very delicious melon, and about the best in the market. They are raised by Mr. Peters, in Fresno Colony, and are said to be Armenian melons.

## Lake.

BIG VALLEY GRAIN.—Lakeport Democrat, Aug. 27: Messrs. Welty & Young, who have just laid their thrashing machine up for another year, thrashed 34,000 bushels of grain. Mr. Welty thinks they thrashed about half the grain in Big Valley. This being the case, the yield in Big Valley can be set down at 60,000 to 70,000 bushels.

A THIRTY DIGGER.—Lower Lake Press: An opulent Indian is something very unusual in California, i. e., among the thoroughbred Diggers. They are nearly always distinguished only for poverty, filth and general wretchedness; but we have one full-blooded Digger Indian in Lake who considers himself pretty well fixed, and, to tell the truth, we wouldn't reject a partnership interest with him. We speak of Bob Augustine, of Scott's Valley. He was down the other day and looked very much civilized with white shirt, diagonal suit and polished boots. He is in the hop business at Scott's



Valley, where he has a small piece of land rented, 15 acres of which he devotes to the growth of hops. When the bottom fell out of hops a couple of years ago, the bottom came near falling out of Bob's money-box, but he weathered the gale some way and held on to his hops. He didn't get mad and tear up the ground and yank out the hop-plants, but pursued the unimpassioned, even tenor of his way, until there came a turn in the tide that will now lead him out of trouble. His hopfield is said to be as good as any in the county, and the crop this season unusually large.

## Los Angeles.

**DOWNEY ITEMS.**—Los Angeles Times, Sept. 1: The grape crop throughout the valley is good, not having been afflicted with the peculiar blight which is playing havoc with the grapes at Anaheim. The president and secretary of the Agricultural Association are busy preparing for the fair, to be held October 5th, 6th, 7th and 8th at Downey. All indications now point to a most successful exhibit.

**A NICE DAIRY.**—Pasadena Union, Aug. 27: We went last Tuesday up to the headquarters of Messrs. J. W. Wilson & Son. Their dairy is at the home place of Mr. J. W. Wilson, one and a half miles west of town on the mesa adjoining the Arroyo Seco, and there the arrangements for keeping cows and caring for the milk are models of neatness and convenience. No mud and dirt, such as usually characterize a cowyard, are to be seen, but instead, a clean, dry corral and sheds that are agreeable to the eye and inviting to the visitor. Here is a barn 24x96, with 276 feet of sheds in which the stock find ample accommodation. It takes 50 cows to supply the large demand, 12 horses to do the incidental team work, and 4 men to attend them. It takes over a ton of feed per day to satisfy this large number of animals, the most of it coming from El Monte and Alhambra. The Messrs. Wilson find a great advantage in having a pure water supply for their cows, and inform us that they do better on it and give better milk than those compelled to drink stagnant, muddy or impure water. Certainly it is, as the water at this place is clear, cool and fresh from its source, and is an enjoyable luxury to those accustomed to the poorer article of the lower valley. The milking is done at 2 o'clock P. M., and about 3 the brightly painted wagon with "San Pasqual Dairy" blazoned on the side starts on its rounds and distributes its pure and wholesome milk to its many customers.

## Mendocino.

**HOPS.**—Covelo Cor. Ukiah Press, Sept. 3: Hop-picking is nearly over. Some yards which were only partially cultivated yielded but few hops, while those thoroughly cared for produced 1000 pounds to the acre.

## Napa.

**PECULIAR BARGAIN.**—Calistogan, Sept. 1: C. M. Burgess, aside from using the grapes of his own vineyard, will purchase Frank Ashton's crop. For these grapes he has agreed to pay as many dollars per ton as he receives cents per gallon for the wine when sold. We do not remember a similar agreement between the makers and growers.

## Placer.

**BANANAS ON TRIAL.**—Republican, Last spring O. W. Hollenbeck procured two bulbs of the banana tree from Sacramento and tried the experiment of planting them on his place here in Auburn. Both grew and are now thrifty young plants three feet or more in height. A few have been cultivated in Sacramento for a number of years, and the owner believes that they have become acclimated, and can be taken safely through the rainy season with a little care. Mr. Hollenbeck also has a thrifty young india-rubber tree—something uncommon here.

## San Benito.

**THE TRES PINOS REGION.**—"A Scribe," who has lately taken a drive from Hollister to Paicines and back, writes in the Independent: Never before was the country along the Tres Pinos creek more prosperous than now. It is being settled very rapidly, and there is a tendency to break up the large ranches. The number of new arrivals during the past year has been very great, and the best part of it is that the class settling in that section are the very best eastern people. We had the pleasure of meeting a number of the new-comers. They are not people of great means financially, but they have what is more valuable—a determination to succeed and the enterprise to work for success. On the whole, our impression of the Tres Pinos creek country was very favorable, and we returned home feeling more proud of the county, and of the people in the county, than ever before.

## Shasta.

**EDITORS PRESS.**—Anderson is situated on the California & Oregon Railroad, 27 miles from Red Bluff, and is distant about 270 miles from S. F. It contains about 2000 inhabitants, and lays claim along with several other towns to being the coming metropolis of Northern California. It has a fine location, being built upon a high plateau overlooking the Sacramento on the north, is tastefully laid out, and contains many handsome residences and public buildings. Anderson is one of the great wool markets of the State and very prosperous. There is a fine orchard on the east side of the town, owned by Mr. Pettigrove. They have a nice grist-mill, and the town contains many substantial business blocks and a number of factories and mills, including several carriage and wagon factories,

harness shops and waterworks—in fact, all the trades and professions are well represented. There are several newspapers, weekly and daily, a public school and a normal school.—E. G. H.

## San Mateo.

**RANCH FIRE.**—Redwood Times & Gazette, Sept. 4: A fire started in Menlo Park about 12 M. yesterday. It burned several stubble fields, three piles of baled hay on Con. Maloney's place, 400 cords of wood belonging to W. E. Stanton, the dwelling-house on the McKenzies place—rented by Con. Maloney—and ruined several fences. It was brought under control, about 5 P. M., by the efforts of 50 persons from Menlo Park and the neighborhood, before it got near to any of the fine residences east of the village. No persons or animals were injured at last accounts. The origin of the fire is not stated.

## Santa Barbara.

**MONEY IN MUSTARD.**—Lompoc Record, Aug. 28: In Lompoc valley, this year, lands costing from \$20 to \$50 per acre have actually yielded from \$40 to \$60 per acre in English mustard. It is reported that C. E. Carter has thrashed 28 sacks per acre, which, at the price now prevailing—\$20 per ton less than the highest paid in 1885—brings the gross product to about \$80 per acre. Those who are in search of good lands cannot do better than come to this valley; and if they want the pick, must come at once.

## Sonoma.

**MOUNTAIN ITEMS.**—Geysers Cor. Flag, Aug. 30: "Sly as a fox" has gone out of fashion in the mountains. Here it is "sly as a coyote." Thousands of lambs and sheep have been killed in the vicinity of the Geysers, and yet not more than half a dozen of the depredating coyotes have been caught during the entire season. Cattle have done remarkably well, but stockmen are disinclined to dispose of stock at present prices. Corn 14 feet high is grown up here at an altitude of 4000 feet above sea-level. The fire around St. Helena mountain is still burning and doing great damage. It has already destroyed 1600 cords of wood belonging to the Great Western mine.

## Tulare.

**ALFALFA-FED PORK AT A DISCOUNT.**—The Delta is informed by a representative of a leading pork-packing establishment in San Francisco that much dissatisfaction exists concerning hogs shipped from Tulare county, in consequence of which there is a light demand and the prices offered are lower than for the product of almost any other locality. The complaint is that the meat is soft and depreciates very rapidly in weight. This is accounted for on the ground that the hogs are kept too long on alfalfa, and are fed but little, if any, grain. Ranchers who are complaining of the unprofitableness of the business at present might do well to investigate the subject.

**SHIPPING BALED ALFALFA.**—Times, Sept. 2: A. W. Lane, of Mussel Slough, informs us that he shipped baled alfalfa hay to San Francisco last season and realized a fair profit therefrom. This is the first we have heard of hay being shipped to that market, and to many it has often been a query what would be done with that commodity when we should have a surplus. Mr. Lane says the only objection to his hay, and it was not a serious one, was that it was baled too closely, which he had to do to load the cars in quantities to make it pay him. He is of the opinion that if the railroad company would fix their freight rates lower large quantities of alfalfa hay would be shipped from this county, not only to San Francisco, but to markets south of us.

## Yolo.

**HOG CHOLERA.**—Democrat, Sept. 2: Our farmers continue to make grievous complaint of the ravages of the hog cholera. A large number of hogs have died and many others are suffering. There seems to be no remedy for the disease; hogs apparently well in the morning are found dead before night. The disease is in a virulent form.

## NEVADA.

**GOLCONDA NOTES.**—Silver State, Aug. 30: The wool shipments this season aggregated over 100,000 pounds, and occasionally cattle and horses are shipped from the station to San Francisco. On Lay's ranch, situated near the station, wheat, barley, alfalfa and vegetables are produced. This season, in consequence of the depredations of jack-rabbits and damages from water caused by a cloudburst in the mountains, the wheat and barley did not yield over half a crop. The alfalfa, however, is up to the average, and some 500 tons of this hay is now stacked on the place for winter use. The third crop, which will yield about one and a half tons to the acre, will soon be ready for the mower, after which the meadows will furnish good pasturage for stock later in the fall. The alfalfa fields, garden and orchard are partly irrigated with water from the hot springs, which is cooled in a reservoir before it is used. It has been demonstrated on this ranch that the most sterile-looking sagebrush land will produce good crops of grain and alfalfa when irrigated, and that less water is required each successive year for irrigating hay and grain lands.

**IMPORTING GALLOWAYS.**—Reno Gazette, Sept. 2: Thirty-one head of Galloway cattle from yearlings to five-year-olds, from Leonardville, Missouri, were unloaded at Winnemucca, Tuesday last.

## PACIFIC COAST WEATHER FOR THE WEEK.

(Furnished for publication in this paper by NELSON GOROM, Sergeant Signal Service Corps, U. S. A.)

DATE.	Portland.				Red Bluff.				Sacramento.				S. Francisco.				Los Angeles.				San Diego.			
	Rain.	Temp.	Wind.	Weather.	Rain.	Temp.	Wind.	Weather.	Rain.	Temp.	Wind.	Weather.	Rain.	Temp.	Wind.	Weather.	Rain.	Temp.	Wind.	Weather.	Rain.	Temp.	Wind.	Weather.
Sept. 1-8.																								
Thursday.....	.09	60	S	LR.	.00	80	S	CL.	.00	74	SW	Hy.	.00	65	SW	CL.	.00	80	W	CL.	.00	72	W	CL.
Friday.....	.08	63	S	LR.	.00	82	N	CL.	.00	78	NW	CL.	.00	70	SW	CL.	.00	76	SW	CL.	.00	73	W	CL.
Saturday.....	.17	60	SE	Cy.	.00	77	N	CL.	.00	73	N	CL.	.00	69	SE	CL.	.00	73	S	CL.	.00	72	SW	CL.
Sunday.....	.11	62	S	Cy.	.00	74	N	CL.	.00	74	NW	Hy.	.00	72	W	CL.	.00	74	S	Fr.	.00	70	SW	CL.
Monday.....	.00	62	NW	CL.	.00	82	N	CL.	.00	76	NW	CL.	.00	74	W	CL.	.00	74	NW	Fr.	.00	68	W	CL.
Tuesday.....	.00	71	NW	CL.	.00	86	N	CL.	.00	84	NW	CL.	.00	83	W	CL.	.00	78	W	CL.	.00	70	NW	CL.
Wednesday.....	.00	76	NW	CL.	.00	92	N	CL.	.00	84	CL	Hy.	.00	88	N	CL.	.00	79	W	CL.	.00	71	W	CL.
Total.....	.00				.00				.00				.00				.00				.00			

EXPLANATION.—CL for clear; Cy, cloudy; Fr, fair; Hy, foggy; — indicates too small to measure. Temperature Wind and weather at 12:00 M. (Pacific Standard time), with amount of rainfall in the preceding 24 hours.

## Fourth District Fair Awards.

The following were the awards for products of agricultural and kindred industries at the late Petaluma Fair:

## Horses.

**THOROUGHBREDS.**—All awards to P. Carroll, except the following to J. McM. Shafter, viz.: Best stallion colt under 12 months, no name; best mare 4 years old, Nighthawk; 2d, Proserpine; best mare colt under 12 months, no name.

**STANDARD TROTTERS.**—J. R. Rose, 2d best stallion 4 years old, McPherson; W. Page, best stallion 3 years old, Polo; W. P. Fine, best stallion 2 years old, Twilight; P. J. Shafter, 2d, Rustic Boy; A. L. Whitney, best stallion 1 year old, Pilgrim; P. J. Shafter, 2d, Hawkeye; J. & W. S. Fritsch, best mare 4 years old, Nellie R.; T. T. Unkless, 2d, Raka Patchen; F. W. Loeber, best mare 2 years old, Emma H.; A. L. Whitney, best mare 1 year old, Aurora; F. W. Loeber, stallion showing best 5 colts, Whippleton; A. L. Whitney, stallion showing 2d best colts, Dawn.

**NORMAN AND OTHER FRENCH DRAFT BREDS.**—J. P. Rodehaver, best stallion 4 years old, Beaufort; H. Wiley, 2d, Logan; J. R. Rose, best stallion 3 years old, Leon; T. Skillman, 2d, Brilando; I. F. Cook, best stallion 2 years old, Crown Duke; J. R. Rose, 2d, Pete; R. Crane, best stallion 1 year old, Duke de Chartres 2d; L. A. Devoto, 2d, Duke of Marin, and best stallion colt under 12 months, De Chartre; T. Maginnis, 2d best colt under 12 months, Rustic; R. P. Hill, best mare 4 years old, Lady Annie; P. Henley, 2d, Queen of the Valley; M. McLaughlin, best mare 2 years old, Bess; P. P. Rodehaver, 2d, Kittie; I. F. Cook, best mare colt under 12 months, Maud; R. P. Hill, 2d, Bess; J. P. Rodehaver, stallion showing best 5 colts, Tony Oakes; special premiums for get of Rotomago, given by D. R. Misner—all 3 to A. Keyser.

**CLYDESDALE AND OTHER ENGLISH DRAFT BREDS.**—Clydesdale Breeders' Ass'n, best stallion 4 years old, Pointsman; 2d, Morning Star; W. Page, best stallion 2 years old, Premier; E. Fine, best stallion 1 year old, Boss; R. H. Crane, 2d, Tam O'Shanter; L. A. Hardin, best stallion colt under 12 months, no name; P. Henley, 2d, Pointsman, Jr.; Clydesdale Breeders' Ass'n, best mare 4 years old, Maid of the Mist, and 2d, Blossom 2d; W. Page, best mare 2 years old, Lass; R. H. Crane, best mare 1 year old, Ann; W. Page, 2d, Freckle; Clydesdale Breeders' Ass'n, best mare colt under 12 months, Belle, and stallion showing best 5 colts, Pointsman.

**GENERAL PURPOSES.**—T. Skillman, best stallion 3 years old, Echausen; L. A. Devoto, 2d, Prince William; F. W. Loeber, best stallion 2 years old, Johnnie T.; W. P. Hinshaw, 2d, Dan; L. McDonald, best stallion colt under 12 months, Tom Paine; A. J. Show, 2d, George S.; L. A. Hardin, best mare 3 years old, Kate; L. McDonald, 2d, Daisy; G. A. Allen, best mare colt under 12 months, Queen Esther.

**CARRIAGE AND ROADSTERS.**—T. Skillman, best team shown to carriage, Elector and Echmul; J. R. Rose, best pair of mares or geldings to pole, Maud and Minnie; H. P. Brainerd, 2d, Ned and Joe; J. & W. S. Fritsch, best single mare or gelding, to buggy, Abe Ward; W. P. Fine, 2d, Daisy.

**SADDLE HORSES.**—L. W. Walker, best mare or gelding, Black Prince; A. L. Whitney, 2d, Duke.

**JACKS, JENNETS AND MULES.**—S. Gilmore, best jack, 3 years old, Dexter.

## Cattle.

**SHORTHORNS.**—All premiums for single head, herds and sweepstakes to W. Page, except the following, viz.: A. Smith, best bull (3 years old and any age), Pharaoh; Jno. Lynch, 2d bull, 2 years old, Sonoma Chief.

**DEVONS.**—All premiums to J. R. Rose.

**HOLSTEINS.**—All premiums for single head, herd and sweepstakes to J. H. White, except one to E. Steiger for 2d best bull, 1 year old, Wm. Tell.

**JERSEYS AND GUERNSEYS.**—Bulls—W. D. Bliss, best 4 year old, Favorite; E. W. Woolsey, best 3 year old, Ronda; L. Walker, 2d, Tom; E. W. Woolsey, best 2 year old, Miles Standish; Hall Bros., best 1 year old, Wildwood; W. D. Bliss, best calf under 12 months, Sarpedon; Dan Brown, 2d, Ivanhoe. Cows—E. W. Woolsey, best 4 year old, Berkeley Maid; Dan Brown, 2d, Moss Rose; E. W. Woolsey, best 2 year old, Princess; W. D. Bliss, best 1 year old, Juanita 2d.

**AYRSHIRES.**—Bulls—Tyler Beach, best 4 year old, Alexis; Geo. Bement & Son, 2d, Archie; T. Beach, best 2 year old, Burton; G. Bement & Son, best 1 year old, Ethelbert, and 2d Campbell; T. Beach, best calf under 12 months, Quicksilver; G. Bement & Son, 2d, Elector. Cows—G. Bement & Son, best 4 year old, Lady Faxon; T. Beach, 2d, Mamie Pearce; G. Bement & Son, best 3 year old, Marian, and best 2 year old, Sybilla; T. Beach, 2d, Dinah, and best 1 year old, Media; G. Bement & Son, 2d, Marilla, and best heifer calf under 12 months, Ethelberta; T. Beach, 2d, Mattie B.

**SWEEPSTAKES.**—T. Beach, best bull, any age, Alexis; G. Bement & Son, best cow, any age, Lady Faxon.

## Sheep and Fleeces.

**SPANISH MERINOS.**—All premiums to E. W. Woolsey, except the following to E. Mills, viz.: Best

ram 2 years old; best 3 ram-lambs and best 3 ewe-lambs under 12 months.

**SOUTH, SHROPSHIRE, OXFORD AND HAMPSHIRE DOWNS.**—All premiums to R. H. Crane.

**FINE WOOLS.**—All premiums to W. Page, except to E. Mills for best ewe's fleece.

## Swine.

**BERKSHIRES.**—All premiums to Andrew Smith.

**POLAND-CHINAS.**—R. H. Crane, best boar, 1 year old, best sow 1 year old, T. Skillman, 2d best sow 1 year old; best sow and 5 pigs.

**JERSEY RED OR DUROC.**—J. H. White, best boar 6 months old, sow 6 months old.

## Poultry.

Premiums to Morris Bros. for best pair Light Brahma fowls, best do. chicks, best pair White Cochins fowls, best pair Plymouth Rock fowls, best pair Wyandotte fowls, do. chicks, best pair Black Spanish fowls, best pair White Leghorn fowls, do. chicks, best pair B. B. game fowls, do. chicks, best pair Bronze Turkey fowls, do. chicks, best pair White Holland Turkey fowls, do. chicks, best pair Rouen drakes, best pair Pekin ducks, 2d pair Toulouse geese, best pair Embden geese.

To J. H. Gwinn—2d pair Light Brahma fowls, 2d do. chicks.

To P. W. Meadows—Best pair Buff Cochins fowls, do. chicks.

To S. H. Church—2d pair Plymouth Rock fowls, 2d pair Black Spanish fowls, best pair Brown Leghorn fowls, do. chicks, best pair Silver Spangled Hamburg fowls, do. chicks.

To O. E. Elmore—Best pair Plymouth Rock chicks, best pair Brown-red Game fowls, best pair Duckwing Game fowls, 2d pair B. B. Game fowls, 2d pair Pekin ducks.

To R. H. Crane—Best pair Toulouse geese.

To John Stewart—2d pair Wyandotte chicks.

To J. Bowles—2d pair White Leghorn fowls.

To L. W. Walker—Best pair Bantam fowls, do. chicks.

To A. J. Show—2d pair B. B. Game chicks, 2d pair Bantam chicks.

To F. Shattuck—2d pair Bantam fowls.

## Grains, Vegetables and Melons.

R. Crane, best exhibit grain, 4 or more varieties; I. F. Cook, best sack Australian wheat; C. S. Gibson, best sack barley; H. P. McCleave, best sack oats; D. F. Whitlatch, best sack wheat, any variety; C. S. Gibson, best sheaf barley, and best sheaf oats; W. C. Percival, best sack wheat flour, best sack buckwheat flour, best sack cornmeal; P. Mullally, best collection potatoes, best single variety do.; R. Crane, best sack shelled corn; H. S. Gossage, best exhibit squashes; R. H. Crane, best exhibit pumpkins; R. Crane, best exhibit sugar beets, and best exhibit Mangi Wurzel; B. Cary, best blood beets; D. F. Whitlatch, best exhibit rutabagas; H. S. Gossage, best exhibit corn on stalk; Andrew Polucca, best exhibit cabbage; E. L. Charles, best exhibit watermelons, do. muskmelons; C. S. Gibson, best exhibit cantaloupe; Andrew Polucca, best exhibit carrots.

## Fruits, Grapes and Nuts.

F. F. Ennis, collection fruits raised in one orchard; John Merritt, best exhibit apples, best single variety apples, best 6 varieties apples; C. S. Gibson, best collection pears, best single variety pears; R. Andrews, best 6 varieties pears, best exhibit peaches; G. W. Parks, best exhibit plums; A. H. Cassidy, best 6 quinces; Mrs. W. H. Pepper, best collection oranges; Morris Bros., best collection lemons, best collection grapes raised in one vineyard, best exhibit foreign grapes, best exhibit California grapes, largest and best bunch of grapes and variety, best collection almonds, best collection English walnuts.

## Preserved Fruits, Etc.

G. W. Parks, best exhibit sun-dried fruits, do. sun-dried apples, do. sun-dried plums; F. F. Ennis, best exhibit sun-dried peaches, do. dried plums seeded; Mrs. M. Carey, best exhibit domestic canned fruits, do. preserves, do. pickles; Mrs. J. C. Diamond, best exhibit jellies; Mrs. J. T. Merritt, best exhibit catsup.

## Butter, Cheese and Bacon.

L. Cantel, best exhibit cheese; R. Crane, best exhibit hams; W. R. Overholser, best exhibit side of bacon.

## Bread and Cake.

M. Carey, wheat bread, assortment tarts; Mrs. S. Cassidy, Boston brown bread; Augusta Dahlman, corn bread; Mrs. J. T. Merritt, fruit cake; Mrs. J. C. Diamond, pound cake; Mrs. J. C. Bowles, sponge cake.

## Plants, Bouquets, Etc.

All premiums to W. A. T. Stratton.

## Sericulture.

W. W. Stockdale—Best display of samples of silk culture, embracing eggs, worms, moths and cocoons.

## Saddlery and Harness.

All premiums to Ellsworth & Northrup.

## Agricultural Implements.

W. H. Worth, best horse power, best wine press; S. J. Tobin, best model fruit-drier.





### Remember Boys Make Men.

When you see a ragged urchin  
Standing wistful in the street,  
With torn hat and kneeless trousers,  
Dirty face and bare red feet,  
Pass not by the child unheeding;  
Smile upon him. Mark me, when  
He's grown up he'll not forget it;  
For, remember, boys make men.

When the buoyant youthful spirits  
Overflow in boyish freak,  
Chide your child in gentle accents;  
Do not in your anger speak.  
You must sow in youthful bosoms  
Seeds of tender mercy; then  
Plants will grow and bear good fruitage,  
When the erring boys are men.

Have you never seen a grandsire,  
With his eyes aglow with joy,  
Bring to mind some act of kindness,  
Something said to him, a boy?  
Or relate some slight or coldness,  
With a brow all clouded, when  
He said they were too thoughtless  
To remember boys made men.

Let us try to add some pleasure  
To the life of every boy,  
For each child needs tender interest  
In its sorrow and its joy.  
Call your boys home by its brightness;  
They avoid a gloomy den,  
Seeking elsewhere joy and comfort;  
And remember, boys make men.

### One Fair Time.

[Written for the RURAL PRESS by M. B. D.]

Nell and her mother sat on the porch, preparing peaches for the preserving kettle. The sunlight shone softly through a lattice of morning-glory vines, all aglow with pink and blue-bells that were yet heavy with dew; and the linnets had scarcely finished their usual concert.

"I am glad to get such a good start," remarked Mrs. Gillis. "We are likely to have all of these Early Crawfords in the jars before dinner-time."

Mrs. Gillis was noted in the neighborhood for her skill in preserving fruit. And what was quite remarkable, Nell, her piquant and sprightly daughter, had mastered the same art so thoroughly that she was a successful rival. They arranged their work so as to get out of it all the pleasure possible. No hurry and fret over a hot stove was connected with the process, but instead, it was connected with such care and deliberation that it interested them and secured their best efforts. It quite excited Nell's enthusiasm. Just now her brother Rufus came up from the orchard with two large baskets full of the nicest peaches they had.

"O mamma!" she exclaimed, "let me preserve those beauties and send them to the fair. I know they will bring a premium." Her eyes sparkled with the thought. After coaxing in her usual winsome way, her mother consented to the plan, and Nell set to work with renewed earnestness. A tress of glossy hair fell over her cheek and shaded her eyes, as she stooped to gather a lapful of peaches from the basket. When she looked up she started slightly to see Chauncey Kenyon close beside her. He stood leaning awkwardly against a pillar of the porch, and after bidding them good morning, continued:

"Mother has come a visitin'. She'll be round here in a minute—now she's a gettin' her fancy work out of the wagon. Give us a peach, Miss Nell."

Without further ceremony he reached his rough, sprawling hand into her lap, and grasped several of the large peaches.

"These are first rate," he said, as he proceeded to bury his teeth in the ripe crimson of one of them. Nell frowned. It seemed to her a pity that the sweet, delicate fruit should come in contact with those hideous, wide-set teeth, that had impressed her with their ugliness from childhood. She had always disliked him on her brother's account. Years before, when they were all children attending the same school, Chauncey had been apt to tease and play mean jokes on his schoolmates, and Rufus had sometimes quarreled with him in defense of those whom he would have discomfited.

Now he stood munching the fruit with his thin jaws, and staring at her in a half-admiring way that was irritating.

"You may keep on with the fruit, mamma, and I will get dinner," said Nell, gathering up her peaches, and she disappeared through the doorway, just as Mrs. Kenyon ascended the porch steps. She wore a stiff sunbonnet and large, fancy apron, and carried on her arm a basket.

"Well, how do ye do? Hard at work as ever, I declare," she began, as Mrs. Gillis rose to welcome her, and offer Nell's chair.

"Allow me to take your bonnet and make you comfortable," said the hostess.

"La, no! You keep right on to the paring,

and I'll soon be as much to home here as anywhere," replied Mrs. Kenyon. Opening her deep basket, she took out a ball of red knitting cotton and a large square of muslin.

"I am making tuft-work on a pair o' pillow-shams and I thought I'd come up here and get some fig leaves to draw from," she explained. "I've made 'em with plates and cups for patterns long enough. Don't you think the outlines of a fig leaf in each corner, and two large ones in the middle, would look nice?"

"Yes, certainly," replied her hostess. "I will ask Nell to gather the leaves for you."

"Now, Chauncey, is your time; make for the orchard," interrupted Mrs. Kenyon, and she had scarcely finished speaking ere he was making long strides in that direction.

Soon he returned, bringing a bunch of fig leaves, some ripe figs and more peaches. He sat down on the steps while the women worked and chatted together in a neighborly fashion. The several fruits suggested a discussion of their merits, and while they were talking Mrs. Gillis remarked that Rufus was very fond of the Early Crawfords. "He takes extra care of our two trees. They make fine preserves, too," and she went on to tell her daughter's plan.

In the meantime Nell had replenished the kitchen fire, put on the shining copper kettle and filled it with golden fruit. She felt very self-reliant and proud to be left thus entirely to her own resources. Occasionally she stirred the fragrant, bubbling mass on the stove as she flitted about preparing lunch. She exercised her art to the utmost in caring for the fruit. What dreams crowded each other in her fancy! What success and praise seemed to curl up with the thin steam that rose from the kettle! She tasted and examined the fruit carefully a dozen times to be sure that it should be done just right. If one had seen her standing in the open window, with the gilded saucer in her hand, moving attentively with a spoon the amber liquid and fruit it contained, she would certainly have suggested the thought of some pretty witch, preparing a magic potion. Her cheeks were flushed, and the swiftness and grace of every movement showed how intensely she was interested.

Half a dozen fine crystal jars were ready to be filled, and she stood pouring the hot fruit into the first, when Chauncey's gaunt figure suddenly darkened the doorway.

Slop, slop, slop, splashed the slow stream over the side of the jar on the table, and before she could stop pouring, the steaming syrup trickled down her apron and upon one little slipped foot. Her instep seemed on fire and she flew to relieve it, forgetting the preserves, her dreams and all. Chauncey stood wondering what was the matter, while the peaches in the kettle bubbled and sizzled strangely, filling the whole air with the odor of burnt sugar.

Still, he was standing there when she returned to the kitchen and saw her ruined work. The smarting pain of her burn and the disappointment were too much for her to bear with composure, so she sat down on the nearest chair, and covering her face with her hands, burst into tears. Chauncey could see the drops shining through her dimpled fingers, and her little sobs distressed him beyond measure. He felt that in some way he was to blame for them, and he longed to atone for his fault. In and out of his pockets went his hands several times while he hesitated; then, seeing Nell rest her head and shoulder against the side of the dresser, he imagined she had fainted. Quick as thought he filled the ladle with water and dashed it over her head. Poor Nell was perfectly surprised, and, catching a glimpse of his excited face, became so frightened that she really did faint.

In a moment more Chauncey had called his mother and Mrs. Gillis, who soon made Nell comfortable in her own room and restored order to the kitchen. As Nell looked ruefully at her pretty muslin dress, now soiled and limp, and combed out her damp hair, she declared that "she would never forgive that clumsy Chauncey Kenyon. He always was in some sort of mischief, and I believe he delights in it yet," she added.

At dinner, Nell appeared as radiant as though nothing unpleasant had happened. Her crisp lawn dress and wavy curls made her look even better than usual. Mrs. Kenyon and Rufus exerted themselves in their different ways, to make her forget her disappointment; so when Chauncey climbed into the wagon carrying his mother's basket overflowing with fruit, she felt no resentment toward him. He gave her a look of mute inquiry and appeal, as he started the horses, and Nell nodded and smiled pleasantly in return, to reassure him of her good-will. Rufus, and even her father, endeavored to persuade her not to change her plan about the preserves. "How glad we would all be to have you win a premium; and I think such success would deserve a present beside, from some one who approves of a bright, helpful daughter," said Mr. Gillis. These expressions were very encouraging, yet all the fine Early Crawfords were gone, and Nell thought that no other peaches would do so well.

She spent several of the long summer days with her mother, helping to fill the fruit-jars with preserves, and the result of their work was never more satisfactory. The polished glass seemed to contain liquid topaz and rubies, so clear and richly colored were the fruits and syrups within them. Nell labeled each one carefully with a little slip of white paper, upon which she had written the name of the fruit it held; and she arranged them all in even rows

along the cellar shelves. Not so much as a single jar was missed. While she was about this work, Rufus examined one of the jars, and after persuading her to let him sample the fruit, declared it to be superior to any that she had yet made.

"This very jar shall go to the fair," he exclaimed; "it is the best I ever tasted."

"You are very complimentary to mamma," observed Nell. "You know that she put up all of this fruit; I only assisted her."

These remarks settled the question, and no more was said about it. During fair time the Gillis family usually spent a few days in town. They all enjoyed the change, and profited by their observations of the various things exhibited. When driving to town over the winding turnpike, they saw a single horseman come in sight ahead of them, and as he approached, the gaunt figure and sunburned face of Chauncey Kenyon were soon recognized. Spurs jingled upon his heels, and he kept his horse in hand by a bridle gaily decked with chains and pendant horse-hair tassels that danced with every motion. On reaching the carriage he stopped and asked for a word with Nell.

"I've got a present for you," he said to her, holding out a small crumpled-newspaper package. "You can do somethin' with what is inside when you get to town, I guess. You recollect I upset your sauce and made you cry, and this is to pay you back a little."

Nell held the small, musny roll in her hand, and he had spurred his horse by them before she could reply. Unrolling it cautiously, she found that it contained a wide-mouthed vial half filled with grains of gold intermixed with rough garnets, which he had evidently panned out of the creek that flowed near his house. On reaching town, she took her present to a jeweler and had the stones, which were of a yellowish-red hue, set in a bracelet. When this jewel was finished it pleased her so much that she looked at the tempting jars of jellies and preserves at the fair with but little regret that hers was not among them.

She noticed a jar of peaches that appeared familiar, and examining it more closely, recognized her own writing upon the label.

"Look at your preserves, mamma," she exclaimed; "Rufus must have brought them here for you."

She guessed rightly, as he admitted when she asked him about it. This interest added to their enjoyment a new charm, and no premiums were more anxiously looked for than those upon the preserved fruit. Mr. Gillis came in one afternoon and exclaimed proudly: "Your peaches have won the first premium—" He was interrupted by Rufus and Nell, who mingled their lavish praises, bringing a rare bloom to their mother's cheek and a new light to her eyes. To be so appreciated, she found a delight more precious than any treasure would have been to her. Nell was elated over her new bracelet, and so this proved to be the most pleasant visit they had ever made to the fair.

### Why He Went Out of the Business.

"I hear that Smith has sold out his saloon," said one of a couple of middle-aged men, who sat sipping their beer and eating a bit of cheese in a Smithfield-street saloon the other night.

"Yes," responded the other, rather slowly.

"What was the reason? I thought he was just coining money there."

The other nibbled a cracker abstractedly for a moment, and then said: "It's rather a funny story. Smith, you know, lives on Mount Washington, right near me, where he has an excellent wife, a nice home and three as pretty children as ever played out of doors. All boys, you know, the oldest not over nine, and all about the same size. Smith is a pretty respectable sort of a citizen, never drinks or gambles, and thinks the world of his family."

"Well, he went home one afternoon last week, and found his wife out shopping or something of that sort. He went on through the house into the back yard, and there, under an apple tree, were the little fellows playing. They had a bench and some bottles and tumblers and were playing 'keep saloon.' He noticed that they were drinking something out of a pail, and that they acted tipsy. The youngest, who was behind the bar, had a towel tied round his waist, and was setting up the drinks pretty freely. Smith walked over and looked at the pail. It was beer, and two of the boys were so drunk that they staggered. A neighbor's boy, a couple of years older, lay asleep behind a tree."

"My God, boys, you must not drink that," he said, as he lifted the six-year-old from behind the bench. "We 's playin' s'loon, papa, and I was sellin' it just like you," said the little fellow. Smith poured out the beer, carried the drunken boy home and then took his own boys in and put them to bed. When his wife came back she found him crying like a child. He came back down-town that night and sold his business and says he will never sell or drink another drop of liquor. His wife told mine about it, and she broke down crying when she told it."

This is a true story, but the name was not Smith.—Pittsburg Dispatch.

A BASTING MACHINE capable of doing the work of 25 girls is being used experimentally by a large clothing firm in Boston, and the Knights of Labor are giving it their attention.

### Girls, Novels and Sentiment.

EDITORS PRESS:—We do not believe the columns of your paper are as free as the politicians would have us believe speech is in this country, nor yet with "Josiah Allen's wife" would we question, "How free?" But we trust since the "Girl of Twenty" has introduced the subject of reading, you will extend the courtesy of a small space in your paper to a few queries from another girl.

With all due respect for the gentle teachings of a "Woman of 4-," we are almost persuaded she is inclined to be severe with those of us who are forced to mature early. Therefore, it is immaterial if we are unknown beyond the walls of our sanctum (the kitchen), nor that we come of a somewhat modern family, clan, tribe or what not, who know as little of us as we of them, since we have not cared to trace the "bones of our ancestors" beyond the night that Noah entered into the ark. Of our immediate parents, of which we had two, we are more ignorant than we ought to be, they having left us to shift for ourselves (a thing of which we do not approve), at a verdant and tender age. Suffice it to say, they were respectable and intelligent (a trait they forgot to transmit), and of whom we might add, like Napoleon's brother Joseph, they were "too good to be great."

We live in the country—pure, primitive and solemn as it came from the hands of the Creator. There are no advantages of any kind, save gossip and a "school for scandal," in which no tuition is charged but which proves rather expensive in the end. All the other resources at hand to enliven the 365 days of the annual cycle are self-made, including the Fourth of July operations of dish-washing, baking, brewing, scrubbing and such like esthetic duties that come in civilization's train.

Periodically the great monthly magazines fall like so many meteors from a distant literary system, creating panic and consternation in our midst, we are so like the celebrated "Paul and Virginia" in one. This bait thrown in from the outside world relieves the monotonous excitement of our labors, and with the fierce appetite of a Roman gladiator we gather up our manna and proceed to digest it, clinging to it like a vampire.

For the time being we forget in these cultivated guests that the great hum of social life is not touched by the hem of our garments—that we are far beyond its ken.

We are too poor for luxuries; but in the struggle we have managed, by strategic economy, to save a few pittance for books that are veritable treasures to us, representing, as they do, many sacrifices. Withal a meager list, and eyed askance by our sentimental sisterhood; our choice lying, as it does, in books of natural history, history, biography, travel, science and the like. And in consequence we are accounted a youthful "blue stocking," and we are shunned accordingly. Not much sentiment, perhaps, but are we to be blamed if the "fever called living" matures us prematurely? Are we wrong to discount sentiment, and taboo the ordinary novels? Are we any the less womanly for it?

'Tis a hard battle at best that some of us have to fight, even when we can call to our aid patience and endurance to soothe the friction of

"Life's endless toil and endeavor."

Because we do not care for any but the choicest fiction are we necessarily cold and uncharitable? Have we not "heart histories" sufficient in life? And as a "Woman of 4-" told us, they are wonderfully like life, as witness the sensation and rebuke created by the finale of William Black's "Macleod of Dare."

'Tis better to banish the memory of these heart-aches by reading of a remoter nature. Ours is but the nucleus of a library, and we fear it may remain in its nebulous condition for years to come. But it hints of green pastures and flowing waters and ruins in ancient countries, travel, famous scenes, Meccas, history, art *ad infinitum* in that far-off "Beulah Land" we hope to traverse in the future. All things are possible to those who wait. However, we are quivering with desire, awaiting Sandalphon's pleasure. In the meantime we must keep on reading. Shall it be novels?

Josh Billings' substitute for wisdom was silence. It might be better for us to practice it. We are searching for the knowledge of good and evil. Pope said:

A little learning is a dangerous thing;  
Drink deep, or taste not the Pierian spring.

We heard an intelligent lady decrying advanced education only the other day. Fortunately she had not Goldsmith's words, "We grow learned, not wise, by too long a continuance at college," as a weapon to use against us. Not having possessed many of the good things of this life, we are open to conviction in this.

Being of the laboring female persuasion we have wrestled too much with life's great "furnace." The novelty has worn off and we sigh for relief. In all humility we ask for it in some shape. A dessert of novels is all right; but shall we cultivate sentiment by the wholesale?

Have we not enough and to spare by nature? Are we not impractical to a sad degree now?

Sentiment is well enough for ladies and gentlemen of leisure; but it will not earn a loaf of bread nor stave off starvation.

It leads to expectations that can never be realized. Ninety-nine girls out of a hundred expect in due time to marry. Yet they must



link their fortunes with men who banish sentiment at the altar. Henceforth the wife is relegated by her teachings to a life of disappointment, while her husband goes on his way rejoicing. Is it not so, girls? Sentiment as fostered by novels exclusively has the wings of riches.

Those having homes can afford to be indulgent to themselves if it shall please them. With working girls it is different, and something is radically wrong with a rule that will not work both ways.

How many mistresses would employ girls addicted to novel-reading? It grows upon one like the vice of opium or any other elysium-breeding drug. Can we hope to wash our dishes in nectar and survive the consequences? Who will broil the steak or bake the bread if the maid is a novel "fiend"?

"But why carry it to excess?" We do not. This is a terrible appetite, once formed, for sensational reading. It becomes an Erebus with which we cannot grapple. Granted an inch, it takes an ell. Some have not the judgment to discriminate, and novels become an ugly weapon with them.

Girls are in many respects like sheep—they must follow a leader, and they require a guard; for they, as a rule, are as helpless in an emergency or when danger threatens as real lambs, and are about as trustingly led to the slaughter.

Precedent is to girls everything—one would think so, at least. We know of a lady verging on three-score years whose mental repertoire is a series of sensational novels. She reared her daughters and granddaughter on a diet of the same trash. The granddaughter dreamed the days away with dukes and duchesses of a visionary creation, affected their ways, became morose and discontented because she was not as radiantly beautiful as her heroines, and finally, for a trifling offense, threatened to commit suicide. Only her aunt's hard, practical advice to "do so if she wished" brought the girl to her senses. It makes a girl prematurely old to read novels, if it does no worse.

Who of our readers would recommend a *Police Gazette* to a woman of refinement? Yet we could "name the names" of some who have gone as far in the search for sensations, and one a schoolmistress.

The days are long past when one's choice was perforce limited to "Pilgrim's Progress," "Rollin's History of England," and "Mother Goose Rhymes." There is a wide field of unexceptionable, charming literature, fresh and crisp, no trace of the "dust of ages" about it. Living close to the heart of mother nature, as the majority of rural individuals must, how few there are who know of the writings of such naturalists as Audubon, Thoreau, Burroughs, and Gibson. To some it is like a dose of ancient Saxon, and the Chautauqua circle does not reach as far as we wish it did, to assist them.

Go into a bookstore and see what novels three-fourths of the pretty feminine customers, bright, clever-appearing women, inquire for.

We enjoy as well as any one a good, wholesome novel, but it is not satisfying as a staple of food. Let your advice be sound. We girls are buried in Cimmerian gloom, but when we seek the light don't thrust us back. The question of reading becomes complicated—a babel of confusion. There are those far wiser than we. Influence is a great deal.

These theories may militate against yours—may sound aggressive. I submit them humbly. The most of us, then, must put sentiment aside. If it is our birthright we must sell it for a mess of pottage; but we wish its equivalent to do us good and not evil all the days of our life.

We ask for wheat, not chaff! Don't give us stones for bread! Don't place stumbling-blocks in our way! Rather help us to be "lifted up and strengthened." "Our pleasant vices are made the whips to scourge us."

WORKING GIRL.

**NO HEALTH IN IT.**—At a reception by the British National Temperance League, given to the Colonial and Indian delegates, Dr. B. W. Richardson, who presided, said: "They had learned that alcohol, unlike food, acted exactly as a medicinal agent. With regard to its (alcohol's) action, they had discovered that, in the words of the general confession in the Book of Common Prayer, it did those things which it ought not to have done, and it left undone those things which it ought to have done, and there was no health in it. It caused diseases, 24 of which were known to be specifically produced by it, and every day medical science detected more injury arising from its use." Dr. Richardson is a high and honorable authority. He is an M. D. and an F. R. S., and an honorary member of the American Philosophical Society of Philadelphia. He is well known to his profession as the maker of important discoveries, and as the author of valuable medical treatises. In his indictment of alcohol he is probably giving the results of his own experiments.—*San Diego Union*.

**CARRIAGES IN CHINA.**—A paragraph is going the rounds to the effect that the Emperor of China has ordered a carriage in this country, the implied inference being that they have hitherto been unknown in the Flowery Kingdom. As a matter of fact, as far back as the days when Lord Macartney went on embassy to that potentate, he took with him English carriages as presents from Great Britain. They were found still unused in the summer palace when it was looted by the French 20 years ago.

## YOUNG FOLKS' COLUMN.

### The Three Giants.

[Written for the RURAL PRESS by MRS. J. HILTON.]

"O mamma! tell us a giant story," said little Lewis, one morning.

Mamma, who was sitting before the fireplace, looking at the fire, called Lewis to her and told him that there was a big giant named Fire, and that he had a lot of little fairies, and every time a lot of dry wood, or paper, or coal was put together the giant Fire sent some of his little fairies to it, and the fairies danced about among the wood or coal until they burned them all up. When the sparks were thrown out, it was the fairies telling us to learn to be cautious and never play with them, for they say: "We will burn everything that will burn. If you use me well I will use you well and will serve you nicely; but just look out, for although I am a little fairy now I grow into a giant very quickly. Mammams and papas tell little boys and girls to be careful of me. Some little folks think they know more than papa or mamma, and come playing around me. Don't I pinch them quick, though, when they are so foolish? Then, when old Jack Frost has been pinching them, if they come near me I kiss them and make them warm and happy. But I will not be played with, because I grow too fast if I am allowed to play, the big giant, my papa, says. Oh, I tell you I have seen my papa very angry when some one has been careless. Whole houses and barns and even towns have had to disappear when he gets angry. Many little folks have lost their papas and mammams, and their brothers and sisters, and have even been burned up themselves, sometimes, when a little fairy Fire has been played with. So remember, little Lewis, and all the little—yes, and big—folks who read or hear read the RURAL PRESS, and don't play with Fire."

There is another giant who has lots of fairies, and his name is Water. The sea is the giant, and the rivers and brooks and the tiny rain-drops are the fairies. Some of the fairies go dancing through the grass and sparkle in the sunshine, and when the little rain fairies come dropping down so gently, moistening the earth and making the seeds to burst their shells, and the lovely little green spears of grass and grain spring up, how we love the tiny fairies. Sometimes they gather together so fast and get so large that they wash away the banks of the rivers and creeks and run all over the land, breaking up and destroying everything they touch. Then we are afraid of big giant Water, and he tells us that if we are not careful he will destroy us too. But God has given us sense to know how to use these giants, and if we use our senses we can make them useful to us. Those of us who have not lived long enough to have much experience with those giants and fairies must listen to and heed those who tell us how to use them.

Before I close these fairy and giant stories, I want to caution the readers of the RURAL as I did little Lewis, to beware of the Water-giant that has the Fire-giant in it. If you play with the little fairies that are sometimes put into glasses such as we drink out of, they grow fast, very fast, and they burn up and wash away not only the body but the soul. Be careful of the Fire-giant, be careful of the Water-giant; and, dear ones, be doubly careful and have nothing at all to do with the giant Fire-water.

Los Alamos.

### From Our Younger Readers.

#### Lake County Notes.

**EDITORS PRESS:**—As there is much talk about mixed farming in Lake county, I thought I would write you a few lines on the subject. Mixed farming is a thing which is carried on with good success in Lake county. Some people have their dairy, poultry and apiary and have fruit such as the peach, apple, pear and plum and a great many other kinds, and the grape-vine also grows splendidly. There is some talk of planting out the olive tree. Most all kinds of small fruit do well in Lake county, such as the blackberry, gooseberry, raspberry and currant. We have just finished picking a large crop of blackberries, which began ripening the last week of June. Vegetables do well here, and all kinds of grain are grown without irrigation. There is some talk of a railroad to be built through this county, the supposed terminus being the redwood forests in Mendocino county. There is considerable vacant land being taken up, and there are several cabins being built on the brushy hillsides.

Our fall term of school has opened. Our teacher's name is Mrs. Sherwood, and we all like her very much. There was a campmeeting held down near Kelseyville, and we have had two weeks' vacation.

Peaches are surely very scarce in this part of the county.—MINNIE FERGUSON, *Kelseyville, Cal.*

#### The Spider.

**EDITORS PRESS:**—We would hardly call a spider an insect, because a spider has eight legs and an insect has six legs. The spider makes her nest out of a web which is very strong. I expect you have seen a spider's web and some-

times notice a fly in the web kicking and struggling for life. I remember that I used to catch flies for the spiders.—H. P. C., *Poway*.

#### Tuna Birds and Roses.

**MRS. J. HILTON:**—The birds that eat blackberries is the Tuna bird. Will you tell me what I shall do with roses to keep them blooming all the time?—LEWIS L. STARR, *Lugonia*.

## GOOD HEALTH.

### Sunstrokes in California.

**EDITORS PRESS:**—In an article in your paper of recent date there was some speculation in reference to the cause of sunstrokes that have occurred in California during the past summer. Now, it occurs to me that the cause of these sunstrokes will be found in the fact that thunder showers have been so much more frequent this season than in previous years. These thunder showers, wherever they occurred or wherever there was cloudy, damp weather, during which they were likely to occur, produced exactly the same kind of an atmosphere that causes sunstrokes in the Eastern States. I think that if the facts are ascertained, it will be found that in every instance where these cases of sunstrokes have occurred there existed a humid state of the atmosphere, which has been so much more common during this season than during previous years.

Covelo, Aug. 28, 1886.

**SUCCESSFUL TREATMENT OF SCIATICA BY MASSAGE.**—Prof. Max Schuller, of Berlin, is convinced of the superiority of massage over other measures employed in the treatment of sciatica, and relates his experience of 15 cases—all in males, and except in one or two instances due to exposure to cold. Most of the cases were dealt with from the first by massage; but in a few instances electricity, vapor baths, etc., had been fruitlessly employed prior to coming under his care. The *modus operandi* is as follows: The patient lies on the unaffected side, with knees and hips slightly flexed. The course of the sciatic nerve is rubbed from below upward, partly with both thumbs, partly with the ball of the little finger or thumb; sometimes struck with the closed fist, sometimes the muscular mass over the nerve pressed and kneaded with both hands. The pain evoked by these manipulations soon passes away, and after a short time becomes less and less at each sitting. The neuralgic pains very soon abate, diminishing after a severe and painful massage, then recurring with less severity, and gradually disappearing entirely. The power of walking improves after each sitting. On an average the treatment lasts about two weeks and a half, but in one case nine days, and in several from 10 to 14 days, sufficed. One patient abandoned the treatment after five days, owing to the pain caused by it, and tried, without relief, a fortnight's course of electricity and vapor baths; he then returned to the massage treatment and was cured in two weeks and a half.—*Lancet*.

**LEMONS FOR "BILIOUSNESS."**—The lemon treatment of biliousness is quite fashionable at present. Most people know the benefit of lemonade before breakfast, but few know that it is more than doubled by taking another at night also. The way to get the better of the bilious system, without blue pills and other drugs, is to take the juice of one, two or three lemons, as appetite craves, in as much iced water as makes it pleasant to drink without sugar, before going to bed. In the morning, on rising, at least half an hour before breakfast, take the juice of one lemon in a goblet of water. People must not irritate the stomach by eating lemons clear, but diluted properly, so as not to irritate the throat, and taken on an empty stomach, the improvement is marked.

**COCAINE**, which has heretofore proven a useful remedy for such a variety of ills, is now claimed to be a preventive of seasickness. A Russian physician, having occasion to make several journeys by water, claims to have thoroughly tested its virtues in that direction, with almost magical effect. Several others have tried it under his advice, with equal success. The same physician, M. Manassein, of St. Petersburg, also claims that the drug is an effective remedy for cholera morbus, and thinks it probable that it may also be found useful in cases of Asiatic cholera.

**FATALITY IN MINING.**—In England in coal mines alone, since 1851, over 36,000 lives have been lost, and during the last 10 years upward of 12,000 lives have been lost, giving an average of more than 1200 a year.

**PHOTOGRAPHING CANNON-BALLS.**—It is well known that cannon-balls have been most successfully photographed when on their flight from the cannon's mouth, but it seems that quite recently such photographs have been obtained, many of which show, in a remarkable manner, the head of condensed air which precedes the shot. It is this head of condensed air which makes it almost impossible, even for the most skillful rifleman, to hit an egg-shell suspended by a longish thread; and doubtless it is this "head" of condensed air which first wounds when an animal is hit by a rifle shot.

## DOMESTIC ECONOMY.

### Pickle Points Wanted.

**EDITORS PRESS:**—Will you ask some reader of the RURAL PRESS to be kind enough to tell me how to make green string beans pickles? Also, to put up cucumbers in sweet water, so they will make their own vinegar and be nice pickles. B. J. S.

Eagle, Idaho.

**RASPBERRY SHORTCAKE.**—One quart of prepared flour, one tablespoonful of lard and one and a half of butter, yolk of an egg, beaten light, half-teaspoonful of salt, two cups of milk. Chop the shortening into the salted flour, stir egg and milk together and set the flour into a soft paste, roll out lightly and quickly half an inch thick, line a baking pan with the crust; bake 10 minutes in a good oven; draw to the door and cover quickly with black raspberries. Strew with sugar, lay upon them the upper crust, ready cut to the size of the pan, press lightly around the edges; shut up in the oven and bake until nicely browned. You may put both crusts raw, with the sugared berries between, into the oven all at once; but the lower may be made heavy by the process. Try both ways at different times. Send to table hot, cut into squares and split, buttering and sugaring before eating.

**CHILI SAUCE.**—Peel one-half bushel ripe tomatoes, 18 large red peppers and four onions. Chop all these fine. After chopping, squeeze out with the hands from their water, throwing the water away. Add to them four quarts best cider vinegar, two cups sugar, eight tablespoonfuls salt; four tablespoonfuls each ground ginger, cloves, allspice and cinnamon, also two tablespoonfuls ground mustard. Boil all together for two hours, then put into glass jars. Large, plump red peppers are much less sharp than the long, slender variety, so if the latter are used not over six or eight will be required.

**LENTIL SOUP.**—Take one pound of lentils and wash them in many waters, until thoroughly clean and free from weeds. Soak all night, then add as much more water as will make 2½ quarts. When this boils add carrot, turnip, parsnip, two onions and small pinch of carbonate of soda. Boil two hours, then strain, washing all thoroughly except the skins of the lentils, season, and serve. Lentil soup requires no meat, but a small piece of butter mixed with flour is an improvement, and serves to bind the soup together instead of separating into thick and thin.

**BEEF STEW.**—Cut underdone roast beef or steak into inch-long pieces. Have ready in a saucepan a cupful of skimmed gravy or broth, a quarter onion, minced very fine, a teaspoonful of minced parsley, a pinch of mace and a tablespoonful chopped cucumber pickle. Let it come to a boil, season well, thicken with a tablespoonful of browned flour, put in the meat and set in boiling water, closely covered, at the side of the range, for 20 minutes. If the meat be tough, chop it instead of cutting it up, then proceed as directed. Serve hot.

**LEMON JELLY CAKE.**—One cup of sugar, mixed with butter the size of an egg, one cup of milk, one egg, well beaten, and flour enough to make rather stiff, sifted with a heaping teaspoonful of baking powder, and bake in three jelly cake tins. For the jelly take the juice and grated rind of one lemon, one small cup of sugar, three teaspoonfuls of corn starch, mixed smoothly with a little water and one cup of hot water. Let all boil together until thick and spread on the cakes. This quantity makes two layers.

**CORN OYSTERS.**—One cupful of flour, half a cupful of melted butter, three tablespoonfuls of milk, two teaspoonfuls of salt, one-fourth of a teaspoonful of pepper, one pint of grated corn. Pour the corn on the flour and beat well; then add the other ingredients and beat rapidly for three minutes. Have fat in the frying-pan to the depth of about two inches. When smoking hot put in the batter by the spoonful. Hold the spoon close to the fat and the shape of the oyster will be good. Fry five minutes.

**BATTER AND FRUIT PUDDING.**—Chop up one pound of apples and put them in a greased pudding basin (gooseberries, plums or any other fruit will do), and sprinkle sugar over them; now make a batter of one egg, six ounces flour and one breakfast-cupful of milk; one-half a teaspoonful of baking powder must be added to the flour; when the batter is smooth press it over the fruit and steam gently for one hour; care must be taken that the water remains boiling and does not evaporate too much.

**TOMATO CATSUP.**—Cut up and stew ripe tomatoes, but do not peel them. When sufficiently cooked, strain through a sieve. To one gallon of the tomatoes, measured after straining, add four tablespoonfuls of salt, four tablespoonfuls of ground black and white pepper, three tablespoonfuls of ground mustard, three red peppers chopped fine and one pint of vinegar. Simmer all together slowly for four hours, then bottle and cork tight.





A. T. DEWEY.

W. B. EWER.

Published by DEWEY &amp; CO.

Office, 252 Market St., N. E. cor. Front St., S. F.  
Take the Elevator, No. 12 Front St.ADDRESS ALL literary and business correspondence and  
Drafts for this paper in the name of the firm.

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## SCIENTIFIC PRESS PATENT AGENCY.

DEWEY &amp; CO., PATENT SOLICITORS.

A. T. DEWEY.

W. B. EWER.

O. H. STRONG

## SAN FRANCISCO:

Saturday, Sept. 11, 1886.

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## The Week.

What with repeated shuddering of the  
ground in Southern Atlantic States and gentler  
tremors in northern California, the symptoms  
of out-breaking cholera in Japan and countries  
bordering on the Mediterranean, and telegrams  
as to the unstable peace of Europe, the Bible  
words come fittingly to mind: "Ye shall hear  
of wars and rumors of wars \* \* \* and pes-  
tilences and earthquakes in divers places." The  
stir of political conventions and striking seamen  
and workmen is in the air of the city, while  
not a few interior towns are enlivened with the  
more peaceful bustle of autumnal fairs. The  
unwonted sultriness of San Francisco, this  
Wednesday afternoon, seems hardly in keeping  
with the reported flocking to the marshes of  
the San Joaquin and appearance in San Diego  
county of those migratory birds whose coming  
is wont to prove the near forerunner of cold,  
rainy weather.

## State Fair.

The State Fair is being largely attended, and  
a fine exhibition of stock and good show in the  
pavilion are reported. We shall be able to give  
our readers important reports next week.

## Earthquake Theories.

The slightest earthquake tremor sets people  
to thinking. Nature is so reticent and freak-  
ish that no one knows what dread visitations  
may be on her program for the future. The  
recent physical disturbances in New Zealand,  
Greece and Italy, the terrible throe that has  
wrecked the beautiful city of Charleston, and  
the little jolt we had the other day in Cali-  
fornia, have started the editors and other per-  
sons of an inquiring turn of mind to searching  
the encyclopedias and other available books of  
reference, to see if they can learn the cause of  
such convulsions. But they will find the bit-  
ting satire of Bishop Watson, many years ago,  
that geologists were like a fly sitting on the  
back of an ox trying to make out what was go-  
ing on inside of him, is still largely true.

The cause of earthquakes is still shrouded in  
conjecture, but the theory has undergone a  
radical change within a few years. The well-  
known fact that every volcanic eruption is  
announced by precursory earthquakes, the vio-  
lence of which subsides as soon as the pent-up  
energy finds vent, long caused the belief that  
an earthquake could not occur without volcanic  
activity, open or masked, because not strong  
enough to force an outlet. The volcanic throb  
is still regarded as a cause. This was certainly  
the case in New Zealand, where many active  
volcanoes, geysers and mud springs abound,  
especially in the North Island, and prove that  
the crust in that whole region is still very thin,  
and that the chemical processes which have  
been finished in other parts of the earth are  
still in active operation here. The shifting of  
a large quantity of solid matter through a  
small space in the earth's crust is now believed  
to furnish an explanation of most of these dis-  
turbances. The concussion causes the vibratory  
motion described as "the shock."

The fact that earthquakes more frequently  
occur near the sea coast than far inland is  
thought to furnish collateral proof of this  
theory. It is well known that the vapor taken  
up in the air and precipitated as rain and snow  
is rapidly denuding the mountain slopes. Some  
idea of this mighty denudation may be formed,  
when geologists tell us that through the agency  
of trickling rills, mad torrents and sedate  
glaciers, the very Alps have been half wasted  
away, and where once even greater Alpine  
ranges ran, now a continent of rounded, grassy,  
forest-covered hills remain. This vast mass of  
detrital matter is carried down to the ocean  
and deposited near the coast line. Under this  
constant accumulation, the floor of the ocean,  
in time, becomes heavier than the adjacent  
land. The consequence is, there is an unequal  
pressure, which increases till it overcomes the  
cohesion of the subjacent rocks and the sea-  
floor gives way or caves in. The movement  
that restores the equilibrium may be so slight  
as only to cause a faint tremor, such as was ex-  
perienced last week in parts of this State, or it  
may be so violent as to produce the terrible  
shocks in South Carolina and over a wide area  
of our Southern Atlantic States. In either  
case it is a compensation to the influence that  
has been slowly destroying the land at the ex-  
pense of the sea.

But this explanation will hardly furnish the  
cause for the earthquakes that are felt far from  
the sea. The cause of these inland tremors is  
sought in the shrinkage of the earth's interior,  
owing to the slow cooling that has been going  
on since the earliest geologic times. The rigid  
crust is left behind in an arch-like shape, resist-  
ing the tremendous force of gravity toward a  
common center. This resistance must be tem-  
porary; it cannot always endure. At some  
point the bent and folded strata will break;  
there will be fractures, abrupt movements,  
"simple cavings-in in deep cavities," as one  
writer puts it. These displacements grow  
more rare and small in extent as the planet  
grows older and its crust thickens, but the  
quantity of matter displaced is still quite large,  
and the force generated is proportionately great.  
For instance, it has been calculated that the  
force exerted in the earthquake along the At-  
lantic seaboard in January, 1885, was due to  
the displacement of 400 cubic miles of rock only  
to the extent of two inches, and yet the shock  
was felt over as extended an area as the one  
last week, though not so violent. And yet,  
gigantic as this may seem, it was as the gentle  
motion of a feather compared to the mighty  
convulsions that marked the earlier history of

the globe, when the mountain ranges were  
thrown up on the crests of a molten sea and  
the continents shouldered out of the seething  
flood. We may project our fancy to a time in  
the future when the cooling process will have  
so thickened the earth's crust that such col-  
lapses will no longer be possible.

## Geronimo's Surrender.

The Apache war has at last come to a close.  
On the 13th of July, Capt. Lawton, who has  
been unusually active and vigilant, surprised  
the hostiles' camp on the Arras river in Sonora  
and captured all their stock. The Indians then  
raided through the districts of Saueripi and  
Ures, burning houses, killing a number of peo-  
ple and securing fresh horses. They then at-  
tempted to reach Arizona, leaving a track of  
blood and fire behind them. Capt. Lawton  
camped closely on their trail, and Gen. Miles  
promptly rushed fresh troops toward the line of  
march to head them off. This movement was  
completely successful. Confronted by a large  
American force at Fronteras, Geronimo, with  
his characteristic cunning, made overtures of  
peace to the Mexican authorities. The Prefect  
of Arizpe went to Fronteras to treat with them.  
Geronimo took advantage of the truce and  
broke camp in the night, again pushing toward  
the Arizona and New Mexico lines. Lawton's  
vigilant eye was upon him, and after two days'  
hard marching over bleak and craggy mount-  
ains that seemed almost impassable, he again  
caught up with Geronimo near the junction of  
the Barispe and San Bernardino rivers. Geron-  
imo now made overtures of peace to the Amer-  
icans, and went in person to Capt. Lawton's  
camp. He said that he and his men were tired  
of the war and wanted to surrender, but want-  
ed to be assured that their lives would be  
spared; that his two wives should be brought  
back from Florida, and that he and 19 of his  
men be given a separate reservation. The  
terms were rejected. Geronimo hesitated, par-  
leyed, but in the meantime was so completely  
surrounded that escape was impossible. At  
Skeleton Canyon he at last concluded to  
surrender unconditionally, and he is now  
safely under lock and key at Fort Bowie.  
There is great rejoicing in Arizona, and  
the citizens of Tucson last Monday held  
a tremendous mass-meeting to celebrate  
the capture of Geronimo and his hostile band.  
Cannons boomed, rockets lighted up the heav-  
ens, speeches were made, and a series of resolu-  
tions were adopted highly complimentary to  
the military skill, bravery and determination  
displayed by Gen. Miles and Capt. Lawton in  
the prosecution of this campaign. For cease-  
less vigilance and relentless pursuit through an  
unknown land, it perhaps has few parallels.  
The question now is, What shall be done with  
Geronimo and his brutal gang of murderers?  
The verdict is they are bloodthirsty fiends,  
and the sooner sent to the happy hunting-  
ground with a rope around their necks the bet-  
ter. This is the way the British authorities in  
Canada treat all such savages, and their fron-  
tiers are rarely disturbed by Indian raids and  
massacres.

## The Wire Age.

We have had the stone age, the bronze age,  
the iron age, and it is likely the future annalist  
will describe this period of American history as  
the wire age. In no part of the economy of  
daily life are we separated from wire. Sleep-  
ing, we repose on wire mattresses. Eating, we  
see foods that have passed through sieves,  
which are sheltered from the flies by wire cov-  
ers. Calling, we pull wires to ring curled-wire  
gongs. Traveling, we are conveyed by cable or  
electric railways, hoisted by elevators hung on  
wires and hurried over wire bridges. We an-  
nounce our coming by telegraph or telephone  
wires, and we thrud our way by night through  
streets lighted by means of electric wires.  
Across the prairies of the West are stretched  
thousands of miles of barbed-wire fences, against  
which dumb brutes protest, cowboys swear and  
draw the knife, and lawyers, juries, judges and  
reporters whet their intellectual blades. Our  
clocks are set by wires, our watches run by  
wires, our books are stitched with wires, our  
pictures hung on wires, and our politics man-  
aged by wire-pullers.

TRAMPS are overrunning Sonoma county in  
such force as to cause numerous complaints.  
They are reported swarming near Cloverdale.

## Live-stock at the Golden Gate Fair.

The Golden Gate fair always succeeds in gath-  
ering a fine display of horned stock. Coming  
the week before the State fair, and being at a  
convenient point for breaking up the journey  
thither, the leading breeders from around San  
Francisco bay come together there and have a  
general tilt for premiums before they meet the  
larger competition at Sacramento. This year,  
however, there was an important contribution  
in the shape of a Shorthorn herd from Tulare  
county, as will be seen below.

There were not permanent sheds enough this  
year to accommodate the exhibitors, so tempo-  
rary ones were constructed near by. This, of  
itself, shows that the exhibit was a large one.

First, on turning the corner from the en-  
trance gate nearest the railway, the writer  
found the well-known herd of Col. Younger, of  
San Jose, occupying its usual stalls. This herd  
is, perhaps, the best known show-herd in the  
State, as it has for years occupied a prominent  
place at the leading fairs. Col. Younger is a  
pioneer in the upholding of the Shorthorn in-  
terest, and he is now ably seconded by his son,  
Ed. Younger, who has a good eye for animals.  
The herd seemed to us in excellent condition.  
There were 20 head on exhibition, of which the  
2-year-old, 3d Kirklevington, of Forest Home,  
is undoubtedly a bull with a future before him.

Next in the order of the stalls was the Short-  
horn herd of Hyde & Moore, of Visalia.  
Although this herd has been mentioned in the  
RURAL, we have not had an opportunity of  
looking them over before. We were much grati-  
fied with the examination, and we are glad to  
know that such cattle are so well placed in the  
rapidly progressing county of Tulare. There  
were 10 head in good breeding condition, which  
gives the common farmer a much better chance  
to judge them than if they had been put in the  
highest show condition. The cows were fine  
specimens, and Kaweah Dukes 3d and 5th, one  
a yearling and the other a four-months' calf,  
were noticeably good.

Next came Thomas Ward, of Oakland, with  
his yearly increasing herd of well-bred Jerseys.  
Mr. Ward is a most careful and enthusiastic  
breeder. His cattle are his pets, and they are  
showing themselves worthy of his care. He  
has now 17 head. His bull Oakland Chief is  
a splendid animal, and the cow Oakland Bess is  
a worthy companion. Mr. Ward has a 10-  
month-old bull, bred by Camron, Prince of  
Tulare, which he has just had registered, and  
which bids fair to bring new honors to the  
herd. We are glad to see Mr. Ward's success  
in breeding and building up a good herd. He  
began small, with a single cow, if we mistake  
not, and now, by breeding and purchase, is com-  
ing into merited prominence.

The next herd was Tyler Beach's Ayrshires,  
14 head, including the bull Narragansett Chief,  
the latter bred by Peter Coult. The herd  
may be trusted to figure well in any premium  
list. As to the quality of their cream and  
milk, the guests at Mr. Beach's St. James  
hotel, in San Jose, can well testify.

Mr. J. H. White's splendid Holstein herd,  
from Petaluma, occupied the next 15 stalls.  
This herd is already well known to our readers  
through our Petaluma correspondence. The  
cattle show their breeding in every outline and  
feature, and justify the prominence which they  
are attaining.

Mr. F. H. Burke, of Madison & Burke, S. F.,  
had an interesting display of 16 head from his  
ranch in San Mateo county. Mr. Burke is a  
thorough believer in Holsteins, and his cir-  
culars giving his ideas of the breed are worth  
reading.

George Bement & Son, of Redwood City, ap-  
pear as usual with their Ayrshires. George  
Bement, Jr., who is now associated in the own-  
ership, has the responsibility of the herd, and  
he is well fitted for it by taste and training.  
We are glad to see the young men coming for-  
ward in important branches of agriculture.  
Bement's herd has for years occupied a leading  
place at the fairs, and it is gratifying to see  
that the breed is gaining ground, as other  
breeders are contesting the honors. Mr. Bement's  
cattle have been handled and bred with  
care for years and have shown their quality by  
the milking records which are kept in the herd.

Occupying the right flank of the stock ex-  
hibit were the herds of Page Bros., of Cotate  
ranch, Sonoma county, and Robert Ashburner, of  
Baden, San Mateo county. Just as we came to



them the stock were ordered out for parade and we defer our comments upon them until we see them again at the State Fair this week.

There were several creditable small exhibits. One was Andrew Smith's Shorthorn bull, Pharaoh, 60,664, and a good grade cow. Capt. Travers showed a very handsome graded Jersey cow, with horns as beautifully curved as a classic lyre. Peter C. Anderson, of Oakland, had a small group of grade cows, one named Fanny, a magnificent animal and evidently a deep milker. F. Rosenstock, of Oakland, had two good cows and a calf. George Ely showed a good Jersey bull calf, Charlie.

The display of swine and sheep was small, but included good specimens. Andrew Smith, of Redwood City, had a fine lot of his Berkshires from imported stock. George Bement & Son had a pair of Essex, showing the good marks of the breed. The sheep show consisted of R. H. Crane's Petaluma flock, which was favorably mentioned in our report of the Petaluma Fair in last week's RURAL.

## Placer County at the Mechanics' Fair.

Any one who likes to look at fine fruit, particularly if he is interested in the advance of California horticulture, can easily find enough to engage his time through one long visit to the pavilion in scanning the Placer county exhibit. This is placed under the middle of the south gallery—to the left as you enter the building. The principal table is in the form of a hollow square, about 30 feet on a side, and is wide enough to bear four ranks of ample plates. Within the square are three more tables, each 15 feet long, and still others have had to be provided outside to catch the overflow. Upon these are 600 or 700 plates of clean, beautiful fruit, neatly displayed in great variety, grapes, pears, apples, plums and peaches forming the bulk of the output.

The grapes, as a class, would be noticed as choice specimens; the size and perfection of the individual berries, as well as the weight and symmetry of the clusters, bearing witness to the care and judgment used in making the selections. As we looked, last Tuesday afternoon, upon the great, superb Muscats shown by G. D. Kellogg and J. A. Elliott, of Newcastle, L. A. Gould, of Auburn, and P. W. Butler, of Penryn, it appeared to us that one plate of the last exhibitor's held the handsomest bunch we ever saw—until we came to another! Then came the Rose of Peru, Black Morocco, Purple Damascus and Seedless Sultana, from parties already named, and others whom space fails us to specify. Zinfandels were shown by E. W. Maslin; the less familiar Verdelho by L. A. Gould, who also displayed the famed "Whoasco," with a medium-sized, oval, green berry. Elliott's Flame Tokays blazed with rare brilliance. W. A. Himes, near Rocklin, contributes 25 varieties, among which may be named Blue Malvoise, Sweetwater, Red Traumer, Catawba, Isabella, Malaga, Mission and Muscatelle.

Among the pears, the Bartletts of H. A. Frost, Dutch Flat, and J. M. O'Connor, Loomis, attracted our notice—those of the latter being distinguished by their brilliant red. L. L. Crocker, of Horse Shoe Bar, had a green Bell seven inches long and 15½ inches in girth, which it was easy to believe weighed two pounds six ounces. Beside Bartletts of fine, high flavor, C. F. Macy, of Iowa Hill, 2850 feet above sea-level, showed a Russet pear of 18 ounces and a Flemish Beauty of 19 ounces weight. And then there were Horseshoe Daisy, Easter Beurre and Winter Nelis.

There was a good assortment of peaches, embracing Salway, Late October, Day's Yellow Cling, Albright's Seedling, George's and Ward Late Clings, McDonald Cling and Corinne. Handsomest were the big McDevitt Clings, of deep rich hue, shown by J. A. Robinson, of Newcastle; and they had been two weeks upon the plate, as we were assured by Mr. J. J. Morrison, the courteous custodian of the exhibit. P. W. Butler, of Penryn, and G. L. Threlkel, of Newcastle, were well represented in peaches.

Hungarian prunes—great beauties, clothed with their delicate bloom, many of them double—were spread out lavishly. Coe's Golden Drop and Oregon Silver prunes, French prunes, Bradshaw and Columbia plums were beside them. The Yellow Egg plums, from H. A. Frost's, at Dutch Flat, 3400 feet above tide-water, were

most elegant. The dark purple wild plums, displayed by G. H. Davidson, of the last-named town, were very interesting. Though not so large as most of the cultivated varieties, they are of fair size and pleasant, piquant flavor.

Outside the railing, and not far from the plashing waterfall and cool grotto, were laid out the sound, bright mountain apples—three-score plates and upward of Baldwin and Bellflower, R. I. Greening, Newtown Pippin, Spitzenberg, showy Alexanders, Winesaps and Nickajacks, etc., etc. We cannot name them all, but the Canada Strawberry Gray is too conspicuous to be passed in silence. Among the contributors to this table were W. E. Linn, of Alta; E. Cavanaugh and John Smiley, of Iowa Hill; C. Hanson, of Colfax; and several parties from Dutch Flat. G. W. Snyder, of Damascus, claims for his orchard-site an altitude of 4100 feet.

Less prominent features of this exhibit were a few fine Brown Turkey figs, pomegranates, quinces, Spanish chestnuts, butternuts and English walnuts. Cases of East Indian curiosities and of garments worn in the days of our Revolutionary ancestors attract the eye, but are not claimed as products of Placer county. There is also a limited display of specimen vegetables, among which is a "pineapple squash," fair as alabaster and belted with five pair of uniform knobs.

A pleasing incident of our visit was the cheery, huddling irruption of some thousand glad-faced boys and girls from the public schools, a sight not less engaging and more moving than the fascinating fruits of orchard and vineyard.

## Big Noses.

The New Orleans States says:

There are some people in this world who should carry their noses in a scabbard, if for no other reason than to hide them from the public gaze. New Orleans is full of such people. Many of them have knotty, lumpy, flat, twisted and curly noses, which are a positive humiliation to the owners and a source of much mortification to the rest of mankind. But the ugly-nosed men and women need no longer suffer. The hour of their deliverance from ungainly breaks has come, and if they do not haul out the artillery and fire a salute it is their own fault. A Berlin surgeon has discovered the art of repairing and remodeling noses of all sizes and ages. He can take a nose shaped like an artichoke and by his peculiar method turn it into a beautiful and really classic snout. He bars nothing. The fact of the matter is, he invites the hideous, and pays a premium for it. The man with a nose twisted like a gourd handle or a ram's horn is his pleasure. The man with no nose at all is his delight and his joy.

Be all this as it may, there can be no doubt of the fact—we are not aware that Darwin mentions it—that in the struggle of life it is the big noses that win. It may not be exactly gratifying to one's vanity to be born with a huge nose, but it should be greatly soothing to his ambition, for men in all ages have thrown up their caps, kindled bonfires, and shouted after big noses. They are the men who have created epochs in history, founded States and empires and colossal systems of philosophy, science and theology. Plato, Aristotle, John Calvin, Swedenborg, Martin Luther, Newton and Galileo were all conspicuously endowed in this way. They have been the world's heroes from Julius Caesar to General Grant. They have been our leaders in law, literature, statecraft, science, music and invention. Washington, Franklin, Jefferson, Disraeli, Gladstone, Bismarck, Thiers, Goethe, Darwin, Beethoven, Mozart, Wagner, Fulton, Stephenson, and not only they, but all their famous contemporaries, predecessors and successors, have been marked with this symbol of greatness. A big nose is essential to the actor or opera singer. It is a mark of shrewdness, calculation and foresight. Who ever saw a big-nosed politician who was a failure? Who ever saw a man with a big proboscis in the poorhouse or lunatic asylum? They may sometimes get into jail, for a good character is not always coincident with genius, but they never stay there long. They elude the law, they are never hung. Mothers should find some consolation in this thought, for while her child's nose may be hideously out of symmetry with the rest of its face, she need not go to a phrenologist or fortune-teller to learn its destiny, for there it is sticking right out before her eyes.

## Concerning Fools.

It may be a matter of considerable regret that the Fool-killer has ceased to make his periodic pilgrimages through the land. He would have a big job on hand on the basis of Carlyle's estimate, when he speaks of England as an island of "25 millions, mostly fools." Upon the most optimistic view of the case there would be a serious thinning out of the population, when we consider how many, even hard-working people, there are who contrive to fool away their money at "chuckaluck" games and the like. For weeks past in this city, Oakland, and perhaps elsewhere, crowds might be seen every evening at certain street corners "bucking" at the new "tiger" in the shape of the O'Leary belt swindle, when on the face of it the chances of touching the winning card were all against them. And then, what scores of people there are who can never pass one of those itinerant venders of notions or lotions on the street without stopping to listen to his endless flow of froth-oratory; and to listen is to be convinced, and to be convinced is to buy. The amount of worthless lip-salve, eye-salve, corn-salve, shaving-soap, pens, pinchbeck jewelry and cement they manage to accumulate, the world may never know. No matter how often they have been "taken in," they never learn that street peddlers are licensed liars and swindlers, and the first harlequin who mounts a dry-goods box and shouts, "This way, gentlemen, if you would make your fortunes," will gain their attention and pocket their change. It is clear that if the Fool-killer attended to his duty there would be a lively boom in the undertaker's business.

But, perhaps, the most marvelous exhibition of the fool's mania is the extensive impulse to do something exceptionally dangerous to life and health, such as lifting of enormous weights, diving from high banks or platforms, or trying to swim rapid currents. More than half the charm of the circus or hippodrome is to see the perilous riding, jumping, somersaulting, ropewalking and the various trapeze dexterities. The feeling that enjoys this sort of sport is certainly closely akin to that which drew crowds to the gladiatorial combats or Spanish bullfights. Sometimes there seems to be an epidemic of fools. A few years ago there was such a widespread craze to jump from the top of the Column Vendome, in Paris, that the gates had to be locked to all visitors. There are just now so many cranks willing to risk their lives by jumping from the Brooklyn bridge that there is some talk of inclosing it in a network of wire. The fatal consequences that attended the first plunge from the bridge put a damper on the foolhardy jumpers; but the recent success of a crack-brained bootblack has revived the idiotic ambition. In like manner the fatal result of Captain Webb's effort to swim the whirlpool rapids threw a cold, wet blanket on all candidates to glory by that route; but since Graham went through safely in his barrel there are many men and women who seem anxious to make the voyage.

The English papers satirize what they christen the "Alpine fever," the singular fashion of making arduous and perilous mountain ascents, which no amount of suffering, fatigue or melancholy accidents can cure, or anything short of an involuntary descent of a few thousand feet into the abyss. A kindred mania, quite as acute and hard to cure, is that of Arctic explorations. But there is some semblance of glory in climbing rocky pinnacles, camping on glaciers, sliding on avalanches, or going off and getting oneself lost in the ice and fog and snow of an endless Arctic winter, and having the whole world out searching for you. But of what possible benefit can it be to mankind, or any one, that a man can swim the Dardanelles, fast 40 days or more, jump from the Brooklyn or Covington bridge and live, or go over the Horseshoe falls in a barrel or rubber vest? The New York Tribune demands a law "to punish persons who recklessly risk their lives for no useful purpose," but it is hardly necessary to go to that trouble, for, if the Fool-killer neglects his duty, Nature sets traps to catch all such fools and gudgeons that are very effective.

WOOD-WORKING AND WOOD-DESTROYING.—In no department of industry has there been more active progress made during the last few years than in wood-working machinery and in

the manufactures which have been built up by means of such machinery. It is wonderful to see how readily and rapidly all kinds of wood are worked up into almost every conceivable shape by these modern machines. Huge logs from the forest are cut up deftly and rapidly into little splinters for matches, shoe pegs or tooth-picks, or shaved out into immense sheets for veneering or other use as readily as though the material wrought upon was as plastic and yielding as a piece of cheese. Boards are sawed into short lengths, matched, put together and nailed into the shape of boxes with almost magic speed and accuracy—all by machinery. Huge lumber piles are thus transformed and worked up into useful articles for home, and farm, and shop and boudoir with almost incredible celerity. Smaller pieces of wood are twisted and bent into all manner of shapes, or by hydraulic pressure, under dies, made to assume the artistic finish of most elaborate carvings. By the aid of the almost endless variety and number of machines which are everywhere present, more wood is now worked up in ten years than was formerly used in a hundred years, when the saw, planer and chisel were almost the only tools applied to such manufacture. Of course, the same destructive and constructive energies are at work in our forests getting out and saving the timber preparatory to its more careful manipulation in the shops. From present indications it would seem that our forests must soon disappear, and inside of another century we may have to break up our saw-mills, destroy our wood-working machinery and turn them all into cash or new-fangled machinery for working up straw or other vegetable substances into lumber.

## How Can They Live?

"How in the world can they live?" asked a respectable citizen the other day, when informed of the approaching marriage of a young lady of his acquaintance. "Why, he only has a salary of \$600 a year, and she has been in the habit of spending that much annually in head-gear and dresses." Strange that no one promptly answered, "live on their income." The suggestion may seem as impracticable and visionary as the proposition to flood the Desert of Sahara or spring a telephone to the moon, and yet the chances are that their fathers and mothers started life on a much smaller sum.

True, the times have changed and civilized life is growing more expensive, still we can point out many couples in this city who have no greater income and yet manage to live happily within their means, suffer no privation and do not run in debt. But the lives they live, the economies they practice, and the sweet, chaste, simple pleasures they enjoy may be quite beyond the comprehension of the young man and young woman of the period. If this answer is not sufficient we hope the social scientists of the age will tackle the problem and give a better one. They must set their wits speedily and effectively to work if they expect to retain the confidence of the community, for it will hardly be denied that many young men and young women fight shy of the marriage compact and cling to single blessedness for want of a solution of the question.

## Fairs to Come.

For the information of our readers, we give below a list of the coming exhibitions on this coast in the order of their occurrence:

Mechanics' Institute Fair, San Francisco, Aug. 24th to Sept. 25th.  
State Agricultural Society, Sacramento, September 6th to 18th.  
Oregon State Agricultural Society, Salem, September 13th to 18th.  
Eleventh District—Plumas, Lassen, Sierra and Modoc counties—Greenville, September 20th to 24th.  
Second District—San Joaquin, Calaveras, Tuolumne, Stanislaus, Merced, Mariposa, Fresno, Tulare and Kern counties—Stockton, Sept. 21st to 25th.  
Ninth District—Del Norte and Humboldt counties—Rohnerville, Sept. 21st to 24th.  
Fifth District—San Mateo and Santa Clara counties—San Jose, Sept. 27th to Oct. 2d.  
Seventh District—Monterey, Santa Cruz, San Benito and San Luis Obispo counties—Salinas City, Sept. 28th to Oct. 2d.  
Tenth District—Siskiyou, Trinity and Shasta counties—Yreka, Sept. 29th to Oct. 2d.  
Nevada State Fair, Reno, Oct. 4th to 9th.  
Santa Barbara Agricultural, October 5th to 8th.  
Twelfth District—Lake and Mendocino counties—Lakeport, Oct. 5th to 8th.  
Los Angeles Co. Fair, Downey, Oct. 5th to 9th.  
Santa Cruz Pavilion Fair, Oct. 6th to 9th.  
San Diego Horticultural Society, Oct. 6th to 8th.  
Sixth District—Los Angeles, Santa Barbara, Ventura, San Diego, San Bernardino and Inyo counties—Los Angeles, Oct. 11th to 16th.  
Ukiah Park Association, Ukiah, Oct. 14th to 16th.



## Breeders' Directory.

Six lines or less in this Directory at 50c per line per month.

### POULTRY.

**E. C. CLAPP**, South Pasadena, Cal. Light Brahmas and Plymouth Rocks. No fowls for sale. Eggs from first-class stock, after Nov. 1st.

**E. H. FREEMAN**, Santa Clara, Cal., importer and breeder of Wyandottes, Langshans, L. Brahmas, P. Cochins, B. and W. Leghorns, Bl. Br. R. G. Bantams.

**AXFORD INCUBATOR**—Best in the world; never beaten in competition; from \$37.50 to \$85.00. Pekin and Rouen Ducks; best in the State; \$7.50 per trio, or \$2.00 each per doz. Eggs, \$3.00 per doz. For particulars address I. P. Clark, Mayfield, Cal.

**CALIFORNIA POULTRY FARM**, Stockton, Cal. Send 2-cent stamp for Illustrated Catalogue.

**W. C. DAMON**, Napa, Wyandottes, W. and B. Leghorns, P. Rocks, L. Brahmas, Pekin Ducks.

**MRS. M. E. NEWHALL**, San Jose. White and Brown Leghorns, Langshans, Plymouth Rocks, Light Brahmas, Pekin Ducks and Bronze Turkeys.

**GEO. B. BAYLEY**, 1317 Castro St., Oakland, Importer and Breeder of all the best known and most profitable Land and Water Fowls. Publisher of the Pacific Coast Poultryers' Hand Book and Guide. Price 40 cents. Send 2-cent stamp for Illustrated Circular.

**JAS. T. BROWN**, 18 Georgia St., Los Angeles, Cal. Breeder of Thoroughbred Poultry of the leading varieties. Send for circular and price list.

**O. J. ALBEE**, Santa Clara, Cal., breeder of Langshans, Partridge Cochins, Pedigreed Scotch Collies, W. C. B. Polish, Wyandottes, B. Leghorns, B. B. R. G. Bantams.

**T. D. MORRIS**, Sonoma, Cal. Tuolumne and Embden Geese, Bronze and W. Holland Turkeys, and all leading varieties of Thoroughbred Poultry.

**CHOICE LAND AND WATER FOWLS** for sale at all times of all the most popular and profitable varieties. Please inclose stamp for new circular and price list to R. C. Head, Napa, Cal.

**D. H. EVERETT**, 1616 Larkin St., S. F., importer and breeder of Thoroughbred Langshans and Wyandottes.

**J. N. LUND**, Box 116, Oakland, Cal. Wyandottes, Langshans, L. Brahmas, P. Rocks, B. Leghorns, B. B. R. Game Bantams, T. Guineas, Hom'g Antwerp Pigeons.

**D. D. BRIGGS**, Los Gatos, Cal. Fancy Poultry breeder

### HORSES AND CATTLE.

**M. D. HOPKINS**, Petaluma, importer of Thoroughbred Shorthorns and Red Poll cattle for milking strains.

**HYDE & MOORE**, Visalia, importers and breeders of Shorthorn cattle. Young stock for sale.

**J. A. BREWER**, Centerville, Alameda County, Cal. Shorthorns and Grades. Young stock for sale.

**R. J. MERKELEY**, Sacramento, breeder of Norman, Percheron Horses and thoroughbred Shorthorn Cattle.

Estate of **M. E. BRADLEY**, San Jose, Cal., breeder of recorded thoroughbred Shorthorn Cattle and Berkshire Hogs. A choice lot of young stock for sale.

**E. W. STEELE**, San Luis Obispo, Cal., breeder of Thoroughbred Holstein and Jersey Cattle.

**J. R. ROSE**, Lakeville, Sonoma Co., Cal., breeder of Thoroughbred Devons, Roadsters and Draft Horses.

**GEO. BEMENT & SON**, Redwood City. Ayrshire Cattle Southdown Sheep, Berkshire and Essex Swine.

**SETH COOK**, Danville, "Cook Farm," Contra Costa Co., breeder of Aberdeen Angus, Galloways and Devons (Registered). Young stock for sale.

**H. S. SARGENT**, Stockton. Thoroughbred Jersey Cattle, and Poland-China Hogs from imported stock.

**J. H. WHITE**, Lakeville, Sonoma Co., Cal., breeder of Registered Holstein Cattle.

**PETER SAGE & SON**, Lick House, San Francisco, Cal. Importers and Breeders, for past 14 years, of every variety of Cattle, Horses, Sheep and Hogs.

**WILLIAM NILES**, Los Angeles, Cal. Thoroughbred Poultry, Cattle and Hogs. Write for circular.

**COTATE RANCH BREEDING FARM**, Page's Station, S. F. & N. P. R. R. P. O., Penn's Grove, Sonoma Co., Cal. Wilfred Page, Manager. Breeders of Short Horn Cattle, English Draft Horses, Spanish Merino Sheep and Berkshire Swine.

**THE BEST HERD OF JERSEYS**, all A. J. C. C. registered, is owned by Henry Pierce, San Francisco.

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**JOHN RIDER**, Sacramento, Cal. Breeder of Thoroughbred Berkshire Swine. My stock of Hogs are all recorded in the American Berkshire Record.

**TYLER BEACH**, San Jose, Cal., breeder of thoroughbred Berkshires.

**L. L. DICKINSON**, Lone Oak Farm, Sonoma, Tuolumne Co., Cal., breeder of thoroughbred Essex Hogs. Pigs now ready for sale. Prices reasonable.

### SHEEP AND GOATS

**R. H. CRANE**, Petaluma, Cal., breeder and importer. South Down of Long John Wentworth herd for sale.

**E. W. WOOLSEY & SON**, Fulton, Sonoma Co., Cal., imp'rs & b'ders Thoroughbred Merino, & Jersey Cattle.

**EASTON MILLS**, Lakeville, Sonoma Co., thoroughbred Spanish Merino Sheep. Choice rams for sale.

**J. B. HOYT**, Bird's Landing, Cal., importer and breeder of Shropshire Sheep; also breeds cross-bred Merino and Shropshire Sheep. Rams for sale.

**L. U. SHIPPEE**, Stockton, Cal., importer and breeder of Spanish Merino Sheep, Durham Cattle, Red Duroc and Berkshire Swine. High graded Rams for sale.

**JULIUS WEYAND**, breeder of pure-blooded Angora Goats, Little Stony, Colusa Co., Cal.

**KIRKPATRICK & WHITTAKER**, Knight's Ferry, Cal., breeders of Merino Sheep. Rams for sale.

### BEEES.

**J. D. ENAS**, Napa, Cal., breeds pure Italian Queens. The best honey and wax extractor; manufactures comb foundation, sections & hive material; send for circulars.



## HOLSTEIN & JERSEY CATTLE

Heifers in Calf in such grand bulls as Netherland Star, Clifden Prince (Holstein) and Ashantee's Sultan (Jersey) for sale at reasonable prices. Also POLAND-CHINA and BERKSHIRE PIGS.

POULTRY—All Varieties.

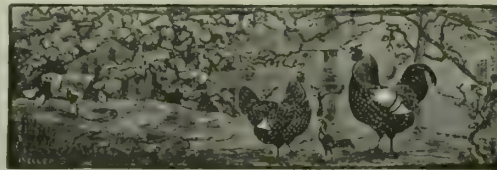
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Thoroughbred JERSEY CATTLE For Sale.



**BULLS**—East Mameluke, A. J. C. C. No.; Demont, Millard, A. J. C. C. No.; Waterman, P. C. J. C. C. No. Cows, Heifers and Calves, all registered, or will be, in P. C. J. C. Club N. R., at reasonable prices. Write for what you want. No catalogues. Address  
**H. S. SARGENT**, Stockton, Cal.

## SHEEP AND SHEEPWASH.

**Italian Sheep Wash,**  
EXTRACT OF TOBACCO

Free from Poison.  
Cures thoroughly the SCAB OF THE SHEEP. The BEST remedy known. Costs Less than 1 cent per head for dipping. Reliable testimonials at our office. For particulars apply to  
**CHAS. DUISENBERG & CO.** Sole Agents,  
No. 314 Sacramento St., San Francisco.



Calvert's Carbolic  
**SHEEP WASH**  
\$2 per Gallon.

After dipping the Sheep, is useful for preserving wet hides, destroying the vine pest, and for wheat dressings and disinfecting purposes, etc. T. W. JACKSON, S. F., Sole Agent for Pacific Coast.

## THOROUGHbred SPANISH MERINO SHEEP.



Have taken the First Premiums at the State Fair for the last three years.

CHOICE  
**BUCKS and EWES**  
FOR SALE.

ORDERS PROMPTLY FILLED. Address  
**FRANK BULLARD**, Woodland, Cal.

## LITTLE'S CHEMICAL SHEEP DIP.



Price Reduced to  
**\$1.25**  
PER GALLON.

Twenty gallons of fluid mixed with cold water will make 1,200 gallons of Dip.

It is superior to all Dips and Dressings for Scab in Sheep; is certain in effect; is easily mixed, and is applied in a cold state. Unlike sulphur or tobacco, or other poisonous Dips, it increases the growth of the wool, stimulates the fleece, and greatly adds to the yield. It destroys all vermin. It is efficacious for almost every disease (internal and external) sheep are subject to.

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Recommended by Professors Hilgard, Cooke, etc.  
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**MISSOURI STEAM WASHER**

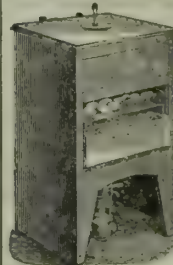


Active, honest persons all over the country, with or without team.

[Extracts from Reports of Purchasers.]  
"MARY J. TAPPAN, REYNOLDS, Neb.: They excel all other washers I ever saw. JOHN R. DODGE, JR., Normal, Ill.: The best machine ever invented by man. H. H. HILGARD, COTTAGEVILLE, B. C.: Everybody likes them and everybody wants them."  
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"JOSEPH SWIFT, Santa Clara, Iowa: The most useful article about the kitchen. ANNA RAMSEY, MILBURN, Tex.: Have thoroughly tested it on articles from New Orleans to bed quilts, give entire satisfaction."  
"ST. CLAIR INKSTER, JR., Keweenaw, Washington: This machine itself and can not be spoken of too highly. JOHN DETTON, IRISHMAN, Ky., Va.: Have given it several severe tests and it came out triumphant every time."  
"JNO. B. WHEELER, KANSAS CITY, Mo.: They have proved themselves to be the best machines I have ever used. A. P. SHIPLEY, TULSA, Okla.: Give entire satisfaction. Ladies' laundry the Washer than anything I have seen."  
"E. M. MANSEY, LAWRENCE, Texas: Has proved a better Washer than I ever thought would be invented. JOHN E. EVANS, STANTON, Mo.: If you will get up any instrument that will take as much labor off of me as this Washer takes off of the women, and cost no more, I could sell one at every house."  
"MRS. M. C. DORRINS, GALLOWAY, N. J.: Gives perfect satisfaction. I do my washing alone in one hour. I could not do it any other way."  
"MRS. F. G. SMITH, SHERMAN, N. Y.: Would not take \$5 for mine if I could not get another. Makes quicker and better than it can be done by hand. MRS. FRED H. HARRIS, HARTFORD, Vt.: Is all that is claimed. Would not be without one for twice its price. MRS. ISAAC B. BOND, NORWICH, Conn.: Have used it nearly four months. Am perfectly satisfied. I freely recommend it to all housekeepers. MRS. MARY E. VAIL, PATONIA, Ill.: Spend me \$200 per year for 16 months I have had it for five months with entire satisfaction. EDNA J. HUNT, STANTON, Mich.: I had rather give up my Jones cow than part with my Washer."  
I will ship a sample to those desiring an agency on a week's trial on liberal terms. A thousand percent the best washer in the world for saving labor, clothes and soap. Pays capable agents BIG MONEY. Write for particulars. Address **J. WORTH**, Box 516, St. Louis, Mo.; or Box 1968, San Francisco, Cal.

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**THE PACIFIC INCUBATOR!**



Awarded the Gold Medal at the State Fair, Sacramento, and at the Mechanics' Institute Fair of 1885 as the best machine made. It will hatch any kind of Eggs better than a Hen.

Send Stamp for Illustrated Circular to **GEORGE B. BAYLEY**, Manufacturer, 1317 Castro St., Oakland, Cal.

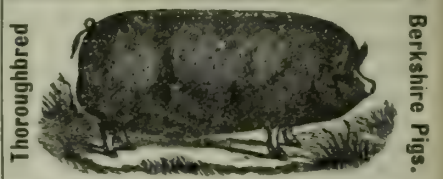
N. B.—A large line of Poultry Appliances, such as Wire Netting, Bone Mills, Chopping Machines, etc., for sale at the lowest rates. The Pacific Coast Poultryers' Hand Book and Guide; price 40c.



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Thoroughbred Poultry and Eggs. Send for new Circulars containing much valuable information.

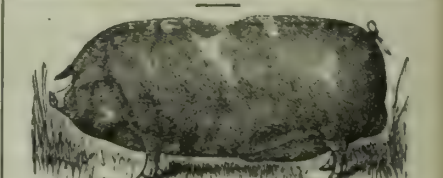
## SWINE.



For Sale at our Farm at Mountain View.

From our Thoroughbred Berkshire Boar and Sow, which we imported from England in 1880. Pigs from Imported Boar and Sow, \$25 each; from Imported Boar and Thoroughbred Sow, \$10 to \$20. Our Imported Pigs are as nice Pigs as there are in the State. Address  
**L. J. TRUMAN**, San Francisco, Cal.

## JONESA POLAND CHINA FARM.



**ELIAS GALLUP**, Hanford Tulare, Co., Cal.  
Breeder of pure-bred Poland China Pigs of the Black Beauty, Black Bear, Blamark, and other noted families. Imported Boar King of Bunny View and Gold Dust at head of the herd. Stock recorded in A. P. C. E. Pigs sold at reasonable rates. Correspondence solicited. Address as above.

## CALIFORNIA STATE FAIR—1886.

At Sacramento, Sept. 6th to 18th.  
TWO WEEKS.

**The Attention of the Farming Community** of this State is particularly called to the Liberal Awards, and advantages offered for  
**COUNTY EXHIBITS.**

The importance of an exhibit made by separate counties, showing the productive qualities of the various sections of our State, has become more apparent each year since the system was inaugurated by this Board. Recognizing the interest made manifest in the past by both the public and the exhibitors, through whose energy and enterprise valuable agricultural lands have been brought to the notice of the world, and counties with small populations have increased in a manifold degree, by reason of the producer having come forward with his products that were of such quality as to enable him to meet all competitors, the Board have deemed it proper to increase the premiums in this Department, and to that end have appropriated \$2000 to be distributed among the various counties making displays under the following provisions: To those who may have charge of the exhibits, we would call their attention to the fact that these awards will be made for the most extensive, perfect, and varied exhibit of Farm Products (exclusive of live stock) exhibited as a County Production. Thus it will be seen that it is to be wholly devoted to the products of the farms located in the county where the exhibit is made from, and does not include manufactured goods of any kind or character except those grown and raised in the county from whence the display comes.

For the best display, as per explanation above, First premium of \$500, cash. The remaining exhibits shall receive premiums in proportion to their excellence, as compared with that receiving the First Premium. Competition to be between counties only. That is to say, that the entire exhibit made by one county must compete against the entire exhibit of another county. The premium awarded to each county exhibit will be paid to the committee in charge of said exhibit.

The State Board of Agriculture earnestly desires the hearty co-operation of the various subordinate Granges throughout the State, in making this exhibition of California's products a success, whereby the varied products of different localities may be fully shown. We would ask the appointment of a committee from the Grange in each county to call upon and urge the patrons to make a display representing their respective counties.

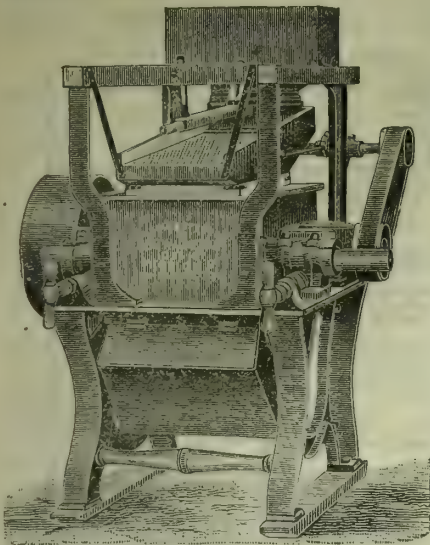
Address the Secretary at Sacramento for Premium Lists and other information.  
**JESSE D. CARR**, President.  
**EDWIN F. SMITH**, Sacramento.

## THE GOAT-BREEDERS' ANNUAL MEETING

Will take place on Thursday, September 16, 1886, at Pioneer Hall, SACRAMENTO, at 8 o'clock P. M. of said day.

All Goat-breeders invited to attend at that meeting, and also requested to exhibit specimens of their flocks at the State Fair.  
**O. W. SCHLEIFER**,  
July 23, 1886. Chairman.





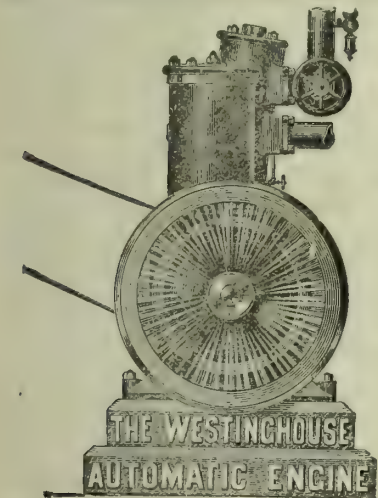
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WITH SHAKING SCREEN.

These Mills are constructed in the least complicated and most substantial manner possible, with rigid iron frame, long bearings, adjustable boxes, with coil springs to allow any chance obstruction, such as nails, screws, etc., to pass through without injury to the rolls. This feature is found on no other roll made on this Coast. Send for prices to

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1,300 Engines now in use.  
40,000 Horse Power now running.  
Sales 2,000 H. P. per month.

Send for Illustrated Circular and Reference List.

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OF CALIFORNIA.  
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Authorized Capital, - - \$1,000,000  
In 10,000 Shares of \$100 each.  
Capital Paid up in Gold Coin, \$645,360.  
Reserved Fund and Paid up Stock, \$21,178.

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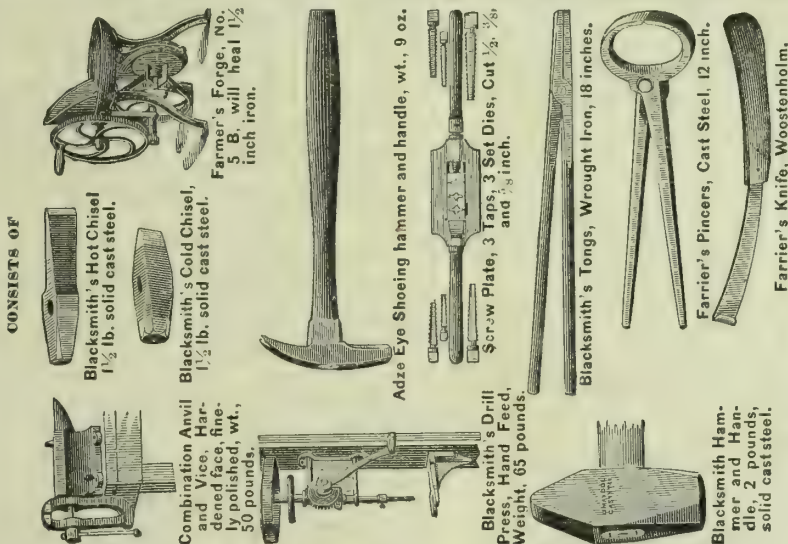
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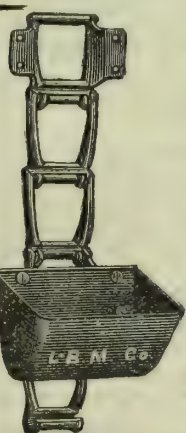
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## S. H. MARKET REPORT

NOTE.—Our quotations are for Wednesday, not Saturday, the date the paper bears.

## Weekly Market Review.

## DOMESTIC PRODUCE, ETC.

SAN FRANCISCO, Sept. 8, 1886.

The market, the past week, for cereals has been more active, with the tendency upward. In other lines, while a general active market is reported, yet prices have shown few changes. On Tuesday last the traffic managers of the Southern and Central Pacific roads made a cut of 50 per cent in freight rates to Missouri River common points and to Chicago common points. The cut was made on all classes of freight, inclusive of fruit and live-stock. This reduction will have a direct bearing on the prices of several leading articles in the produce line, which will show itself within a few days. Private cables report 35s per quarter bid in Liverpool for cargoes of No. 1 wheat for prompt shipment from hence; this advance is not given in the semi-public cables received to-day.

LONDON, Sept. 8, 1886.—WHEAT—Cargoes off coast, very slow; cargoes on passage and for shipment, slow; California wheat, off coast, 34s 3d; California wheat, just shipped, 34s 6d; California wheat, nearly due, 34s 6d; English country market, quiet and perhaps a little lower; Liverpool wheat, spot, firm; Liverpool wheat, California, 6s 9d to 7s; weather in England, fine.

## Foreign Review.

LONDON, Sept. 6.—The *Mark Lane Express* in its review of the British grain trade for the past week says: The rainfall of the week has done no harm to crops. In the earlier districts the bulk of the harvest had been secured, and where crops had not been reaped, strong winds counteracted the wet. The change in the weather will retard the appearance in market of new wheat, and will also be an important factor in determining values. Sales of English wheat during the past week were 29,892 quarters at 33s 1d, against 39,709 quarters at 33s 3d during the corresponding period of last year. Foreign wheat is steady, but with little doing. Fifteen cargoes of wheat arrived; three were withdrawn and 12 remained, including four Californian and one Oregon. There is a fair supply of new English wheat. Flour is dull and cheaper. Corn, beans and peas are unchanged. Oats are dull and 3d cheaper. Linseed is cheaper on spot.

## London Wool Market.

LONDON, Sept. 7.—The fourth series of the wool sales of the current year, at which 266,000 bales are to be disposed of, commenced to-day. There was an equally large attendance of home and continental buyers and competition was very active. Since the close of the last series there has been an active demand, which has resulted in private sale of about 20,000 bales at 1s 2d above the average rate of the series. The sales to-day show the following advances as compared with the closing sales of July: Australian greasy and merino, 3½d; washed and scoured, 2½d; do cross breeds, 1d; Cape of Good Hope and Natal greasy, 2d; do fleece and scoured, 3½d.

## Eastern Wool Markets.

NEW YORK, Sept. 5.—The market shows just enough uncertainty to create a slightly nervous feeling among the more impatient, but without apparently altering the general situation. Among sales were 20,000 pounds spring California, at 18½¢; 20 cents; 27,000 pounds Montana, at 30 cents; 12,000 pounds Oregon, at 23½¢. The Boston market is more active. The miniature panic following upon the Snelling, Gray & Payson developments has subsided, and wool has been sold during the week generally at higher prices than would have been readily accepted two weeks ago. Among sales were 378,000 pounds California spring and Oregon, on private terms; 25,000 pounds medium Montana, at 28 cents; 15,000 pounds fine medium Territory, at 25 cents. The Philadelphia market developed a stronger undertone and a little more activity. Among sales were 6,000 pounds scoured California, at 50½¢; 10,000 pounds scoured California, at 61 cents; 50,000 pounds fine Territory, at 25½¢.

NEW YORK, Sept. 7.—Wool is firm and moderately active. Domestic fleeces, 30½¢ to 31¢; pulled, 14½¢ to 15¢; Texas, 9½¢ to 10¢.

PHILADELPHIA, Sept. 7.—Wool is in improved demand at unchanged prices.

BOSTON, Sept. 7.—Wool is steady and firm. Michigan extra, 32¢ to 33¢; Ohio and Pennsylvania extra, 32½¢ to 33¢; XXX and above, 34½¢ to 35¢; other grades unchanged.

## New York Wheat Market.

NEW YORK, Sept. 5.—Wheat has been unsettled, and speculation only moderately active, with export movements considerably less than last week. The reports of unfavorable rains in Great Britain on Thursday caused a firmer feeling, with a somewhat increased export demand. The market reacted somewhat, later, but prices closed a shade higher and near to the top figures: September, 87 cents; October, 88½¢; November, 90½¢; December, 91½¢; January, 93 cents; May, 98½¢.

## California Products at the East.

NEW YORK, Sept. 5.—Seeds—Sales of 50 bags reported of California yellow mustard seed, on spot, at 5½¢; 50 do, to arrive, of August shipment by railroad; 500 do, September shipment, 4½¢.

Canned Goods—California canned peaches, \$2.25 @ 2.50; pears, \$2.25; plums, \$1.90 @ 2.00; grapes, \$2.00; apricots, \$2.15; salmon, \$1.60.

Honey—Extracted, 5½¢.

Beans—Quint, California, \$1.70.

## New York Hop Market.

NEW YORK, Sept. 5.—Returns from various sections of the State, showing as they do a much smaller yield than was estimated a week or ten days ago, are developing a gradual undertone of strength to the local market for fine goods of either 1885 or 1886 growth. There is some buying going on in a quiet way, but the general disposition is more care-

ful, and the most confident believers in higher prices seem inclined to assist, rather than resist, any uneasiness that may be caused among timid holders by various offers made of inferior at low figures. No first-class State's are offered at the present time, and attractive Pacifics are by no means plentiful. It is reported, however, that some medium quality Pacifics have been purchased at about 21 cents for local account.

## Local Markets.

BAGS—There is very little trading reported in grain bags. The market is strong at 6½¢ cts for standard Calcuttas, in sympathy with an advance in Calcuttas.

BARLEY—Under heavy receipts and a strong bear pressure, the market weakened off, but has since recovered, closing strong on yesterday. Call sales to-day were, at the morning session: Buyer season—500 tons, \$1.04; 200, \$1.04½; seller season—100 tons, 91½¢; 100, 92¢; seller 1886—100 tons, 92½¢; 100, 92½¢; 300, 92½¢ cts. Afternoon session: Buyer season—200 tons, \$1.04½; 100, \$1.04½ cts.

BEANS—The market is quiet but steady.

CORN—Nebraska has come in quite freely, causing lower prices to obtain.

DAIRY PRODUCE—Gilt-edged fresh roll is strong, higher, with all other grades doing better. The hot weather is against shipping on land orders, but by sea all orders are filled.

EGGS—The market is strong for strictly choice, and also choice California, but fair to good are slow and lower.

FEED—The market is quiet for ground feed and choice hay, but slow for poor hay. The following is the range for hay: Barley \$4 to \$7, oats \$6 to \$9; wheat \$8 to \$11, with something extra selling higher.

FRUIT—Full particulars given elsewhere.

HOPS—Late private advices give an improved market in the East. In our market no trading is reported.

HONEY—The demand is strong, with stocks well cleaned up. The buying has been for shipping and local canners. A slight advance is reported.

OATS—The market has a steadier tone, with the consumptive demand increasing.

WHEAT—Owing to holders' firmness in not selling, buyers have been forced into the market at an advance on last week's bids. The market to-day closed strong for sample lots. To-day's call was as follows: Morning session: Buyer season, 100 tons, \$1.45½; 500, \$1.46½. Buyer 1886, 100 tons, \$1.41½; 300, \$1.42; 500, \$1.42½. Seller 1886, 100 tons, \$1.35½; 500, \$1.35½ per cts. Afternoon session: Buyer season, 100 tons, \$1.46½; 300, \$1.46½; 1000, \$1.46½; 100, \$1.47. Buyer 1886, 100 tons, \$1.42½.

[COMMUNICATED.]

## Market Information.

## Cereals.

European advices are confirmatory of previous reported shortage in this year's crop, compared with last year's. England's requirements are placed at 154,000,000 bushels, and France's at 52,000,000; Italy's is also increased. Eastern advices report the United States crop at 420,000,000 bushels, but in the estimate, California's crop is placed at 60,000,000 bushels, while the very best informed only give us 38,000,000. Deducting the difference, 22,000,000 bushels, and the crop of the United States is placed at 398,000,000 bushels against 357,000,000 last year; but then this year the carryover was all of 60,000,000 bushels less than last year's carryover. In this State alone it was 4,000,000 bushels, with flour reduced to wheat, less and in Oregon, 1,000,000.

European semi-public cables have reported a dull, weak market throughout the week in England for cargoes, with quotations fully 6d per quarter for prompt shipment below private cables. Acting on the semi-public advices, export and speculative buyers, with the aid of the daily press, commenced bearing the San Francisco market—buyers bidding extremely low and the newspapers quoting these bids, but farmers did not appear to be fooled, so no business was done. Finding they could not buy, they increased their bids on Friday, Saturday, Monday and Tuesday, paying as high as \$1.38½ for good to choice No. 1 shipping and not below \$1.36½ for barely No. 1. Even at this advance they cannot buy much. Milling wheat sold at \$1.37½ to \$1.41½, according to quality and where delivered. No. 1 Sonora sold at \$1.36½.

Corn has ruled very strong, with all received gone into consumption. The crop in this State will not be as large as was claimed in July last. Western advices continue to place the crop of the United States this year at 300,000,000 bushels less than last year's.

Receipts of barley the past week were very heavy, but they were either warehouse or went into consumption, for there was very little selling pressure, causing prices to be maintained, with a strong market at the close.

Receipts of oats from Puget Sound and Oregon increased the past week, but all that came to hand was placed at unchanged prices, particularly if good to choice.

In rye and buckwheat no transactions are reported.

## Dairy Produce.

Butter is stronger and higher, owing to the market being better cleaned up, due to lighter receipts and a good demand. The retail trade have about out their own pack of pickled and are coming in to the general market for supplies.

Cheese is very strong with stocks well in hand, and a good consumptive demand ruling.

Eastern eggs continue to arrive by the carloads, flooding this market with inferior and trashy stock which are sold at very low figures and keeping California eggs down. Strictly choice and also choice eggs are still wanted at good figures, but poor are hard to sell at any price.

## Fruits.

The market is glutted with wormy and otherwise defective apples and pears, which are hard to sell at any price; choice sound apples and pears are in good request at top figures. Some extra from Oregon fetched \$1.25 per box, and fair, 75 cts per box. Bartlett pears are very scarce and high; Oregon

Bartletts continue to fetch from \$1.50 to \$1.75. Some choice Hungarian pears were received this week by Eveleth & Nash, from San Jose, that showed on the stem the scale.

Plums and prunes are without change; choice continue to move off steadily, while indifferent are hard to sell.

Peaches have ruled steady and firm throughout the week.

Table grapes, under continued heavy receipts, ruled weak and low throughout the week. This morning they opened strong at a slight advance, owing to free shipping orders from the North, but weakened off again. Canners only paid from 20 to 30 cts per box for choice, with now and then a slight advance for something extra. Wine grapes have ruled steady and strong throughout the week.

Figs dropped under free receipts and only a moderate demand. They closed weak.

Strawberries and raspberries have ruled strong throughout the week, but blackberries barely remained steady.

Watermelons under heavy receipts have shaded off, closing weak at \$30 to \$35 per carload and \$2.50 to \$5 per 100 from stores.

Cantaloupes have been demoralized, with more or less dumping through the week. To-day the market closed weak and dull.

## Feedstuff.

Choice to extra choice hay continues in light supply, causing a strong market for these grades, but poor to good is in large offerings, with prices in buyers' favor.

Ground feed of all kinds are strong, with a free demand reported from consumers, but at unchanged prices.

## Hops.

The market is quiet pending the receipt of this year's pickings. Buyers claim to be indifferent and name lower prices, but it is noticed they are still ready to close a contract at good round figures. The consumption on this coast promises to be all of 10 per cent greater than last year, while brewers are lighter stocked than for several years past, in this month.

## Live-stock.

The market for beef cattle is very weak, with buyers masters of the situation. The hot weather keeps consumption down, while slaughterers confine purchases to actual wants from day to day. Mutton sheep also in liberal supply, but the market is steady. Choice lambs and calves are scarce and fetch good prices. Block hogs, young, weighing from 80 to 150 lbs, meet with a fair demand, but large hogs are not wanted, as packers are not buying; while the former sell at the highest price, for the latter it is hard to get 4 cts. Horses are without change, the inquiry reported in last week's Press for carriage horses and roadsters continues good this week, but draft and general utility horses are slow and lower.

The following are to-day's meat prices: Beef—Stall-fed, 7½¢ to 7¾¢ lb; grass-fed, extra, 6½¢ to 6¾¢; first quality, 5½¢ to 6¢; second, 5½¢ to 5¾¢; third, 4½¢ to 4¾¢. Calves, small, 9¢ to 10¢; larger, 7½¢ to 8¢ lb. Mutton—Ewes, 4½¢; wethers, 5¢. Lamb—Spring, 6½¢ to 7¢ lb. Pork—Live hogs on foot, 3½¢ to 4¢ for grain and dairy fed; 2½¢ to 3½¢ for soft; dressed, 6¢ for hard, and 5¢ for soft. Grass-fed stock sell on foot, gross weight, at one-half the price they fetch dressed; stall-fed, on foot, fetch one-third less than they sell at dressed.

## Vegetables.

Potatoes held up well up to Monday, when a weaker feeling was noticeable, and still more marked on Tuesday and to-day. The weakness is due to heavier receipts—averaging fully 4800 sacks per day—and dealers being well stocked. The general run of potatoes appear to be of a better quality than those received in July and August.

Sweet potatoes, under fair receipts and a good demand, ruled strong throughout the week, with an advance on Monday which has been further advanced since.

Onions have ruled in buyers' favor, with some difficulty reported in working off consignments at full quotations.

Green okra, green peppers, cucumbers, cabbages and root vegetables in general, have ruled weak and in buyers' favor, but with few concessions reported. Tomatoes have ruled steady, with at times a strong feeling, and slight advance reported, but the next day they would be back again. Canners are only buying poor and cheap stock at from 15 to 25 cts per box.

## Wool.

The market continues exceedingly strong, with a slight advance paid the past week. The demand is more of a consumptive than speculative character. The clip of the United States is 15,000,000 lbs short of last year, while the Australian clip, compared with last year, shows a larger shortage, as does the River Plate clip. All these shortages tell in favor of wool. European advices report a very strong and higher market.

## Miscellaneous.

The tonnage movement compares with last year at this date as follows:

	1886.	1885.
On the way.....	295,798	225,239
In port, disengaged.....	67,519	109,789
In port, engaged.....	73,367	12,373
Totals.....	436,694	347,401

The above gives a carrying capacity as follows: 1886, 695,772 short tons; 1885, 562,180 short tons; increase over last year, 173,592.

Tonnage on the way to Portland, Oregon, 49,012 tons; same time in 1885, 36,223.

The exports by sea from this port from July 1, 1886, to date, compared with the like time in 1885, are as follows, in cents:

	1886.	1885.
Wheat (flour reduced to wheat) 2,010,472	979,624	
Barley.....	229,943	20,132
Oats.....	2,529	3,813
Corn.....	4,094	969

Poultry has ruled weak and dull for poor stock, but strong for choice. Ducks and young turkeys are scarce.

Game is coming in, but, owing to hot weather, is unsalable.

San Francisco, September 8, 1886.

## Domestic Produce.

WEDNESDAY, Sept. 8, 1886.

BEANS AND PEAS.		POTATOES.	
Bayo, cts.....	1 40 @ 1 50	New cts.....	— @ —
Butter.....	1 25 @ 1 50	Burbank.....	— @ —
Castor.....	— @ —	Early Rose.....	65 @ 1 10
Pea.....	1 75 @ 1 80	Cuffy Cove.....	— @ —
Red.....	1 10 @ 1 12	Jersey Blues.....	1 10 @ 1 20
Pink.....	1 07 1/2 @ 1 12 1/2	Petaluma.....	— @ —
Large White.....	— @ —	Tomatoes.....	— @ —
Small White.....	1 75 @ 1 80	River reds.....	80 @ 1 00
Lima.....	2 00 @ 2 25	Humboldt.....	— @ —
Fid Peas, blk eye	1 00 @ 1 50	do Kidney.....	— @ —
do green.....	1 00 @ 1 12 1/2	do.....	90 @ 1 15
do Lima.....	1 25 @ —	do Oregon.....	— @ —
BROOM CORN.		do Peoria.....	90 @ 1 15
Southern.....	— @ —	Salt Lake.....	— @ —
Northern.....	— @ —	Sweet.....	34 @ 1 15
CHICORY.		POULTRY AND GAME.	
California.....	4 @ 4 1/2	Hens.....	5 00 @ 7 00
German.....	— @ —	Broilers.....	5 50 @ 7 50
DAIRY PRODUCE, ETC.		Ducks, tame.....	3 50 @ 5 50
BUTTER.		do Mallard.....	2 00 @ 3 00
Cal fresh roll, lb.	20 @ 27 1/2	do Sprig.....	— @ —
do Fancy brands	30 @ —	do.....	— @ —
Pickle roll.....	20 @ 22 1/2	Geese, pair.....	1 50 @ 2 00
Irish, new.....	15 @ 18	do Goslings.....	— @ —
Eastern.....	— @ —	Wild Geese, dos	— @ —
CHEESE.		White do.....	— @ —
Cheddar, Cal, lb.....	7 @ 9 1/2	Turkeys, lb.....	16 @ 19
Eastern style.....	10 @ 13	do Dressed.....	— @ —
EGGS.		Turkey Feathers.....	— @ —
Cal, ranch, dos.....	29 @ 30	do.....	— @ —
do store.....	20 @ 27 1/2	Snipe, Eng, dos.....	— @ —
Ducks.....	— @ —	do Common.....	— @ —
Oregon.....	— @ —	Doves.....	75 @ 85
Eastern.....	10 @ 17	Rabbits.....	1 00 @ 1 25
Utah.....	20 @ 21	Hare.....	2 50 @ 2 75
FEED.		Venison.....	14 @ 15
Brass, ton.....	15 50 @ 16 00	PROVISIONS.	
Cornmeal.....	26 00 @ 27 00	Cal Bacon.....	— @ —
Hay.....	5 00 @ 12 50	Heavy, lb.....	8 1/2 @ 9
Middlings.....	16 00 @ 17 00	Medium.....	8 1/2 @ 9
Oil Cake Meal.....	26 50 @ 28 50	Light.....	10 1/2 @ 11 1/2
Straw, bale.....	25 @ 50	Extra Light.....	12 @ 12 1/2
FLOUR.		Lard.....	7 @ 9
Extra, City Mills.....	4 12 1/2 @ 4 50	Cal Smoked Beef.....	11 1/2 @ 12 1/2
do Country Mills.....	4 00 @ 4 37 1/2	Hams, Cal.....	11 @ 14 1/2
Superfine.....	3 00 @ 3 50	do Eastern.....	14 1/2 @ 15 1/2
GRAIN, ETC.		SEEDS.	
Barley, feed, cts.....	85 @ 92 1/2	Alfalfa.....	10 @ 11
do Brewing.....	1 00 @ 1 10	Canary.....	34 @ 4
do new.....	1 10 @ 1 15	Glover red.....	12 @ 13
Chevalier.....	1 35 @ 1 45	White.....	17 @ 18
do Coast.....	— @ —	do.....	— @ —
Buckwheat.....	1 00 @ 1 10	Flaxseed.....	23 @ 24
Corn, White.....	— @ —	Hemp.....	4 @ 4 1/2
Yellow.....	1 39 @ 1 35	Italian Rye Grass.....	25 @ 26
Small Round.....	1 30 @ 1 35	Perennial.....	7 @ 9
Nebraska.....	1 05 @ 1 20	do.....	— @ —
Oats, new.....	1 27 1/2 @ 1 32 1/2	Mustard, white.....	1 @ 10
do No. 1.....	1 20 @ 1 25	Brown.....	2 25 @ 2 75
do black.....	1 12 1/2 @ 1 15	Rape.....	1 @ 1 1/2
do Oregon.....	1 25 @ 1 45	Ky Blue Grass.....	17 @ 13
Rye.....	1 10 @ 1 25	2d quality.....	11 @ 12
Wheat, No. 1.....	1 34 1/2 @ 1 38 1/2	Sweet V. Grass.....	17 @ 18
do No. 2.....	1 30 @ 1 35	do.....	— @ —
Choice milling.....	1 38 1/2 @ 1 41 1/2	Red Top.....	15 @ 16
HIDES.		Hungarian.....	8 @ 10
Dry.....	— @ 16	Lawn.....	30 @ 40
Wet salted.....	8 @ 9 1/2	Mesquit.....	10 @ 12
HONEY, ETC.		Timothy.....	54 @ —
Beeswax, lb.....	20 @ 22	TALLOW.	
Honey in comb.....	8 @ 10	Crude, lb.....	11 @ 14
Honey in comb.....	11 @ 13	Refined.....	14 @ 16
Extracted, light.....	4 @ 4 1/2	WOOL, ETC.	
do dark.....	3 1/2 @ 3 3/4	Spring—1886.....	— @ —
HOPS.		Humboldt and.....	22 @ 25
Oregon.....	— @ —	Mendocino.....	17 @ 20
California old.....	17 1/2 @ 20	Free Mountain.....	17 @ 20
do new.....	27 1/2 @ 31 1/2	St. Joaquin defective.....	— @ —
ONIONS.		do long.....	— @ —
Red.....	— @ —	Cava's & Fitch.....	17 @ 22
Silverskin.....	60 @ 60	Oregon Eastern.....	23 @ 25
NUTS—JOBBING.		do.....	23 @ 25
Walnuts, Cal, lb.....	7 1/2 @ 9	Southern California.....	13 @ 17
do Chile.....	7 1/2 @ 9	FALL—1886.	
Almonds, hshl.....	6 @ —	Soft shell.....	16 @ 19
Soft shell.....	10 @ 12	do defective.....	12 @ 18
Brazil.....	11 @ 12	No. 1, free.....	17 @ 21
Pecans.....	10 @ 12	do defective.....	12 @ 18
Peanuts.....	3 @ 4	do defective.....	12 @ 18
Filberts.....	13 @ 14		



List of U. S. Patents for Pacific Coast Inventors.

Reported by Dewey & Co., Pioneer Patent Solicitors for Pacific States.

From the official report of U. S. Patents in DEWEY & Co.'s Patent Office Library, 252 Market St., S. F.

FOR WEEK-ENDING AUGUST 31, 1886.

- 348,372.—FAUCET—U. Bachman, St. Helena, Cal.  
348,309.—ENGINE-VALVE GEAR—H. C. Behr, S. F.  
348,376.—EXCAVATING MACHINE—A. Boschke, S. F.  
378,380.—CABLE GRIP—H. Casebolt, S. F.  
348,455.—CUT-OUT FOR ELECTRICAL CIRCUITS—J. M. Fairchild, Portland, Ogo.  
348,456.—SWITCH FOR ELECTRICAL CIRCUITS—J. M. Fairchild, Portland, Ogo.  
348,389.—GAS-REGULATOR—A. Ford, S. F.  
348,277.—ROTARY WATER METER—F. T. Gilbert, Walla Walla, W. T.  
348,341.—GAUGE FOR PLANE KNIVES—A. Potter, Portland, Ogo.  
348,357.—FRUIT-PICKER AND HOLDER—T. C. Stark, Vallejo, Cal.  
348,358.—LOCK AND SEAL FOR TRUNKS—A. N. Towne, S. F.  
348,361.—FORCE PUMP—J. W. Van Orden, Arlington, Ogo.  
348,433.—GATE—L. D. Wade, Puyallup, W. T.  
348,368.—INCUBATOR—W. Worswick, S. F.

NOTE.—Copies of U. S. and Foreign patents furnished by Dewey & Co., in the shortest time possible (by mail or telegraphic order). American and Foreign patents obtained, and general patent business for Pacific Coast inventors transacted with perfect security, at reasonable rates, and in the shortest possible time.

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- JARED C. HOAG—California.  
G. W. INGALLS—Arizona.  
E. L. RICHARDS—San Diego Co.  
R. G. HUSTON—Montana.  
GEO. McDOWELL—San Luis Obispo and Santa Clara Co's  
FRANK W. SMITH—Utah and Colorado.  
M. S. PRIME—Alameda Co.  
A. S. LUCE—Nevada and Placer Co.'s.

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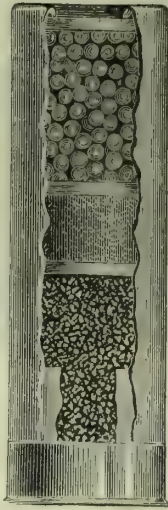
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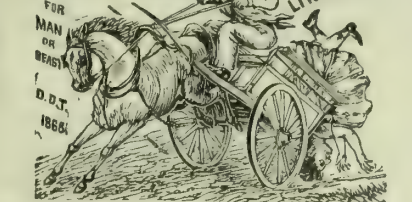
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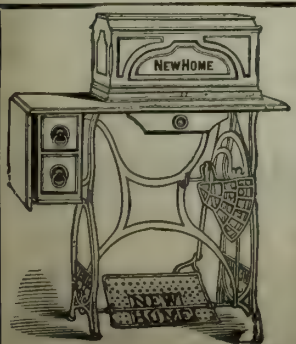
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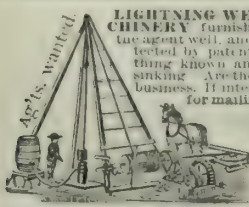
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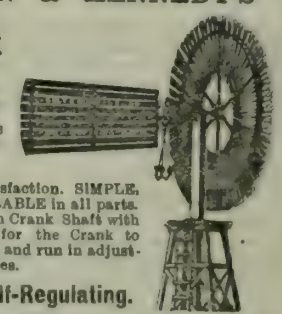
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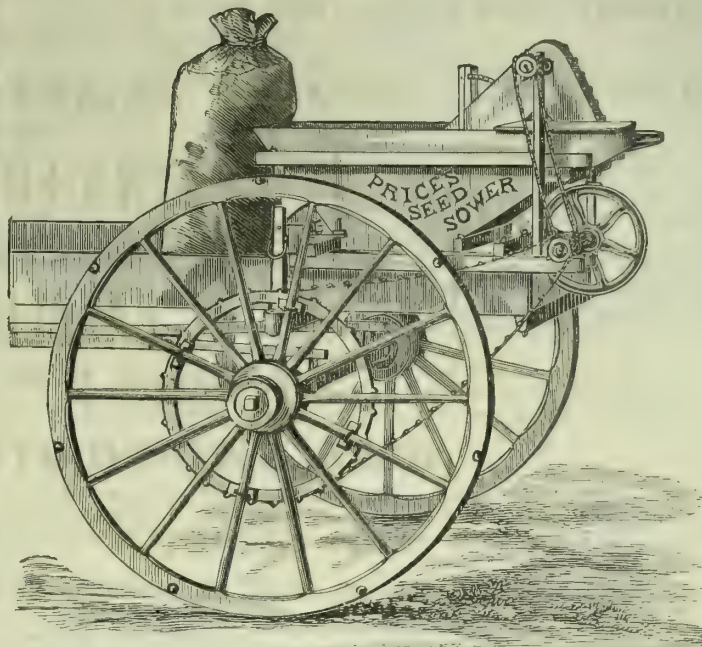
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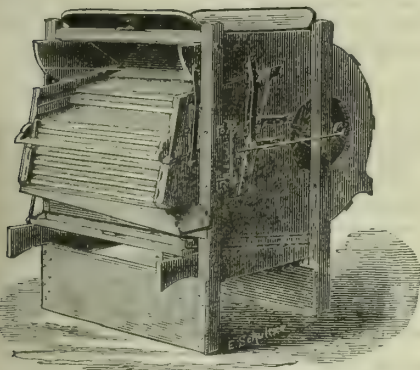


Sows a strip 100 feet wide at each passage (working width in wheat, 80 feet). Sows as evenly as a Force-feed Drill.

The supply of grain to the distributor is governed by the speed of the team, feeding rapidly when the team walks fast, and slowly when they walk slowly. Will sow an acre of ground as thoroughly with 80 pounds of seed as any other machine of its class will with 100 pounds. Sows 20 acres per hour with ease. Saves its cost in seed grain over any other machine every 200 acres sown. Warranted as above. Order on Trial. Price on board cars, \$40. Send for large, illustrated circular.

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## DANIEL BEST'S HAND SEPARATOR.



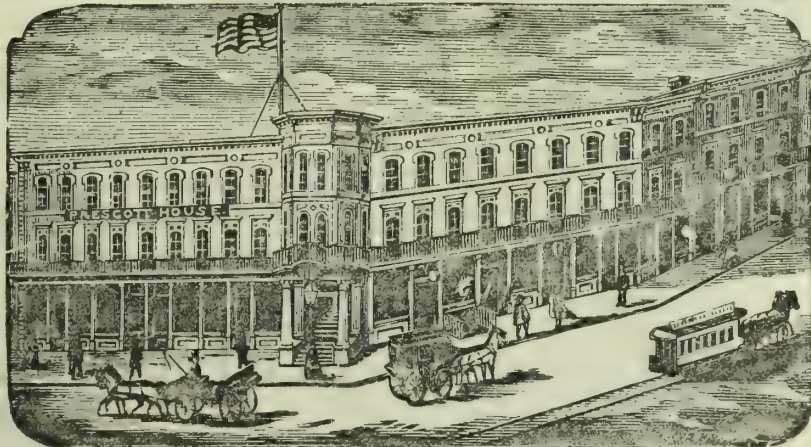
OUR IMPROVED HAND SEPARATOR is a double combined machine, possesses two shoes (instead of one, as in machines of other manufacturers), nine riddles and a large independent screen. Each shoe is equal in power and capability to the one in any other mill, and by the operation of the two, double efficiency is secured. Our 28-inch mill will clean from 400 to 600 bushels of seed grain per day, according to the condition of the grain, and we guarantee that all barley, oats, or other foul seed will be thoroughly removed with complete satisfaction.

By an ingenious set of Barley Riddles, which accompanies each mill, wild oats will be separated from barley—a feat which no other machine has yet accomplished. We ask you to give our mills a trial. We guarantee that you will find them precisely as represented.

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The Proprietary Institution called THE PACIFIC ASYLUM, where the Insane of the State of Nevada have been kept for several years, was opened as a PRIVATE ASYLUM for the care and treatment of Mental and Nervous Diseases, on the 10th of August, 1882, the Nevada patients having been removed to the new State Asylum at Reno. The buildings are capacious and comfortable, having been constructed for the accommodation of over 200 patients, and they are pleasantly situated in the suburbs of Stockton, and are surrounded by attractive grounds of 40 acres in extent, with cultivated gardens and pleasant walks. Its advantages over public institutions in facility of admission and procuring extra accommodations, if required, are obvious. For terms and other particulars apply to the proprietor and Superintendent, DR. ASA CLARK, PACIFIC ASYLUM, STOCKTON, CAL.

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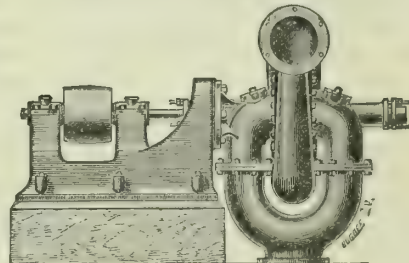
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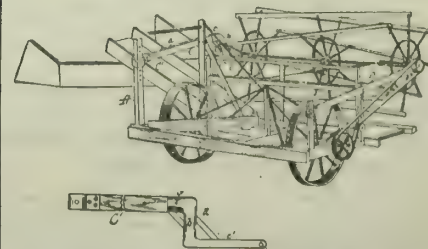
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A SPECIALTY.

## REEL SUPPORTING ARM

—FOR—

## HARVESTERS.



ALL PERSONS ARE HEREBY NOTIFIED THAT THE device shown in the above engraving is covered by Letters Patent awarded to me by the U. S. Government, and are warned against making and using the same without my consent.

All those desiring the Angular Supporting Arms or information about them, will be furnished therewith by addressing

**JOHN B. GEMMILL,**  
Red Bluff, or Tehama, Cal.

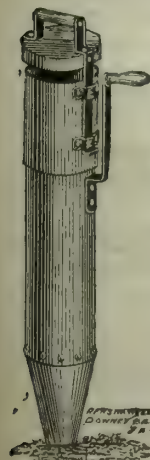
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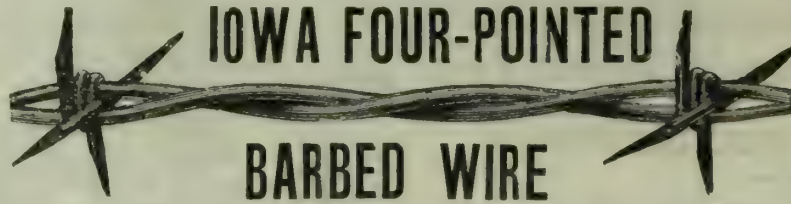
## Hardware and Agricultural Implements.

The regular has the barbs seven inches apart, and the "Thick Set," or Hog Wire, has barbs three and one-half inches apart. PRICES ARE SAME ON BOTH KINDS. IN ORDERING, STATE WHICH KIND IS WANTED.

The 7-inch weighs 352 pounds to the mile.  
The 3½-inch weighs 410 pounds to the mile.

Our Wire is put up on spools in lengths of about 100 rods, weighing from 100 to 120 pounds, so as to be easily handled. One pound of 7-inch measures 15 feet in length. Our staples run about 80 to the pound.

A great many kinds of inferior four-point wires have been placed on this market, and are still sold in competition with our Iowa, and the agents often say that they



THE STANDARD BARBED WIRE OF THE WORLD.  
WITH BARBS 3½ OR 7 INCHES APART, AS ORDERED.

are the same as the Iowa. The fact is the Iowa is the only good four-point wire in this market. You can buy some four-pointed wires for 25 cents to 50 cents per hundred pounds less than the Iowa, but they are inferior in quality. If you want a good quality of wire, you cannot afford to buy these inferior grades at any price.

Of the various kinds of four-pointed wire barbs, the Iowa is the only barb which is locked between the two wires, and also wound around both wires. The lock prevents it slipping on the wire, and winding around holds the two wires together.

Made only from the best of annealed steel, fully warranted, either galvanized or painted.

## IOWA TWO-POINTED BARBED WIRE.

While we have sold the four-point Iowa Wire almost exclusively, and still continue to recommend it as THE BEST, yet, as some prefer a two-point wire, we are now prepared to furnish the two-pointed Iowa Barbed Wire, made from the same material as the four-point and equal to it in quality, strength and durability. In offering this to dealers and farmers we point with pride to the universal satisfaction which the Iowa Wire has given. Our prices are always as low as first quality wire can be bought for. Remember that the Genuine Iowa Barbed Wire can be obtained only from Baker & Hamilton, Sole Agents for Pacific Coast. Prices quoted on application.

### AMOUNT OF BARB FENCE REQUIRED TO FENCE FIELDS OF DIFFERENT SIZES.

1 Square Acre.	2 Square Acres.	1 Plot of 640 Acres or 1 Square Mile or Section.	Divided into 16 Plots of 40 Acres Each.
200 feet, or 12½ rods, on each side. 836 feet, or 50½ rods around, requiring 56 pounds of wire for each strand.	296 feet, or 18 rods on each side. 1184 ft. or 71½ rods around, requiring 79 pounds of wire for each strand.	Entire distance to be fenced, 1280 rods, requiring 1405 pounds of wire for each strand.	
When Posts There are required for each strand are placed of wire, for 1 mile of fence feet apart.		It requires less fence for a square plot than an oblong one of the same area.	
		Each division line run parallel with the border of a square plot requires one-quarter as much fence as the entire distance around.	Entire distance to be fenced, 3200 rods, requiring 3320 pounds of wire for each strand. Distance around each plot, 320 rods, requiring, if fenced separately, 352 pounds of wire for each strand.
8 10 12½ 16 20 25 30 33	660 528 440 320 264 212 176 160	81 63 51 44 36 28 24 2	352 352 352 352 352 352 352 352

### DIRECTIONS FOR PUTTING UP FENCE.

The height of an ordinary fence is, say four feet. First firmly fasten with staples the wire to the starting or end post, which should always be of good size, say 6x8 or 8x10, firmly imbedded in the ground below frost, and well braced. Then two men carry the spool of wire between them, unwinding as they go, to the next straining post—which may be set from 600 feet to 800 feet from the other—apply the stretcher to the wire and strain it up taut; after fastening securely, go back, and staple to the intermediate posts, which may be set from one to two rods apart; twenty feet will be found to be a good distance. If over 20 feet apart, a picket or lath should be stapled half way between posts, the end resting on the ground.

### NUMBER OF WIRES AND DISTANCES BETWEEN POSTS.

Although fences are sometimes made of two wires, to fence against cattle only, we recommend not less than three, and as many more as desirable. Five wires make a good fence—such is used by nearly all the railroad companies.

The following are the distances apart at which the wires are generally placed:

TWO-WIRE FENCE—1st wire 22 inches, 2d wire 44 inches from the ground.

THREE-WIRE FENCE—1st wire 16 inches, 2d wire 30 inches, 3d wire 48 inches from the ground.

FOUR-WIRE FENCE—1st wire 12 inches, 2d wire 24 inches, 3d wire 36 inches, 4th wire 48 inches from the ground.

FIVE-WIRE FENCE—1st wire 8 inches, 2d wire 15 inches, 3d wire 24 inches, 4th wire 36 inches, 5th wire 48 inches from the ground.

One less strand can be used with four-point than two-point wire.

In regard to the distance apart that posts should be set, most farmers, having been accustomed to put up a board fence, with posts 8 to 12 feet apart, find it hard to adopt the way of putting them from 16 to 30 feet from each other for barb wire; but it should be remembered that there is no strain against a barb fence; it affords no resistance to wind or snow, and cattle cannot get against it to push it down.

## FRESNO COUNTY. BRIGGS' SELMA TRACT.

This most desirable tract, comprising 1280 acres of first-class gray ash and sandy loam land (situated one and one-half miles from the fast-growing town of Selma, the second in the county, and two miles from Fowler, both being S. P. R. R. towns), has been subdivided and will be sold in 20, 40, 60 or 80-acre farms. The distributing ditches are now being constructed, and convenient roads are laid off. The main canal is 60 feet in the bottom.

### THE WATER RIGHTS

Consist of stock in the canals and entitle the owner to one-eighth of 2 feet 6 inches of water, being 2½ times the usual amount supplied to colonies. The owner of the water stock has a pro rata vote in the management of the canal, and the expense per year is about \$3.50 on a 20-acre lot.

A school-house is to be erected on the land this year, and it has two within two miles of it at present. Fresno, Selma, Fowler and Kingsburg are good local markets for produce. Opportunities to labor with or without teams are abundant, and land can be rented for wheat-growing in the neighborhood. The health of this region is perfection, and, in common with the plains generally, is an excellent sanitarium for persons affected with pulmonary and rheumatic complaints.

The best raisins in the world, wines unsurpassed, the finest grapes, the best peaches, apricots, plums, prunes, nectarines, figs and olives, and in fact all the choicest fruits and vegetables of the world are grown in this favored region. Raisin vines three to six years old yield per acre from four to seven tons, and increase to eleven. Wine grapes three to six years old yield from four to eleven tons per acre. Alfalfa is cut from four to six times a year, and yields from one to two tons per acre at each cutting.

Two good cows and 100 hens furnish more than half the living for a family, and can be kept, with a team, on three acres of alfalfa, the growth of which is incredible in this favorable combination of soil and climate.

A comfortable house for a small family can be built for \$150.

The low price, taking into consideration water and transport facilities, should especially recommend this to seekers of homesteads.

Price, \$25 to \$37.50 per acre, on very easy terms to actual settlers.

For further particulars call on or address

O. J. WOODWARD, FRESNO, CAL.

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## WEST COAST LAND COMP'Y.

SAN LUIS OBISPO, CAL.

Incorporated March 27, 1886.

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R. E. JACK,  
C. H. PHILLIPS.

OFFICERS.  
JOHN L. HOWARD, President.  
ISAAC GOLDREIN, Vice Pres't.  
R. E. JACK, Treasurer.  
C. H. PHILLIPS,  
Secretary and Manager.

### THE PASO ROBLES, SANTA YSABEL, and EUREKA RANCHES,

Recently purchased by the West Coast Land Company, are now offered for sale in subdivisions. This immense body of land, including 12,000 acres unsold of the Huerfano ranch, belonging to C. H. Phillips, comprises 64,000 acres of rich, virgin soil. It lies in a compact body, in the center of San Luis Obispo county, and is within from 9 to 20 miles of the sea coast. It is covered with white and live oak timber, is one of the most picturesque bodies of land in the State, and requires

### NO IRRIGATION.

It has an abundance of living water, and where not sufficient for domestic use, good water can be had at a depth of from 10 to 40 feet. It has an average annual rainfall of 21 inches, exceeding by six inches that of Santa Clara county, one of the most prosperous counties in the State.

The extension of the Southern Pacific Railway from Soledad southward traverses these lands for 15 miles throughout their entire length, placing the property within eight hours of San Francisco.

These lands are offered at from \$10 to \$30 an acre, and are all susceptible of the highest cultivation. In salubrity of climate, productiveness of soil and location as to market, they are equal to lands in Los Angeles and other counties, which readily bring from \$100 to \$200 and upward; and as to price and terms offer the best inducements to those seeking homes on any part of the Pacific Coast.

The field work of the subdivision of the famous

### PASO ROBLES RANCH

Has been completed. The maps and catalogues are now being prepared, and will be sent free on application. This ranch, containing 20,400 acres, has been subdivided into 230 lots. It is 12 miles from the sea coast, and is 20 miles north and west from San Luis Obispo city.

This ranch was one of the earliest granted by the Mexican Government and having been held by the same party for 30 years, has never before been offered for sale. It consists exclusively of land of the choicest character, and is second to none in the State for the production of wheat, wine, fruits, raisins and olives.

### TERMS OF SALE.

One-third cash; balance in 4 equal payments at 2, 3, 4 and 5 years; interest, 6 per cent per annum. The mortgage tax paid by the mortgagee makes the interest about 4 per cent net to the purchaser. A deposit of \$25 will be required in all cases to cover expenses of sale.

C. H. PHILLIPS, Manager,  
West Coast Land Co., San Luis Obispo, Cal.

Send for Catalogue and Map.

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# PACIFIC RURAL PRESS

STOCKTON FAIR EDITION—TWENTY PAGES.

Vol. XXXII.—No. 12.]

SAN FRANCISCO, SATURDAY, SEPTEMBER 18, 1886.

{ \$3 a Year, in Advance  
SINGLE COPIES, 10 CTS.

## A Grand Galloway.

One of the features of the live-stock show at this year's State Fair is the advancement of the black. Any one would notice it on the parade. The reds, once supreme in men's minds, are becoming rare. The Galloways and the Aberdeen Angus with their black hides—solid black as though cut from the heart of midnight—are bringing their jetty color to support the black and white of the Holsteins, and as both breeds seem in the height of the fashion, one riding the beef and the other the dairy wave, there bids fair, in the near future at least, to be a growing prevalence of black at all our cattle-shows. No doubt the color argument will be revived as this startling innovation becomes more apparent, and we believe the black-cattle men are fortifying themselves with arguments to show that even in warm latitudes the black is desirable.

One of the most striking exhibits at the State Fair is the herd of Galloway cattle shown by George L. Goulding, as manager for Leonard Brothers, of Mt. Leonard, Mo. There are 31 head in the herd, and they are a most excellent showing of the breed. They are all either bred or imported by Leonard Brothers, and they are descended from strains of blood the most fashionable and most successful in the prize ring. As the cattle were brought here for sale, a sale catalogue was prepared giving the pedigrees and interesting notes of the ancestry in the famous prize contests of Scotland. As the interest in Galloways on this coast is fast increasing, we give a few notes on the breed for those who have not yet informed themselves. The Galloways as a breed are of great antiquity. Their home is the province of Galloway, which now comprises the two southwestern counties of Scotland, but in ancient time had a much larger territory. Cumberland, the most northwesterly county of England, had the same race of cattle. The origin of the breed is lost in antiquity. The good quality of the cattle in that part of the kingdom was put upon record, however, as early as 1573. Efforts to improve the breed by intelligent and systematic breeding was commenced very early, some think it was before any other British breeds started upon their courses of improvement. They began to be sought for and taken to other parts of Great Britain about a hundred years ago, and there is abundant testimony as to their popularity thus long ago.

The claims made for the Galloways by the Rev. John Gillespie, editor of the Galloway Herd Book and a generally recognized authority, may be briefly summarized as follows: They do not claim superiority as a dairy breed; as a source of high quality beef, juicy, and with fat and lean well marbled, they are praised by the most respected and trustworthy judges; the complete absence of horns is a mark of purity of breeding in the Galloways, and the absence of horns is of decided advantage in handling the cattle in cars and otherwise; the hardiness of the Galloway is universally admitted and they are fitted to thrive even when not well sheltered, thus giving them especial fitness for range stock and as "rustlers" in an open country. Another important point is the impressiveness or prepotency of the Galloway sire. He stamps his form and color irresistibly upon the offspring of the common dams with whom he may be associated. Excellent examples of this were some grades shown upon the fair grounds this

year in connection with the exhibit by the Marysville Association.

The Leonard Brothers, who have brought the large band of Galloways to California, is a firm composed of three brothers—Leverett, Abiel and W. H. They have long been stock-breeders, and are now breeding Shorthorns as well as the black cattle. They were led to the Galloways by their special fitness for range purposes. The father of the Leonard Brothers was Nathaniel Leonard, who began importing cattle from Great Britain as early as 1831. The present firm began operations in 1878, and have since then imported over 2000 head. Mr.



IMPORTED GALLOWAY BULL, BORDERER OF DRUMLANRIG (2628).

George L. Goulding, who comes to represent the firm in this State, is a thorough cattle-man, and has an address and bearing which will recommend him to California people.

We come last of all to the noble fellow who rears his head aloft upon this page. His portraiture is one of the best we have seen from the brush of Lou Burk. Borderer, of Drumlaurig (2628), was selected in Scotland by Leonard Brothers, for Bush & Morse, of the Windsor hotel, Denver, the order being for a bull which could beat anything in this country. The portrait would certainly indicate that he is endowed with some such quality. He is said to have cost his present owners \$2500. He was bred by the Duke of Buccleugh, Drumlaurig, Thornhill, who is one of the leading breeders of Galloways in their native country.

MONTANA WOOL.—Wm. Macnaughtan's Sons, wool merchants, 79 Spring street, New York, report 5518 bags of Montana wool shipped to New York this season from Fort Benton and Judith by the Missouri river. They promise a similar statement from Helena, and quote Montana wool, average clips, at 27@30 cents.

EVAPORATED VS. SUN-DRIED.—Mr. E. E. Morris is making Los Angeles county quite a long visit in the interest of Bigelow & Lafauci, of Chicago. He is attending particularly to dried fruit. The Anaheim Gazette says he deems the future for evaporated fruits of all kinds exceedingly promising, as the demand for them in the Eastern market is far in excess of the supply. He finds it impossible to fill his orders for evaporated peaches. California peaches are the favorite in the markets supplied from Chicago. The only other peaches that come to that market evaporated are from Tennessee, and this year the crop in that State

is a failure, and when California peaches are selling at nine cents a pound, the Tennessee article brings but five cents. By evaporated fruit is meant that dried by other processes than sun-drying, the latter bringing much less money. A sale of evaporated apricots was made by Mr. Morris in Chicago, last week, at 24½ cents per pound, and the same fruit would have brought but 16 cents if it had been sun-dried.

THE FORESTRY CONGRESS.—The American Forestry Congress met at Denver, Sept. 14th, in the Chamber of Commerce. The officers, most of whom are attending, are: Warren Highley, N. Y. City, Pres.; H. G. Joly, Quebec, 1st V. P.; J. Sterling Morton, Lincoln, Neb., 2d V. P.; J. S. Hicks, Roslyn, L. I., Treas.; N. H. Eggleston, Washington, D. C., Rec. Sec.; Bernhard E. Fernow, N. Y. City, Cor. Sec. Addresses of welcome were delivered by Gov. Eaton and the mayor of the city, and Pres. Highley responded. Committees on order of business, nominations and resolutions were appointed. Subsequent session will be devoted to the reading of papers.

## Another Hour in the Pavilion.

A brief visit to the Mechanics' Fair in San Francisco, last week, sufficed for little more than a study of Placer county's exhibit, and passing glances at some others which one needed more leisure to inspect.

Another stroll, since Sunday, brought us to the tables of the unirrigated Vaca valley fruit exhibit. The first, devoted to grapes, upheld about 50 plates of most superb clusters of well-known varieties, among which Fred. Buck's Emperors and M. R. Miller's Black Moroccos were eminently handsome. The Balkans, from the ranch of A. Montpelier, are a novelty. The berry is shaped somewhat like the Cornuchon, but less elongated, is colored like the Flame Tokay, and is firm-fleshed and deliciously sweet. Fine Tokays and Muscats are shown by the brothers Bassford from a three-year old vineyard of 50 acres, which has this season averaged over seven tons to the acre. Most of their grapes have been sold in Chicago, under the auspices of the Cal. Fruit Union. The branch of White Syrians, forming the centerpiece, carried four adjacent clusters, crowded into the semblance of one, which weighed 28 pounds.

A second table was freighted with a fine selection of peaches—nearly all Clings—apples, pears, plums, quinces and nectarines; and a third with exceedingly choice samples of both evaporated and sun dried fruit, and of fruit in glass put up at the orchard. This part of the exhibit is worthy of more extended notice, and should be examined by every visitor who can appreciate and admire the useful work of preparing fruit for keeping, done in a way thorough, tasteful and even artistic.

We understand that this display was got up on very short notice by some young men in J. & I. Blum's store for Admission Day, in Vacaville, and brought down to San Francisco by Messrs. Allen & Pratt, who have it in charge.

Two tables of citrus products, shown by J. S. Harvey, San Diego, include St. Michael, Konah, Mediterranean Sweet, Wilson, Malta Blood and Navel oranges, Eureka, Genoa and Sweet Rind lemons and limes.

The elegant raisins from the Fresno vineyard of T. C. White, who took the silver medal and diploma for the best display of California raisins last year, are finished and set forth in a style of attractive beauty, rivaling the finest imported.

The magnificent output of Sonoma county products under the auspices of the Pomona Grange demands a more elaborate treatment than we can undertake to-day; but we hope, in our next issue, to do it a measure of justice, and also speak of some other exhibits specially interesting to such good folks as enjoy the RURAL.

THE FRUIT UNION sent a train of 16 cars eastward on the 9th, and expect to dispatch another before the close of this week. They are also forwarding from four to six carloads daily by passenger train. Many shippers choose the latter mode of sending, though at double rates, because the fruit-trains lose from 24 to 36 hours between Sacramento and the Missouri river, and the time thus lost is often worth more than the \$300 difference in freight-charges.

The C. P. R. Co. is said to be building 200 improved fruit cars, which will be ready for the next crop. They are to be larger than those now used for this traffic.



## THE DAIRY.

## Marin County Dairies.

A correspondent of the *Bulletin* gives the following notes on some features of dairying in Marin county: Dairying is one of the leading industries of the county. The Assessor's returns for 1886 show 23,104 milch cows, calves 4256, stock cattle 4221, and 36 thoroughbred bulls in the county. Well-informed dairymen place the average number of pounds of butter from each cow a year at 175. Multiplying this by the number of milch cows, we have 4,112,500 pounds of butter for the yearly output of the dairy business. San Francisco is the great market for this product, and it is sold at the average of 25 cents per pound. The sum of \$1,028,125 is therefore the annual income from butter alone to the dairy people of Marin. This income is almost a clear profit, for on looking over the Assessor's list a little further I find the number of hogs put down at 6716, and in a year they double themselves. A number of dairymen boast that from sales of hogs and poultry they pay help, regular current expenses and taxes, and the principal feed of this stock consists of sour, skimmed milk.

On Point Reyes there are dairymen who claim that they can make 250 pounds of butter per cow per year. Certain it is, the grass in that immediate vicinity is very nutritious, although of a native wild growth. Beside Point Reyes country, in which Bolinas is included, the other great dairying sections are Nicasio, Tomales, Novato and San Antonio. Cheese-making has fallen into desuetude from all appearances, as I have not seen in all my rambles so much as one small cheese; yet I remember that J. McM. Shafter exhibited a mammoth cheese a few years ago at the Mechanics' Fair that ran away up into the tons. That industry was booming then; it now seems to be dead, butter-making being more profitable.

Alderneys and Jerseys, with their graded offspring, have taken the place of the wild-eyed Spanish stock, with their horns a yard long; and on the sentimental side of the question I think Marin owes Adolph Maillard a debt of gratitude for introducing them in 1870, as they are gentle and handsome, light and active, produce more butter and consume less grass than the common breeds, therefore more can be kept on a certain amount of pasture. The profits to the county cannot be estimated, but a little thought will never fail to bring it appreciation.

Almost half of Marin county, 350,000 acres, is owned by a dozen people, and dairying is carried on largely by tenant dairymen. One ranch, that of State Senator De Long, will give one an idea of the management of rented dairies in the county. I am told it is the custom to give long leases at so much a cow, the land thrown in; but Mr. De Long chooses to furnish all the necessities, as land, cows, buildings, churns, pans and packing-tubs, etc., while the tenant does all the work, the product being divided share and share alike, between landlord and tenant. The cost of selling, transportation, salt and wrapping cloth are borne by each one in equal ratio, so that at the end of a good year both have prospered, and if the income, by some unforeseen power, has been small, the landlord has not had his harvest and left his tenant a beggar. So, in the end, the De Long method is the most just of all the rental systems, as both parties share alike the losses as well as the profits.

## A Napa County Butter Dairy.

The *Napa Register* gives the following interesting account of one of the leading dairies of that county. We quote as follows:

The well-appointed dairy of J. W. Grigsby, situated four miles north of town, at the extreme end of the Big Ranch road, stands among the foremost in the county. With many other dairymen in the valley, Mr. Grigsby has paid much attention to every detail of the business and is ever making improvements in this or that department. It is because of these practical methods, ever kept in mind by our dairymen, that the dairy interests of Napa county have developed so rapidly during the last decade.

Mr. Grigsby's farm comprises 475 acres and is especially adapted to dairying. Here nutritious grasses grow rapidly and produce a large amount of pasture, owing to the character of the soil and the nearness of water to the surface of the ground. One hundred acres are seeded to alfalfa, which is used with other forage, as, fed by itself, it is too heavy and has other disadvantages. Alfalfa here grows rapidly and luxuriantly, and one of the finest sights you see, in going among our valley farms, is the large herd of cows leisurely grazing in these rich pastures or moodily chewing their cud in the shade of the many wide-spreading oaks that dot the fields.

Mr. Grigsby has sown 25 acres to rye grass, a variety that has succeeded well in many parts of this State and one that is highly recommended by many dairymen. It has many advantages, and, should it prove a success here, it will add much to the resources of the dairyman. To furnish a variety of fodder, several acres are planted to corn, a part of it drilled in, the balance sown broadcast. A portion of this is cut daily after the grasses commence dry-

ing up. Quite a large amount of sugar beets, or mangel wurtzels, are annually raised for the cows, so that our readers will observe that a generous variety of nutritious food is provided for the cattle. About 200 tons of hay were cut on the farm this season.

"In my opinion," said Mr. Grigsby, "the full-blooded Jersey, or the high grade, is the best cow for dairy purposes, though I am desirous of trying the Holsteins, and think of purchasing some of these cows at an early date."

Sixty cows, well cared for in every particular, are milked the year round. During the summer they are, at night, kept in the open corral, but are well sheltered during the rainy season. Their stables are on either side of a large barn, 32x80 feet in size, kept scrupulously clean. Stanchions are used for fastening the cows which can be very quickly unhinged. In the stables we saw one of the finest full-blooded Jersey bulls in the State—raised, we believe, by Mr. A. McFarland—and were told that two very fine Jersey bulls were with the herd at pasture.

A stone dairy, in size 18x26 feet, built last March, adjoins the smaller wooden dairy building used for several years. The floor is of cement or concrete, and the building during the hot summer weather is cool. Instead of racks extending along the inside walls of the building, upon which the milk, in pans, is set for the cream to raise, several revolving shelves are used, extending from the floor to the ceiling. They work like a charm, and are much more convenient than those ordinarily used in dairies. Standing in one place, the dairyman can skim 20 or 30 pans of milk, as by simply turning the shelves each pan is brought directly before him. A Stoddard, or barrel churn, of the largest size is used, revolved by horse power, the cream being churned every other day. During the flush season, or from April to July, about 60 pounds of butter are made daily, in the dryer portions of the year about 40 pounds. The dairy is completely shaded by locust and other trees, and the butter room—the old dairy building—is always cool. The butter we saw on the large, marble-topped table looked like so many rolls of solid gold. No butter coloring has ever been used on the place. Most of this butter is marketed in Napa and St. Helena. Three men are employed to care for the dairy in the busiest season, at other times two.

Mr. G. is one of the most modest of men, yet he is a very practical farmer, a keen observer, ever on the alert to seize hold of and utilize any improvement that will enable him to be more successful in his occupation. Success rarely fails to attend such men in any path in life.

## THE BOTANIST.

## The Ferns of Ceylon.

At the August meeting of the Santa Barbara Natural History Society, the following paper, prepared by Dr. Lorenzo G. Yates, was read:

The island of Ceylon, in the Indian ocean, is almost connected with India by rocks and shoals. It is 271 miles in length by 137 miles in width, and contains about 26,000 square miles. The coast on the south and west is uniformly low and fringed by coconut trees, the interior of the island being mountainous and surrounded by the low belt, of from 30 to 80 miles in width. The mountains are clothed with verdure from base to summit, and the beautiful valleys at their base were, until within a few years, covered with magnificent forests, which have mostly fallen before the ax of the coffee-planter.

The length of the days throughout the year does not vary more than one hour, owing to its proximity to the equator. In localities near the coast, and up to an altitude of 300 to 400 feet, the mean daily maximum temperature in the shade is from 82° to 87° F., with a range of from 16° to 34° F., while in some more elevated localities, for instance at Nuwara Eliya—altitude 6000 feet, the mean maximum temperature is 65°, the minimum 38°. Owing to its similarity of climate at that altitude to the climate of some portions of Southern California, it is probable that many plants of the two countries could be advantageously interchanged.

The climate seems to be peculiarly favorable to the growth of ferns, there being 235 species, representing 43 of the 75 accepted genera of ferns, found on the island of Ceylon; while North America, with its immense area, has only 213 species and varieties, representing 32 genera. Of the 235 species of Ceylon, 26 only are peculiar to that island; of the others, 3 species are found in North America (north of Mexico); of these eight, four are found in California, and of these four, two—*Adiantum capillus-veneris* and *Pteris aquilina*—are found in Santa Barbara county. Of the remaining species, much the larger proportion are found in India and the Malayan peninsula. This, taken with the fact of the close proximity to India, and the shallowness of the intervening sea, would indicate that Ceylon had not been long separated from the continent.

This indiscriminate destruction of the forests and the cultivation of the soil by the coffee-planters are causing the rapid extermination of many of the species. Many of the species dry up and rest during the prevalence of the monsoon winds. The writer's collection of Ceylon ferns, consisting of 180 species, was collected almost entirely by Dr. Thwaites, accom-

panied by manuscript notes by that eminent botanist, with comments on the rare species, and those nearly extinct. Other additions have been received from the Royal Gardens, at Kew, London. Some of the specimens are very old, yet finely preserved, and highly valued because collected by eminent travelers and botanists nearly 50 years ago. I am expecting shortly to receive such species as are lacking to complete the collection of Ceylon ferns.

As Dr. Yates was not able to be present, his fine collection was not exhibited at the meeting; but members of the society and others present were invited to call at his office and see them.

## PUBLIC AFFAIRS.

## Women's Rights and Influence.

EDITORS PRESS:—The declaration by the Revolutionary fathers, "that all men are created equal," etc., is as broadly liberal as justice could demand or truth indorse touching men's rights, but it said nothing about women's rights, and for nearly a century it was construed as referring only to white men's rights; but that "self-evident" truth was too evident for such limited application, and the stain of slavery left upon our nation by its founders was washed away in the blood of their children.

Another "self-evident" truth, as declared by the same authority, is that "governments derive their just powers from the consent of the governed;" yet for more than a century the men of this nation have governed its women without allowing so much as an expression of consent, dissent or participation by the ballot. Woman is allowed her full share of being governed, but of the governing part she is prudently relieved. For such political gallantry woman may be expected to be respectfully grateful and affectionately submissive. But is not that second "self-evident" truth herein practically ignored? We know it is said that women are exempt from military service and therefore should not vote. We also know that thousands of our men are legally exempt from military service, yet vote all the same. Is that "military service" argument a reality or a sham?

It is also said women are not qualified to vote intelligently. In view of the fact that our women average about the same educational advantages as men, and many of them have done public service as teachers under Government certificates of necessary intellectual and moral qualifications, does not this talk about unintelligent voting sound a little queer, and the more so when we remember that a foreign-born embodiment of ignorance and degradation, if of the male sex, can procure a government certificate of eligibility, get drunk on licensed whisky, be led to the polls and voted, while native-born refinement, intelligence and virtue, if set in feminine groundwork, has no representative rights that "white men" (black men, native or foreign born) "are bound to respect" at the ballot-box. Women, idiots, lunatics and felons must not vote. I have heard something about "the eternal fitness of things." Is this one of the fitnesses?

It is said that contact with politics would degrade women; that our elections are unfit places for women. The corruption of our politics and elections I admit is past dispute, and, in my opinion, there is a perfectly natural cause thereof. The most common observation shows that promiscuous gatherings of men, where women are excluded, uniformly relax the higher and bring out the lower elements of manhood. Female influence, the most potent of all human agencies in development of all that is pure and noble in man, is ruled out of our political representation, and, as a consequence, the balance of power therein, which woman should hold on the side of virtue and morality as opposed to masculine depravity, is thrown on the side of the latter. As we have sown, so have we also reaped. And now, after a century's practical denial of rights on which the Government professes to be founded; after a century's discrimination against worthy women, and in favor of unworthy men, is it any wonder that we cry out, O the corruption of politics! Like a man poisoning his own food, then, moaning with pain, wonders what ails him.

Is it a wonder that our elections are "unfit places for women"? When I hear men advocate withholding the ballot from woman for fear it would degrade her, I think their philosophy about as deep as that of the child who feared that if the lamp was taken into a dark room its light would all turn black. The moral atmosphere of our elections is unsuited to woman's presence, and will continue so while she is kept away from them, and no longer. When she attends them the fitness will accompany her presence; the uncongenial element will vanish as the darkness before the light. Instead of women falling into men's habits of drinking, smoking, swearing and betting, men would be put upon their better behavior, drunken voters and whisky bribery, with kindred evils, would disappear, and the preponderance of the ballot change from vice to virtue. A government that has cost so much as ours in life and treasure should not die of blood-poison through corruption of the ballot. In point of importance, next to a reverent regard for divine law, I would place good human government, and next to a sacred sanctuary a pure ballot casting.

Paskenta.

THOUGHTOGRAPH.

## SWINE YARD.

## The Swine Industry.

The latest publication on the hog is a neat pamphlet of 72 pages by Rufus Bacon Martin, published by O. Judd Co., of New York. We quote the introductory chapter as follows:

The term hog is stated by Carpenter to be derived from a Hebrew noun, while others are inclined to refer this name to the Arabic, signifying "to have narrow eyes," and there is much in favor of the probability of this latter supposition. Judging from some characteristics, swine seem to form an intermediate link between the whole-footed and cloven-footed animals, and from other peculiarities to occupy the same ground between the cloven-footed and the digitate animals; but look at them from whatever point of view we may, these animals present distinctive characteristics and are of vast importance as affording the economical means of sustenance to millions of human beings in all parts of the world. As far back as the records of history enable us to go, the hog appears to have been known and his flesh used as food. The various allusions to this kind of meat, which appear again and again in the writings of the old Greek authors, show the esteem in which it was held, and it appears that the Romans early made the art of breeding and fattening hogs a special study.

Swine were brought to this country by the earliest settlers. Many of them soon became wild and found habitation in the back woods and lonely solitudes, which then abounded in the now thickly populated East. As no care or attention was given them, they migrated and increased, until in later years the country had an abundant supply of what were called "native hogs." These have since improved, slowly at first, until now there are several distinct and unquestionably good breeds of swine. The larger number of hogs raised in this country are produced in the States of Ohio, Indiana, Illinois, Iowa, Kansas, Nebraska, Minnesota, Michigan and Wisconsin, and it is in these States that the greatest improvement in their breeding, feeding and fattening has occurred.

A statement of some of the statistics of this industry will probably be of interest to those who have never before had them brought to their notice. The number of hogs packed in the West in 1884 was 10,519,108, against 9,183,100 in 1883. The gross weight of all hogs packed in all parts of the country in 1884 was 3,691,513,000 pounds, an increase of 272,597,000 pounds over the previous year. It would be impracticable to ascertain the amount paid to the producer for all these hogs; but a fair average price would be four cents per pound, at which rate their total value would have been \$147,660,520. This sum represents the extent of the swine industry in dollars and cents. Of the packed produce, a large portion, nearly half, is exported, as will be seen from the following tables:

Hog products	1883.	1884.
Bacon.....	\$38,161,198	\$30,087,879
Hams.....	6,624,866	5,617,541
Pork.....	5,891,317	4,517,001
Lard.....	28,618,576	20,059,834
Totals.....	\$79,295,957	\$60,282,255

From these figures it will be seen that the exports for 1884 were about \$19,000,000 less than for the previous year, and the reason for this is largely that some European countries prohibited the import of American pork products.

The total number of live hogs in the hands of the producers in the 12 packing States, in January of 1884 and 1885 is shown in the following table

	1884.	1885.
Ohio.....	2,442,701	2,446,128
Indiana.....	2,642,652	2,801,211
Illinois.....	4,010,472	4,090,681
Iowa.....	4,800,998	4,200,998
Missouri.....	4,087,556	4,210,193
Kansas.....	2,103,725	2,208,911
Nebraska.....	1,780,383	1,079,200
Minnesota.....	411,325	431,902
Wisconsin.....	1,046,014	1,066,934
Michigan.....	840,766	849,174
Kentucky.....	1,594,919	2,052,665
Tennessee.....	2,127,966	2,021,568
Totals.....	27,895,477	28,230,595

The total number of hogs packed and marketed in the year 1884 in the above States was 10,500,000, or about 37 per cent of the entire product. The whole number of hogs in the United States in January for the last five years were as follows:

January, 1885.....	45,142,657
January, 1884.....	44,200,893
January, 1883.....	43,270,086
January, 1882.....	41,127,200
January, 1881.....	30,227,903

There are a large number of hogs marketed and consumed each year that are not included in the previous statement, for the reason that many of them never reach a market of record, being sold to local butchers, and many more are consumed at home. Taking 37 per cent as a fair percentage of the number sold during a year, we have about 17,000,000 as the whole number of hogs brought to a market during each year.

Having seen the extent of this industry in



figures, let us look at the improvements and facilities that have been developed during the past few years. Intelligent and energetic men have given much time and patient study to that part of the business pertaining to the raising and fattening of swine, and as the result of their labors we have to-day not only improved breeds of swine, but we have also been educated to a more thorough and scientific management in their production. Better systems of feeding and fattening have been suggested, which tend to an economy of labor as well as in the quantity of the food consumed, and these consequently lessen the cost of production, which is, in the case of swine, one of the price-making facts.

Transportation has been facilitated, improved stock-cars have been built, local packing-houses have been established and in many other ways have the marketing facilities been improved. Agricultural colleges have devoted much attention to this industry and have conducted experiments in breeding and feeding, the results of which have been of great value to the more intelligent and progressive class of farmers. The United States Department of Agriculture has also had a hand in the advancement of this industry, more particularly in respect to swine diseases. It has conducted exhaustive and expensive investigations into the diseases of swine, notably hog cholera, the results of which have been most gratifying and beneficial. Several individual veterinarians have also devoted themselves to similar investigations, with equally good results. What is now wanted is more attention and care on the part of the farmers and raisers to keep up with the advancement of the scientific men.

### Curing the Sick Pigs.

W. F. Cutler writes the *Bee* in regard to the cause and cure of the malady which has been so fatal to swine in the neighborhood of Sacramento. He says that this disease (which is *diabetes cholericus*) is produced by feeding too much raw vegetables, and is very easy to stop. First, cook your hogs' food, add one-third of boiled potatoes, with a little short bran if possible, and the following mixture:

Bi-carbonate of iron.....2 drachms  
Sulphate of magnesia.....2 drachms

This dose is for each pig about five or six months old. They would get fat so quick, and the flesh and lard be so firm and healthy, that it pays for the little work that it requires. This disease is very easy to observe. First, the pig doesn't eat so voraciously as before; second, the disease being very injurious to the kidneys and bowels, the pig doesn't walk straight, but drags its hind quarters, discharges urine very often and also fecal matter.

## THE IRRIGATOR.

### The Sierra Madre Tunnel.

To any one not familiar with the mode of developing mountain water in Southern California it is an interesting trip up the Little Santa Anita canyon, which winds a long way up, and nearly to the summit of, the Sierra Madre mountains. This canyon contains several prominent springs of water gushing forth from among the rocks, which have heretofore supplied the wants of the new but ever-increasing and prosperous settlement of Sierra Madre. E. J. Baldwin, the original owner of the tract, and the Sierra Madre Water Company, having in view the increased needs of the settlement and others adjacent, have caused a tunnel to be drilled in the canyon to concentrate the water from the springs mentioned above, and then conduct it economically through a 12-inch pipe, down to where smaller connecting pipes are laid to distribute it to the shareholders. The writer hereof is no land and water sharp, but, with an eye for the picturesque and grand, visited, on the first instant, the "source from which the waters flow." The cry has been industriously sounded by some that damaging scarcity of the irrigating fluid was imminent, but present indications point to an everlasting sufficiency for all practical purposes for generations to come, with proper means put forth to draw it from the almost innumerable fountains in the mountains. The representative of the *Times* rode by carriage, with a "pilot," nearly to the entrance of the before-mentioned tunnel, and there donned rubber coats for the occasion. The darkness in the tunnel demanded a "glim," and, at the entrance, a candle was lighted and we plodded along with careful steps through the "hole" in the granite-bound mountains, until arriving at the farther end. As we passed through the darkness, there was picturesque scenery before us. The clear, sparkling water, reflected by the lights of the workmen, gushing forth through the uneven granite walls on either side as through immense sieves, and giving a shower-bath to the rubber-mantled workmen, produced a grand effect. At the time of the visit the tunnel was in 181 feet. Mr. Smith, of Richardson & Smith, of Sierra Madre, gave kindly information pertaining to the tunnel, which said firm have contracted to push 300 feet. The tunnel itself indicates a thorough knowledge of the art of penetrating the huge mass of mountainous solidity. It is incased with woodwork three feet in width and six feet in height, as fast as drilled and in readiness.

The rock is blasted by giant powder, touched off by an electric battery, to which is attached a cord that extends the whole length of the tunnel. The fragments of rock, after blasting, are placed in a hand-car, which runs on a track over the pipe laid at the bottom of the tunnel, conducted outside and conveniently "dumped." There is a large flow of water from the tunnel, increasing all the time, and the vacuum has already enticed into it several open springs, as shown by their decrease of bubbling flow, and in some cases an entire drought to outward appearances. The indications are that the tunnel is producing the desired effect of concentrating the surrounding beds or springs of water into it for profitable diffusion.—*J. F. Cook in L. A. Times.*

## THE VINEYARD.

### Grapes in San Joaquin.

The Stockton *Independent* of last week has an interesting article on grape-growing in San Joaquin county, from which we take the following: There are in this county upward of 2000 acres of grape-vines, but the larger proportion of vines are of young growth. In 1884 there were in this county 300 acres of vines one year old, 270 acres of two-year-olds, 75 acres of three-year-olds and 523 acres of vines four years old and upward. Last year there were 400 or 500 acres added to the grape-vine acreage. This year one Italian vineyardist has set out 5000 cuttings of the Black Prince and California varieties. In 1884, when the last statistics were taken by the county assessor, there were 38,500 gallons of wine made in this county, and 552,320 pounds of table grapes were sold from San Joaquin vineyards. The yearly increase since 1884 has been large, but the figures for a careful estimate are not at hand.

The grape crop in San Joaquin county this year is very large and of the best quality. Buyers from abroad have visited the vineyards in this county and have offered top prices for entire crops. A Sacramento dealer recently went over the county buying Black Prince, Emperor, and Flaming Tokay grapes for shipment East, at prices ranging from \$40 to \$60 per ton. The Black Prince grapes grown in this county are plump and luscious, and the color is perfect. This variety grown in this county is the favorite in the markets, and brings from 10 to 15 cents more per box than grapes of the same kind grown in any other county of the State. The Flaming Tokay grown here also command top prices, and are the best in the market.

The Mission or California grape this year brings from \$10 to \$12 per ton, and the average yield is from five to six tons per acre. The Zinfandel variety bears well here, averaging from 8 to 12 tons per acre, and the price paid for such grapes is \$20 per ton. The market price for other varieties which are lighter bearers, averages about \$40 per ton.

John Gambetta, of this city, has purchased for the San Francisco market this year the crop of 56 acres of common grapes, paying for the same \$4100. He buys grapes in lots and picks and hauls them away. He recently offered Philip Fitzgerald, who lives near Waterloo, \$1500 for the crop of 15 acres of Zinfandel and California grapes on the vines, but the owner refused to sell at that figure. Mr. Gambetta paid Mrs. Girard, of Woodbridge, \$400 for a crop of grapes from less than four acres of land. It will be seen by these prices quoted that grape culture will pay handsomely.

### Grape Prices and Labor.

The Santa Clara County Viticultural Society met September 4th, in San Jose, J. B. J. Portal in the chair. We quote the *Mercury's* report:

The Chair announced that the subject for discussion was the price of grapes, wine, and material for wine-making.

Mr. Kerwin saw no reason why grapes should not bring a fair price in this county this season. In San Francisco they were paying from \$22.50 to \$27.50 per ton.

Mr. Portal considered the prospects for good prices better now than three weeks ago. The crop in the northern part of the State had been greatly diminished by blights and other causes. He intends to double his wine-making capacity and to pay ruling prices for grapes. Contract had been made for from \$17.50 to \$22. Some varieties had been contracted for at \$30, and it been stated that Mr. Estee was paying \$50 for the true Cabernet.

Mr. Pfeffer thought the prospective prices was a poor subject for discussion among the grape-growers and wine-makers.

Mr. Combe thought they should all be interested in the matter. The trouble was they did not have confidence enough in each other. If they worked more in concert it would be for their interest. He intended to buy no grapes and very likely would sell none. He had it from good authority that \$22.50 had been offered for grapes in this county, and he thought there was no reason why the price should not reach \$25.

R. C. Stiller did not see how any standard of prices could be fixed by the society. The growers were at the mercy of the San Francisco merchants and would have to accept the prices offered by them.

Mr. Daggett stated that he had been told by D. C. Feeley that grapes in this county ought to bring \$25 per ton. In Napa they were paying as high as \$30 for Zinfandels and similar varieties.

The labor question was next discussed. Mr. Portal asked if any of the members had arranged to get white labor.

Mr. Daggett stated that he had partially made provision for all the labor he would work. So far he saw no indications that there would be a scarcity of white labor. He paid \$1 a day and found.

Mr. Portal stated that he had made arrangements for nearly all the labor he would need. He would pay \$1.75 per day, the hands to board themselves. He thought that plenty of white labor could be had to pick all the grapes, and the result would be more satisfactory to the growers. He expected to be able to secure good men at these rates, and if it proved otherwise he would be obliged to employ Chinamen. For the purpose of picking he would probably get white women and girls, as he believed in encouraging the women when they showed an inclination to work. For this work he would pay \$1 per ton.

### Santa Cruz Mountain Grapes.

EDITORS PRESS:—Mrs. MacKenzie, of Ardanna vineyard, Santa Cruz mountains, began her first picking, or vintage, of her grapes on Sept. 4th, with a showing of 21 degrees at a temperature of 60 Fahr., on Balling's saccharometer. This is the earliest case of proceeding to vintage in the county, or even the State, we have yet heard of. There must be something peculiar in her Ardanna vineyard, for the vintage began there last year on the 20th of August, with a showing of 22 degrees by Balling's saccharometer. The wine has developed a bouquet like that of a nosegay of opening vine-flowers, and is otherwise of much promise.

The grapes picked on the 4th inst., as also those that were picked on the 20th of August, last year, are of the Meunier variety, which forms the principal vine of the valley of the Loire, from Orleans to Blois, and thence toward Angoulême and Poitiers and the district of the Charente. J. A. S. Santa Cruz.

GRAPE SALE.—According to local papers, R. R. Givens, in Alexander valley, has sold to Conner's winery, at Calistoga, his entire crop of the Reising, Chasselas, Grenache, Burgundy, Carignan and Fehr Zagos varieties, for \$25 per ton, to be delivered at Calistoga. Mr. Givens says he can have the grapes hauled to Calistoga at a cost of \$3 per ton, which will leave him the very good price of \$22 per ton. His vineyard will produce about 25 tons of the varieties named.

GRAPE STATISTICS.—Chas. Thorn, general freight agent of the S. F. & N. P. Railroad, has sent a circular to all grape-growers in Sonoma county, for the purpose of ascertaining the number of vines, variety, age and probable production of wine for 1886 and 1887, on all lands in Sonoma, Marin, Lake and Mendocino counties, the owners of which use the S. F. & N. P. and Sonoma Valley Railroads for transportation of wine coming to San Francisco or over these roads to an Eastern market.

## THE FIELD.

### Economic Ornithology.

The good and bad deeds of the birds are of importance in agriculture in California as elsewhere. We have previously mentioned the effort which was inaugurated some time ago by the U. S. Department of Agriculture to ascertain definitely concerning the characteristics of the different birds. The following circular, which we have just received, will explain fully the aim of the Division of Economic Ornithology and Mammalogy of the Department, and will, we trust, secure the co-operation of Californians in the important work:

#### Circular on the Food Habits of Birds.

It is well known that certain birds are directly destructive to farm crops, causing a loss of many thousands of dollars each year, and that others are highly beneficial, preying upon mice and insects which are injurious to vegetation; but the extent and significance of these effects, and their bearing on practical agriculture, is little understood. Moreover, great difference of opinion exists, particularly among farmers, as to whether certain well-known species are, on the whole, beneficial or injurious, and many kinds which are really of great practical value are killed whenever opportunity offers. For example, hawks and owls are almost universally regarded as detrimental, while as a matter of fact most of them never touch poultry, but feed largely, and some almost exclusively, on mice and grasshoppers.

The wholesale slaughter of small birds has been known to be followed by serious increase of noxious insects, and invasions of insects which threaten to devastate large tracts of country have been cut nearly short by the timely services of some of our native birds.

In view of the above facts, and many others which might be cited, it is clear that a comprehensive, systematic investigation of the interrelation of birds and agriculture will prove of

enormous value to farmers and horticulturists. Such an investigation has been undertaken by the newly-established Division of Economic Ornithology of the Department of Agriculture, and the assistance and co-operation of persons interested are earnestly solicited.

The food of all birds consists either of animal matter or vegetable matter, or both, and its consumption must be serviceable or prejudicial to the interests of mankind. Therefore, according to the food they eat, all birds may be classed under one of two headings—beneficial or injurious. Many species are both beneficial and injurious, and it is impossible to assign them to either category until the percentages of their food elements have been positively determined and the sum of the good balanced against the sum of the evil.

In a very large proportion of our small birds the food varies considerably with the season, sometimes changing from vegetable to animal, or from injurious to beneficial. Furthermore, many birds feed their young upon substances which the adults rarely or never eat, and the young, on leaving the nest, sometimes greedily devour things which are discarded as they grow older. Hence it becomes necessary to ascertain the food of each species at different times of the year and at different ages.

Information is desired on all questions relating to this inquiry, and special attention is invited to the following:

1. Has the common crow been observed to catch young chickens or to steal eggs?
2. Has it been observed to eat corn or other cereals in the field? If so, how long after planting, and how extensive was the injury done?
3. Has the crow been observed to feed upon injurious insects? If so, what kinds of insects were thus destroyed, and to what extent?
4. Has the crow blackbird or grackle been observed to carry off the young of the robin or of other small birds, or to destroy their eggs?
5. When breeding near the house, has it been observed to drive off small birds (such as robins, bluebirds, etc.) which had previously made their abode on the premises?
6. Has it been observed to eat corn or other cereals in the field? If so, how long after planting, and how extensive was the injury done?
7. Has the crow blackbird been observed to feed upon injurious insects? If so, what kinds of insects were thus destroyed, and to what extent?
8. What birds have been observed to feed upon or otherwise injure buds or foliage, and what plants or trees have been so injured?
9. What birds have been observed to feed extensively upon fruit? What kind or kinds of fruit have been most injured by each species, and how extensive have been the losses thus occasioned?
10. The bobolink (ricebird or Maybird of the Southern States) congregates in vast flocks during its migrations and commits extensive depredations in certain parts of the South. The Division will be glad to receive detailed accounts of these depredations from persons living in the affected districts, to whom a special circular will be sent on application.
11. What birds are considered to be injurious to grain crops, and what kinds are regarded as beneficial? On what facts are these opinions based?
12. What birds have been observed to feed upon injurious insects, and upon what kind or kinds does each bird feed?
13. Do blackbirds (other than the crow blackbird already mentioned) commit serious depredations in your vicinity? If so, which of the several species of blackbirds are concerned, and what crops are affected?
14. Has any kind of bird been observed to feed upon the honey bee? If so, what species, and how extensive has been the injury done?

When possible, the exact date should be given of all occurrences reported. Persons willing to aid in the collection of birds' stomachs will be furnished with the necessary blanks and instructions. Special circulars on the English sparrow, and on the economic relations of mammals, will be furnished on application.

DR. C. HART MERRIAM,  
Washington, D. C. Ornithologist.

### The First Combined Harvester.

EDITORS PRESS:—Seeing in a late copy of the *RURAL*, among the notes by Mrs. W. D. Ashley, of Stockton, that the credit of inventing the combined harvester is given to Oregon, which is a mistake, I thought, perhaps, you would like to know where the first harvester ever made did come from.

The first harvester was built in Schoolcraft, Kalamazoo county, Michigan, in 1840, by Hiram Moore and my father, Geo. W. Leland. Their attention was first called to it by Mr. Moore's wife, who dreamed of seeing such a machine at work in the harvest field. Her dream was so vivid and she was able to describe it so clearly that her husband, who was a draughtsman, was able to draw an almost complete plan of the machine. He was a capitalist; and my father being a mechanic, they went into partnership and built one, with very few changes from the original plan, which proved a good machine but a financial failure, on account of the shortness of the season and uncertainty of the weather.

They obtained a patent on the machine for seven years, and then had the patent renewed for seven more years. In 1854 my father bought Mr. Moore's interest and shipped the machine to California, and harvested grain in Alameda county for a number of years with good success. W. W. LELAND.

Walnut Creek, Sept. 4, 1886.

[Was this the machine which was used on John M. Horner's ranch, in Washington township, Alameda county? If so, we think Mr. Horner gave us a letter on the subject a few years ago.—EDS. PRESS.]



## PATRONS OF HUSBANDRY.

Correspondence on Grange principles and work and reports of transactions of subordinate Granges are respectfully solicited for this department.

## The Irrigation Question.

EDITORS PRESS:—In the issue of your paper for August 21st, under the above heading appears a communication from the hand of James Boyd, dated Riverside, August 12, 1886, in which I am taken to task for an extract published in the RURAL of August 7th, and taken from the Patron, of a previous date. Unfortunately the RURAL did not publish my premises and chief argument as they appeared in the Patron. Had it done so, Mr. Boyd might have received some light on the subject treated, and saved himself the worry over a communication so ill-advised as the one to which reference has been made. For the modicum of argument therein contained I should not have considered an answer necessary; but his slurring allusions to my ignorance of the Constitution and of the subject treated are sufficient incentives to reply.

He starts out with the assertion—"In your issue of August 7th is an article on the Water Question from the Patron, by Brother Webster, which, being written under a total misapprehension of facts, I propose to set him right from our standpoint here in Southern California."

This is equivalent to saying that everything and everybody is wrong who does not view the subject "from our standpoint here in Southern California." After quoting from my article—"It is rather late in the history of the world to make many converts by misrepresentation; and he who endeavors to foist a fraud on his neighbor is usually the first to bite the dust," Mr. Boyd continues: "Such is the quotation, and it is applicable to Mr. Webster in an eminent degree—not that we accuse him of willful misrepresentation, but he has taken his facts (?) from papers interested on the side of the monopolists."

In answer I have to say that this quotation is not "applicable to Mr. Webster in an eminent degree," for the reason that he has never attempted to "foist a fraud upon his neighbor," and moreover, situated as we are here, absolutely independent of all artificial irrigation, it is impossible to affect his private interests by any turn the case may take. So far as taking my "facts from papers interested on the side of the monopolists," I will say, for the information of Mr. Boyd, that my facts on which the article was based, as published in the Patron from which the RURAL, in part, published my conclusions, were taken directly from the decision of the Supreme Court in the case of *Lux et al. vs. Haggin et al.*, and contained the complete syllabi of said decision, which decision Mr. Boyd manifestly never has read. In the matter of papers being "interested on the side of the monopolists," the less Mr. Boyd says on that subject the better it will be for the cause he is endeavoring to advocate. For, if there is any one thing relating to this subject, well settled in the minds of most people, it is the indisputable fact that Haggin & Carr and their ilk, on the side of the appropriators, have wasted more money in manufacturing conventions and buying up newspapers with the view of controlling and directing public opinion than has been expended from all other sources combined.

Moreover, if the application, as quoted, does not rest heavily and directly on the heads of the appropriators and their proposed legislation, I certainly fail to understand the situation. Haggin and Carr, having held their convention in San Francisco, that their program of appropriation might have a seeming indorsement; having spent thousands of dollars in the publication of the proceedings of said convention and for anti-riparian literature; having traveled, individually or through paid agents, all over the State, circulating petitions for signatures, and pledging 90 members of the Legislature to vote solidly for their appropriation measures; having induced Stoneman to convene the Legislature in extra session, in order that their dirty work might be consummated—have, at the last moment, signally failed of their nefarious purpose, simply because public indignation reached such a point that the pledged statesmen went back on their promises to Haggin & Co., in order, if possible, to save what little reputation they had left, and, by order of the Governor, are now out on short pasture until the 7th of this month, when they will be again corraled with the hope of getting the appropriators' bit in their mouths. But it is no use; the cat is out of the meal-tub and has scattered hair and consternation all along the road to the capitol.

Again we quote from Mr. Boyd's communication: "Mr. Webster says: 'There is no alternative left the producer in the irrigated districts but to pay the price demanded for water or to perish.' Now, Mr. Webster, the shoe is just on the other foot; for if this doctrine of riparian rights is to prevail, we will have no alternative but to pay the price demanded by the riparian proprietors for water or to perish."

In this quotation Mr. Boyd has cut a single clause out of a full sentence, in order to make its meaning suit his purpose. As printed in the RURAL, the sentence which he has garbled reads: "A railroad may be so exorbitant in its charges for transportation as to bar its use

by the producer; nevertheless, he has his old facilities of hauling or driving his products to market; but with the waters of the State under the control of corporations, there is no alternative left the producer in the irrigated districts but to pay the price demanded for water or to perish." It will be observed that Mr. Boyd simply quotes the last clause of the sentence, whereby its meaning is perverted. But this is a fair sample of the literature and perverted argument employed by the appropriators.

"If Mr. Webster had studied the Constitution of the State he would have found that it was mandatory on the part of Boards of Supervisors of the several counties to annually fix the rates to be paid for water for the ensuing year, so that we are not by any means at the mercy of any corporation." In answer to this profound disquisition on constitutional law, I will say that if Mr. Boyd had studied the Constitution of the State with the commonest intelligence he would have discovered that it contained no such provision as indicated in his statement. He has evidently been looking at Section 1, Article 14, of our Constitution, which, so far as applicable to the subject in hand, reads: "The use of all water now appropriated, or that may hereafter be appropriated, for sale, rental or distribution, is hereby declared to be a public use, and subject to the regulation and control of the State, in the manner to be prescribed by law; provided that the rate of compensation to be collected by any person, company or corporation in this State for the use of water supplied to any city and county, or city or town, or the inhabitants thereof, shall be fixed annually by the Board of Supervisors, or city and county, or city and town council, or other governing body of such city and county, or city or town, by ordinance or otherwise, in the manner that other ordinances or legislative acts or resolutions are passed by such body, and shall continue in force for one year, and no longer." It will be noticed that where the words "city and county" occur in the above extract they are in conjunction, and refer directly and only to the city and county of San Francisco, which is the only "city and county" in the State combined under one corporation. The term "Board of Supervisors" is used because the governing power in said city is vested in a Board of Supervisors. That portion of the section preceding the proviso vests the control and regulation of "all water now appropriated or that may hereafter be appropriated in the State, in the manner to be prescribed by law." This is exactly the position taken by the Supreme Court in its recent decision, which has been harped on so much by men who never read it.

So far as my being ignorant of the "true status of land ownership here in Southern California," and "the average resident of the upper portion of the State being as ignorant of the true state of affairs in Southern California as the average Eastern man is ignorant of the Chinese question on the Pacific Coast," and being "just as unwilling to learn," is concerned, I will say that the charge may possibly be true, but it appears to me that some one who has sufficient intelligence to comprehend a plain proposition of constitutional law should make the charge.

If the little colony of Redlands has profited by the experience of the Riverside colony—the most important one in Southern California—where the water is controlled by a corporation and the rates for its use are fixed by the "powers that be," we congratulate Redlands, and if it has not robbed somebody else in the appropriation of its water, neither the Supreme Court nor the State authorities will ever interfere to mar the happiness of the inhabitants thereof.

## Land Monopoly.

Section 2, Article 17, of the Constitution (to which Mr. Boyd calls my attention, and which he misquotes), is as it should be, and I did all I could in the convention to place it in the Constitution in its present form. The reason why its spirit is not more generally enforced is that assessors disregard the law, in failing to make an equitable assessment on lands held in large tracts.

Continuing, Mr. Boyd declares: "In Southern California we went to work to carry out these principles, and bought out large ranches and dug ditches, and sold the land and water with it in 5, 10, 15 and 20-acre lots." Further on he says: "We set to work and appropriated water and built ditches, and ran it on to land which had no actual value."

After giving us a glimpse of the growing glory of Southern California, in which he states that the assessed value of property in the colony of Riverside aggregates \$1,286,168, and that "it is safe to say that the property could not be bought for three times that amount" (to which statement I beg leave to call the attention of the State Board of Equalization, whose duty it is to see that all property is assessed at its full cash value), Mr. Boyd indignantly exclaims: "Now, the riparian owners propose, if they can, to carry this exploded English doctrine of riparian rights into our midst; and what does it mean? Simply, that we shall pay them for something which they had not the slightest hand in making valuable. \* \* \* Because Haggin and Carr are on our side, should we be deprived of our rights? \* \* \* If Haggin and Carr appropriate water and build ditches, they will be obliged to sell their lands in small tracts, for land will then be too valuable to farm in large tracts."

Now let us examine these statements. If

reduced to a fair and consecutive declaration, with sufficient wording thrown in to fill out the manifest discrepancies, the language of Mr. Boyd, above quoted, will read about as follows: "In Southern California, we, with an eye on the main chance, went to work to carry out this principle of dividing up large tracts of land and selling the subdivisions, with water, at a large profit over cost. With this end in view we bought out large ranches, dug ditches, and ran the water on to land which had no actual value; but when we got the water on it (which we had taken out of the channels of the rivers flowing through the county, along the margins of which there were many riparian owners whose rights we contemptuously disregarded), the land became of so much value that we readily sold it in 5, 10, 15 and 20-acre tracts, at immense profits—just as Haggin and Carr will do if they are not molested in the appropriation of sufficient water to irrigate their 600,000 acres of desert land; for I am sure that they are as much opposed to land monopoly as we were when in possession of large tracts. In fact, they will be obliged to sell their lands in small tracts, for land will then be too valuable to farm in large tracts."

"Now, when everything is running along lovely, when we have appropriated all the available water in the county, and applied it to our own use or to the use of our neighbors at a profit, here come these riparian owners whom we robbed of their water years ago, claiming under this exploded English doctrine of riparian rights that we shall pay them for something which they had not the slightest hand in making valuable. It is true that the Supreme Court, in the *Lux vs. Haggin* case, presents a line of decisions in favor of riparian owners, running back a hundred years without a break, 51 of the 183 cases cited being California cases, and directly relating to the rights of water in this State. Nevertheless, we at Riverside call the doctrine exploded—the Supreme Court and the balance of the world to the contrary notwithstanding."

"The people of Southern California are sound on the doctrine of appropriation, and no judge can get any support who will not support the state of things as they exist here at the present time. If our judges are antiquated and fail to catch the spirit of the age in Southern California, they ought not to stand in the way of our progress. What are our laws for, anyhow? If they are helps, viewed from our standpoint here in Southern California, all is well; but if they run counter to our interest, we will appeal to the higher law. We know that Herr Most made the same declaration in Chicago something like a year since, and that because several of his associates attempted to carry out his conceptions of the 'higher law,' by throwing dynamite bombs among innocent people, they are under sentence of death at the present time. Nevertheless, we won't submit to the decision of any court that recognizes a riparian right to the waters that we have already appropriated to our own use, and for the benefit of the community in which we live."

Creston, Sept. 3, 1886. J. V. WEBSTER.

## Shall we Go to the State Grange?

Of course we will, and must. Health and rest pilgrimages should be regarded as a law of nature—which we fear is almost universally evaded—but when such calls are backed by a sense of duty to an accepted and honored brotherhood, then surely going on a trip is, or should be, deemed quite as necessary as the incoming doctor's bill, and oh, how much more pleasant to cancel. Then, for health and recreation's sake on the one hand, and duty's call on the other, the Patron's going is a foregone conclusion; therefore, in the early days of October we expect to greet you all in the city of Marysville.

Patrons, like the busy bee, you labored while the sun shone, and, unlike that buzzing monitor, rainy and dark days found you still at your post. During the winter, between her clouds and sunshine, many acres of newly upturned soil gave proof of your faith in the harvest-time, and when the heat of summer came you verified the writ, that by the sweat of the brow shall thy bread be won; and now, as the waning ruddiness of summer merges itself in the golden, fruitful mellowness of autumn, surely the sabbath time of the farmer should be in time and keeping with nature's rest, and State Grange services afford a fit and appropriate medium by which his adoration for Creator and zeal for profession may be made manifest. In such utterances is labor's weal not only for today, but living practical truths and principles are compiled into such form as to become no little towers of strength in the great Grange superstructure that is being built for generations to come.

During the past year subordinate work has been successful in accordance with the manner in which we as combined co-workers have planned and labored; and in our pilgrimage to the State Grange is stamped the seal of loyalty to that higher Mother power, which is the Creator and preserver of the scattering Granges that dot our young State. In these several home Grange thoughts, words and acts have been so freely given, it is oftentimes a mystery these motors do not become poverty-stricken. That such is not the fact exemplifies that hom-

ily, "In use there is growth." And the more extended use the greater power and depth is given. Thus the rough diamonds of labor and hopeful thought will be found to have been most wonderfully polished by that pumice stone of thought contact; many truths seen in the solitariness of home, "as through a glass darkly," by the airings of friendly criticism are made to shine in very different tints and give entirely new colorings. Thus by friendly controversy are we imperceptibly made to see ourselves as others see us, and, presto, is taken the first step in wisdom.

California tips the western end of our continent and sends across mountains, rivers and plains iron horses freighted with Aladdin-like stories, tinged with colors of Oriental extravagance. The past year's wonderful G. A. R.'s incoming to thousands of Eastern homes gave these almost fable-like tales a reality and semblance of truth not heretofore realized. The fruits of such a realization are hard to conceive or measure. Westward ho! has already received a new impetus, and these western waves of emigration will bring to California new sons and daughters who look to the native-born for elements not unlike those around the eastern Puritan—like home behind them. These Grange principles for which you are called to fight, be they enacted in secret or social conclave, are no mean nor feeble liftings of the whole State into such expected higher grade, both mentally and socially. Even though this leverage of power comes not from those clad in purple, must it be any the less tenacious of truth, or will its acknowledged weight in this upheaval of farm, social and political life be any less to the coming man and woman?

Marysville sends forth her invitation to all Patrons. Brothers and sisters of that region will give a royal welcome, in keeping with the known hospitality of the Pacific Coast, and it becomes not only the duty, but should be the pleasure, of every Granger to test the welcome of this alikeness-ridden brotherhood.

Co-operation is one of our best watchwords. Co-operation of presence and thought in these, our yearly meetings, is but the forerunner of another prosperous year for the Grange. Therefore, Patrons, think well and seriously before you say "I cannot go." These State Grange meetings are milestones, marking the pathway trodden by the pioneers of our Order, and each absentee loses not only a pleasure but a prestige in the unfolding of the labors credited those present.

May the year 1886 mark the presence of all the old familiar faces, as well as the advent of many new ones, is the prayer of

MRS. MARIA B. LANDER.

Martinez, Sept. 12, 1886.

FARES TO MARYVILLE AND ACCOMMODATIONS THERE.—By order of the Committee of Arrangements, Bro. George Ohleyer informs the Patron that ample hotel and lodging accommodations for the coming State Grange will be furnished in Marysville at from \$1 to \$1.25 per day, board and lodging. They hope in a few days to be able to give names of places and capacity, and other information in season for their expected visitors. The usual excursion rates from points on the line of the Southern Pacific Company to Marysville will be given, delegates and members to pay full fare to Marysville and one-third the regular fare for return.

IN ELECTING ALTERNATES, Granges should refer to the provisions in the latest edition of Constitution and by-laws governing the membership of State Granges. See if there is any law for electing more than one alternate, and that in place of the Master. If the alternate elected is married and his wife is a Matron, she will be an alternate. Those Granges that have elected two alternates other than man and wife should look into the matter and govern their final action according to the Constitution.

W. L. OVERHEISER, overseer of the State Grange, long a prominent Patron of Husbandry, has received the Republican nomination for the State Assembly from San Joaquin county.

TEMESCAL GRANGE meets at 2 P. M., Saturday, Sept. 18th. Besides work in the first and second degrees, matters of interest are to be discussed.

## The Heath Amendment.

The proposed amendment to the Constitution of California, relating to the assessment and taxation of property, and generally known as the "Heath Amendment," will come before the people for adoption or defeat on Tuesday, Nov. 2d. The Governor's proclamation, fixing the date of the election and containing the full text of the Amendment to be voted on, was published in the RURAL PRESS of Aug. 14th. We invite the farmers of the State to give, through our columns, a free expression of their views upon the questions involved in the measure.

THE EXTRA SESSION OVER.—The Legislature reassembled on the 7th, and held various discussions thereafter daily, Wednesday excepted, until the 11th, when both houses succeeded in adjourning sine die. The valuable results of their deliberations are yet to be seen—that is to say, they are not yet visible; but it is to be hoped that the general agitation of the water question is preparing the people's mind for more intelligent action and equitable arrangements in the future.



## AGRICULTURAL NOTES.

## CALIFORNIA.

## Humboldt.

**GOOD AUTUMN FEED.**—Salmon Brown, of Bridgeville, Humboldt county, informs the *Eureka Advocate* that, although feed has in a measure become dry, it is yet excellent, and that cattle and sheep are thriving splendidly. There is every evidence that stock will be in fine condition to meet the coming of the winter or wet season. This has been an unusually prosperous season in the hills country.

## Lassen.

**THAT SHEEP CASE ONCE MORE.**—Red Bluff *Sentinel*, Sept. 4: M. Marsteller, Judge of the Superior Court of Lassen county, twice decided in favor of the right to run sheep in that county without paying a license tax. The third time he decided in favor of the county, remarking that he hoped it would be appealed. He expressed doubts as to the validity of the ordinance, but gave a judgment for the plaintiff, expecting the defendant would appeal. The papers are being prepared and a decision this fall may be expected.

## Monterey.

**SUNFLOWERS AND MELONS.**—EDITORS PRESS:—I can't quite come up to the Los Angeles sunflower, but I have some 14 inches across, and one with 30 heads, varying in size from a silver dollar to a tea-saucer. I haven't discovered any horns yet, but they may appear later on. Have watermelons as large as a wooden water-pail, of the Ironclad variety. Have squashes—Boston Marrow—as large as a good-sized wash-tub. Have lots of luscious sweet Nutmeg muskmelons and canteloupes, and wish you were here to help eat them.—J. S. TIBBITS, Santa Rita, Sept. 6, 1886.

[The Los Angeles sunflower above referred to was said to be 17 inches in diameter.—EDS. PRESS.]

## Napa.

**JAPANESE CATTLE BUYERS.**—Reporter: T. Katow and Y. Kadoi, the two Japanese gentlemen who paid this city a visit some days ago, are at present in Petaluma. They have been making a tour of this part of the State for the purpose of procuring fine cattle and sheep for the Japanese Government and private parties in Japan. For this purpose they have visited Solano, Napa and Sonoma counties. Both gentlemen state that they are highly pleased with the fine live-stock in the three counties. Mr. Katow came from Japan only about two months ago. Mr. Kadoi has been at the State University for some time studying horticulture.

**CODLIN MOTH.**—Iowa Hill Cor. *Republican*, September 8: The Codlin moth has made its appearance in all the orchards in this neighborhood, and at Yankee Jim's, Wisconsin Hill, and Monotonatown. The apples and pears are falling from the trees; it is impossible to find a sound specimen of either fruit in any of our orchards. Figs do well in this section and it is to be regretted that a larger number of trees have not been planted. The second crop is nearly ripe and the third will follow next month.

## San Benito.

**HUGE HAY CROP.**—*Independent*, Sept. 7: There is more hay now held in the county than ever before in its history. At R. P. Lathrop's hay warehouse there are now about 2000 tons. This includes a number of large stacks back of the warehouse and that in the warehouse. The scarcity of cars is very annoying. Although there seems to be considerable hay moving, Mr. Lathrop says there is strong probability that a vast amount of hay will be entirely lost, as the farmers are holding it back and we are liable to have rain any day now. The San Francisco hay market is badly overstocked, and as a consequence prices are ruinous.

## Santa Barbara.

**RAFFLING FOR AN ARTESIAN WELL.**—Santa Maria Cor. *Lompoc Record*: Tickets are selling rapidly for an experimental artesian well. Two hundred have been issued at \$10 each. When all are sold a drawing will be had and the lucky holder can have the well on his own land, or sell the right to locate it. Five hundred dollars have been offered for the winning ticket. Now, Mr. Miller offers \$1500 for a six-inch well, 500 feet deep, water or no water.

## Stanislaus.

**BOUND TO IRRIGATE.**—*Modesto Herald*, Sept. 3: G. Manuel, a civil engineer, will be in Stanislaus county on the 13th inst., to survey the route for a canal from the Merced river. It is expected that this canal will carry sufficient water to irrigate most of the land on the south side of the Tuolumne river, conveying the water to the section lying between the railroad and the San Joaquin river. We are not advised as to the capacity of the canal under project by the citizens, but they seem determined in their efforts to test the fruits of irrigation.

## Tehama.

**SPECIMEN FRUIT.**—*People's Cause*: John Clements has in his store quite a collection of fruit which is "offered in evidence" of what Tehama county can do in the fruit line. We saw there on Tuesday a variety of black prune and the Gross, a beautiful red plum and a fine large seedling peach produced on the farm of A. O. Peden; also a mammoth late Crawford peach grown by W. W. Dollings, and a fine apple from the same place, a few miles northwest

of Henleyville. A variety of peach called the Indian Queen, very handsome and of fine flavor, is among Mr. Clements' collection. It is worth the while of visitors here as well as that of our own people who are skeptical about fruit-raising to call and be convinced that Tehama county does produce the finest fruit in the world.

## The Farmers' Convention.

In accordance with the notices heretofore published, delegates to the Farmers' Convention met at Sacramento on the 15th. The only word thence as we go to press is a brief telegram to the S. F. dailies that they propose to nominate a ticket from the Democrats, Prohibitionists and Republicans, and that they declare in favor of Government ownership of all railroad, steamboat, telegraph and telephone lines, in opposition to the Heath Amendment and in favor of State control of all water. We expect to give a full report in our next issue.

## FORESTRY.

## Arbor Day at Goat Island.

It now seems that Arbor Day for California is virtually settled upon. On Friday morning of last week, Sept. 10th, through the kindness of Gen. Howard, commander of this department, some 40 persons interested in State forestry went on board the government steam-launch, *McPherson*, for a trip to Yerba Buena, or Goat Island. The party included Gen. O. O. Howard, Joaquin Miller, Adolph Sutro, Major W. W. Blow, F. M. Pixley, Sands W. Forman, Secretary of the State Board of Forestry, Col. George Weeks, John Vance Cheney, Judge Waymire, Major John A. Darling and several other gentlemen, besides a number of ladies.

Arriving at the island, most of the party at once ascended to the summit, and there held an informal council, a report of which we compile from some of the San Francisco daily papers.

Mr. Sutro was looked upon as the chief expert of the party, and great deference was paid to his opinion as he probably has planted more trees than any other individual in California. His experience has been with half a million shrubs of all descriptions, mostly set out on eminences similar to that of Goat Island. The island was found to be covered with a rank, matted growth of dry grass, and after a slight exploration the soil was pronounced fit for the intended purpose. The proposed day, October 30th, Mr. Sutro regarded as too early, since there is considerable doubt of there being any rain whatever before that date, and without moisture preceding the operation the trees would surely die. The most favorable time to plant would be early in December or late in November, as the rainy season opens about that time, and it is necessary that the young trees be placed in damp ground in order that they may be firmly rooted. Tree-planting in the spring is unprofitable, on account of the young shoots missing so much of the season's strengthening moisture that they are unfitted for the ordeal of the summer. In consonance with his views the last Saturday in November, the 27th, was finally decided upon. Mr. Sutro was asked for suggestions as to the varieties of trees he would set out, and after further study of the soil named the marine pine (*pinus maritima*), the Monterey cypress and the eucalyptus, with the *acacia latifolia* or *lophanta malva* for protection. In his opinion the trees should be planted not more than three feet apart, and after the hardy varieties mentioned had taken root others of a more tender nature could be put in beneath their shelter.

"Very well," said Mr. Miller, "we will now adjourn until the 27th of November, when I trust and expect all now here, with hundreds of others, to visit this island, and contribute a tree each toward starting the great work." With this the company took its departure, the details of preparing the ground being left to the active workers, who have the preliminary organization in hand.

Yerba Buena is about one mile long and three quarters of a mile broad, 344 feet above low water at the highest point, and has an area of about 160 acres. The south side was formerly covered with heavy oak timber, which was cut by the whalers. As the island has once afforded soil for such sturdy trees, there is every reason to expect that the new planting will be a success.

The trees will be planted across the west side of the island. The design of the first planting will be a huge Maltese cross, plainly visible to ferry passengers. It is expected that there will be many hundreds more trees than will be required to complete the figure, and they will be set out by their donors wherever fancy and favorable soil dictate.

In order to arouse a public interest, Mr. Sutro has indited a note to Supt. Moulder, stating that he will donate a tree to each of the 40,000 school children in the city, if they will plant them on some regularly organized excursions. As it would be hard to provide ferry facilities for such a host, General Howard promised to prepare a tract near the Presidio, to receive the overflow from Goat Island.

Mr. Forman will bring the matter before the notice of the Forestry Commissioners, who will

all be here before the settled date, and he was able to assure the projectors of their hearty co-operation and support. The State Board will introduce measures at the next session of the Legislature to establish Arbor Day as a legal holiday. They will also make an effort to have a bill passed awarding prizes to such children in the public schools as shall plant and rear the largest number of trees. They will also recommend that assessors be required to make returns as to the quantity and value of timber lands in their counties.

## Placer County State Fair Exhibit.

Nearest to the north entrance to Horticultural hall, in the State Fair pavilion, is the exhibit of Placer county, covering a floor space 50 feet square and 150 feet of wall space. There are 11 tables on the main floor and terraced tables all around the wall, above which the wall display is made. The exhibit is comprehensive and varied, showing nearly everything, from soils and rocks, up through the whole range of field crops, orchard and vineyard products, to the wood of majestic forest trees. It is late for many kinds of fruit, and yet the display included 14 varieties of peaches; 13 of pears; 26 of apples; 4 of quinces; 3 of pomegranates; 3 of walnuts; 7 of almonds; 2 of chestnuts; 5 of watermelons; 42 of grapes; 10 of plums and prunes, etc., these varieties being, of course, largely multiplied as they came from different growers.

The Placer county work at the fairs came about in this way: For a few years the display of Placer county products has been mainly made by four residents—G. L. Threlkel, J. J. Morrison, R. Williamson and E. W. Maslin. They had secured about \$200 in awards, and they agreed to donate that amount toward showing up the county at this year's fairs, provided the county supervisors would appropriate \$400. The enterprise was taken up by the Placer county branch of the Northern California Immigration Association, and at their solicitation the supervisors voted the amount named. It was decided to make three county exhibits—one at the Seventeenth District Fair, the charge of which was given to W. B. Hayford, of Colfax; another at the Mechanics' Institute Fair, in charge of J. J. Morrison, of Loomis; and the third at the State Fair, in charge of J. F. Madden, of Newcastle. Mr. Madden is assisted by W. B. Gester, of Newcastle; G. W. Turner, of Loomis; J. T. Terry, of Newcastle. We give below an outline of the material shown, with the names of the contributors, and by looking this over the reader can get the best idea of the extent and variety of the collection:

J. H. Lewis, Newcastle: Wheat and oats in the sheaf; White Adriatic figs.  
M. Mansfield, Dotan's Bar: Muscat grapes.  
Joseph Kelly, Manhattan Bar: Hungarian prunes and Salway peaches.  
John C. Boggs, Newcastle: Pomegranates and quinces.  
Jacob Working, Newcastle: Salway peaches.  
J. B. Sisley, Newcastle: Collection of peaches and grapes.  
R. J. Becker, Newcastle: Vegetables and raspberries.  
Auburn Orange-growers' Association: Watermelons without irrigation, large and fine.  
C. Estrada, Ophir: Green peppers, dried figs and grapes, also quinces.  
Frank Robles, Ophir: Corn on stalk.  
C. Foster, Ophir: Hungarian prunes.  
James Johnson, Newcastle: Lemon Cling and Salway peaches.  
Wm. Foster, Mt. Pleasant: Fine collection of grapes, including 21 varieties.  
Frederick Becker, Newcastle: Peaches and grapes in variety.  
J. W. Hulburt, Auburn: Collection plums and prunes.  
Wm. Ingram, Jr., Ophir: Hungarian prunes.  
A. Freitas, Newcastle: Oranges, lemons and peaches.  
T. F. Perry, Newcastle: Salway peaches.  
S. K. Harned, Rattlesnake: Quinces.  
J. B. Evans, Newcastle: Peaches and grapes.  
W. E. Richey, Newcastle: Vegetables.  
Philip Theasley, Newcastle: Pepper tree boughs.  
G. L. Threlkel, Newcastle: Grapes and peaches in variety.  
S. Quinn, Ophir: Hungarian prunes.  
C. T. Adams, Newcastle: Four varieties peaches, five varieties plums, eleven varieties grapes.  
J. A. Robinson, Newcastle: Six varieties peaches, including the McDewitt Cling, a deep yellow peach with very bright red cheek.  
J. L. Robertson, Newcastle: Four varieties apples, four varieties pears, six varieties grapes; also prunes, quinces and pomegranates.  
M. Bauman, Ophir: Fruits in variety.  
Hall Brothers, Penryn: Salway peaches and Muscat grapes.  
Gladding, McBean & Co.: Sewer pipe and tile; also architectural terra cotta in variety.  
J. R. Marston, Newcastle: Plums and prunes in variety.  
P. W. Butler, Penryn: Day's Yellow Cling, Lemon Cling, Salway, George's Late and Butler's Cling peaches; also other fruits in variety.  
M. Enos, Newcastle: Salway peaches.  
Hawk & Wood, Rocklin: Wine and table grapes in variety.  
Robert Sims, Newcastle: Grapes.  
J. D. Pratt, Roseville: Red building brick.  
P. H. Smith, Colfax: Watermelons and squash.  
R. Roster, Loomis: Grapes in variety.  
J. H. Gregory, Penryn: Watermelons.  
A. J. Goding, Alta: Ten varieties apples, fine collection; also Bartlett pears.  
J. F. Hill, Loomis: Corn on stalk about 14 feet high.  
J. W. Smyth, Horse Shoe Bar: Vegetables, fruits and nuts in variety; an orange from the crop of 1884

and from the coming crop of 1886; manufactured tobacco, dried figs, etc.

J. F. Madden, Newcastle: Collection natural grasses, pomegranates, English walnuts, black walnuts and almonds.

G. Griffith, Penryn: Three pairs beautifully polished granite vases.

H. E. Parker, Penryn: Pine apple squash.

S. F. Woodworth, Clipper gap: Berry and grape baskets, fruit boxes, also samples of smooth sawing and thin veneers.

Chas. Schutt, Rattlesnake: Tobacco in stock and leaf, and sample of straw covering to protect orange trees from frost.

J. G. Norris, Newcastle: Grapes.

R. Kayo, Plums and grapes.

R. Hector, Rattlesnake: Pears and grapes.

E. W. Maslin, Loomis: Grapes in variety.

E. Booth, Roseville: Fine collection dried fruits also fresh fruits in variety.

Olsen & Nelson, Clipper gap: Pears and apples. L. L. Crocker, Horse Shoe Bar: Fruits and vegetables in variety, also samples of Bartlett pears first, second and third crop of the present year.

W. & P. Nicholls, Dutch Flat: Apples in variety, and walnuts.

J. H. Greely, Newcastle: Large collection of grapes and pears, also squashes.

N. B. Lardner, Penryn: Dried and preserved white figs and grapes.

J. F. Talbott, Shady Run: Tomatoes, Para cucumbers and several fruits grown at elevation of 4150 ft. Contreras & Kette, Manzanita bush in native soil. M. Yarbrough, Loomis: Squashes.

J. A. Grant, Loomis: Sample lot of rye.

Brown & Kette, Applegates: Plums and Para cucumbers.

P. H. Smith, Colfax: Squashes.

G. W. & E. H. Honn, Applegates: Fruits in variety; also flowers, hops, nuts, etc.,

J. E. Simpson, Applegates: Apples.

G. W. Applegate, Applegates: Vegetables in variety.

J. F. Wall, Alta: Pears and apples.

Wm. Eddy, Dutch Flat: Bartlett pears.

J. H. Runkel, Dutch Flat: Apples in variety; also pears and plums.

H. A. Frost: Large and fine collection of orchard fruits.

W. H. H. Hudson, Dutch Flat: Apples.

P. Norburg, Penryn: Oranges, lemons, peaches and grapes.

Jefferson Wilcoxson, Applegates: Collection apples, grapes, pears; also nuts and vegetables; very interesting exhibit.

W. Shillingsburg, Gold Hill: Quinces.

C. Hanson, Colfax: Fine varieties of apples.

C. H. Roberts, Landers: Large collection of the woods of Placer county; also fruits; year's growth of a grapevine, 86 feet; also collection of soils and various native and introduced products; a unique display.

G. W. Turner, Loomis: Specimen woods of forest growth.

J. M. Gayetty, Penryn: Collection rocks and minerals.

Dr. H. E. Stafford, Rocklin: McKay's pruning shears.

A. Caldwell, Penryn: Pears.

J. B. Evans, Newcastle: Grapes.

W. Hazen, Newcastle: Grapes in variety.

H. P. Markert, Roseville: Prunes and peaches.

M. Borah, Shady Run: Plums and apples.

A. Freitas, Newcastle: Peaches.

M. Bannon, Penryn: Collection grapes, including Eastern varieties.

Mrs. Annie M. Fiellen, Alta: Apples and pears in variety.

A. L. S. Martin, Ophir: Grapes.

Mrs. Mary Grafmiller, Spring Valley: Grapes, and sample of rye.

R. Boles, Riverside: Grapes, Eastern and European varieties, and oranges.

W. A. Hines, Rocklin: Large collection European grapes; a splendid display.

J. H. Reith, Penryn: Watermelons.

H. H. Taylor, Ophir: Cucumbers.

John Woodward, Newcastle: Beets and carrots.

M. Pranzi, Newcastle: Red and Silverskin onions.

Jacob Miller, Dotan's Bar: Wine, white and red, grapes, string beans and pomegranates.

Jones & Perkins, Ophir: Peaches.

W. H. Threlkel, Newcastle: Peaches.

W. Barry, Ophir: Peaches.

G. T. Bartlett, Lost Camp: Vegetables and fruit in variety; also hops grown on ranch, near Blue Canyon, 4500 feet above sea level.

J. W. Smith, Horse Shoe Bar: "Hong Choy" or "Chinese date."

J. B. Whitcomb, Colfax: Large collection grapes, 22 varieties.

N. Mertes, Roseville: Collection wine and table grapes, well grown and handsome.

Andrew Ryder, Loomis: This season's growth of plum trees without irrigation, about eight feet long. Philip Dippel, Lincoln: Chili wheat.

Jesse Thompson, Lincoln: Cultivated wild oats.

**A LUSCIOUS DONATION.**—Last Friday week a note came to us from Merced, running thus:

EDITORS PACIFIC RURAL PRESS:—You will please accept a box of Bartlett pears. You can get them by going to the Pacific Fruit Company's store.—MARSHALL HARRIS.

The pears themselves—a generous supply—arrived at the office Monday morning in condition for immediate eating. We put a tape-line around one of the largest, and found its girth to be 10 inches. Employees of the business office, as well as the editorial staff, showed their practical gratitude for the welcome present, and can testify that the favorite epithet, "melting," well befitted the fruit.

**THE VIOLET APPLE.**—While at his place in Sacramento, Mr. Robert Williamson, of W. R. Strong & Co., called our attention to his trees of the Violet apple, which he considers of great promise. It is a large red apple resembling, in size and form, the 20-ounce pippin, except that it is rather more flat. It was found on the place of Mr. Violet, of Ione, the origin of the tree being beyond memory. The apple ripens with the Bellefleur and Rhode Island Greening. It has proved valuable for shipping to the Colorado and Wyoming markets.





### Somehow Or Other We Get Along.

The good wife bustled about the house  
Her face still bright with a pleasant smile,  
As broken snatches of happy song  
Strengthened her heart and hand the while.  
The good man sat in his chimney nook  
His little clay pipe within his lips,  
And all he'd made, and all he'd lost,  
Ready and quick on his finger tips.

Good wife, I've just been thinking a bit;  
Nothing has done very well this year—  
Money is bound to be hard to get,  
Everything's bound to be very dear.  
How the cattle are going to be fed,  
How we're to keep the boys at school,  
Is a kind of a debit and credit sum  
Can't make balance by my rule."

She turned her round from the baking bread,  
And she faced him with a cheerful laugh.  
Why, husband dear, one would think  
The good rich wheat was only chaff.  
And what if the wheat was only chaff,  
As long as we both are well and strong  
I'm not a woman to worry a bit—  
Somehow or other we get along.

"Into some lives some rain must fall,  
Over all lands the storm must beat;  
But when the rain and storm are o'er,  
The after-sunshine is twice as sweet.  
Through every strait we've found a road,  
In every grief we've found a song;  
We've had to bear and had to wait  
But somehow or other we get along.

"For thirty years we have loved each other,  
Stood by each other whatever befell;  
Six boys have called us father and mother  
And all are living and doing well.  
We owe no man a penny, my dear,  
We're both of us loving, well and strong;  
Good man, I wish you would smoke again,  
And think how well we've got along."

He filled his pipe with a pleasant laugh,  
He kissed his wife with a tender pride;  
He said: "I'll do as you tell me, love—  
I'll just count up on the other side."  
She left him with his better thought,  
And lifted her work with a low, sweet song—  
A song that followed me many a year—  
Somehow or other we get along.

—Philadelphia Times.

### In a Garret.

When old Squire Marcy died, having lived  
20 years beyond his allotted time, the neighbors  
were very curious as to the existence of a will.  
For if there were none "the girls" would have  
to give up their home and "do something for a  
living." The little farm, which had yielded a  
comfortable living for three persons, when sold,  
and its proceeds divided among 10, would give  
but a pittance to each. It was generally con-  
ceded that "it would come hard on the girls."

"Squire Marcy was always a good provider,"  
said Mrs. Denison to her husband, who hoped  
to "administer" the estate if no will was found.  
"Sabra nor Cynthia, neither of 'em, have ever been  
stinted. They'll feel it dreadfully if they've got  
to give up their comfortable home and come  
down to earning their own bread and cheese."

"I shall advise the girls to bring in a bill,"  
said Mr. Denison, "a bill for their services.  
The Probate Court will allow it quicker'n light-  
ning."

"The girls won't bring in no bill," said his  
wife; "Sabra told me that if her father didn't set  
enough by them to provide for them, she should  
not make any claim on the estate."

"That's just like a woman," said Mr. Den-  
ison, testily.

But no will, and no evidence that the old  
gentleman had ever contemplated making one,  
could be found; Mr. Denison received the cov-  
eted appointment, and the settlement of the es-  
tate by law went forward.

Cynthia and Sabra were the children of their  
father's third wife. A delicate creature she  
had been, who accepted Squire Marcy's offer  
because, homeless and friendless, the prospect  
of a home tempted her. But her home was  
made wretched by eight children, sons and  
daughters of her predecessors, some of them  
nearly as old as herself, coarsely organized,  
quarrelsome, but agreeing upon one point—to  
make life as intolerable for their young step-  
mother as possible. She could not bear up un-  
der their petty persecutions. In a few years  
she was laid to rest with the other wives, leav-  
ing her two little girls to fight their way as  
best they could. It had been a hard life for the  
children at first, but one by one the older ones  
had drifted away, and finally the Western  
fever seized upon them all, and they went, one  
after another, to make homes on the broad,  
fertile prairies. So, for many years the sisters  
had lived happy, peaceful lives in the old home-  
stead with their father.

They were quiet, gentle women, inheriting a  
poetic temperament from their mother. They

loved the old house and the woods about it.  
They knew where the earliest spring flowers  
grew and where to find the brightest autumn  
leaves. They would not have dared to let their  
neighbors, who disapproved openly of their  
"traipsing about all over the woods," know  
what treasures of pressed flowers and leaves  
they had carefully put away. Not for worlds  
would Miss Cynthia have told of the timid at-  
tempts at flower-painting she sometimes made,  
in the solitude of her own room. They had not  
felt much in sympathy with their neighbors  
heretofore, but now that real trouble had come  
upon them, every one was kind; the sisters  
found they had many warm friends where they  
least expected to find them. They were middle-  
aged women now, well advanced in their fifth  
decade. Of their half-brothers and sisters they  
knew little, but it was certain there would be  
no mercy from them. They would grudge the  
sisters the "living" they had had, and each one  
would claim every penny due, eagerly. Once  
Mr. Denison ventured to suggest his idea of "a  
bill," but an ominous gleam in Miss Sabra's  
eyes warned him, and he left his sentence un-  
finished.

"Cynthia," said Sabra, one bright September  
morning, "Mr. Denison said last night that he  
thought brother James would be here pretty  
soon. Don't you think we had better look  
over the things in the garret before he comes?  
I don't feel as if I could have any one but our-  
selves touch mother's things."

"Just as you think best, sister Sabra," an-  
swered Miss Cynthia, meekly. The coming  
change was an even greater grief to her than  
to her elder sister. She loved her old home  
with an almost passionate tenderness, and it  
seemed to her, sometimes, that leaving it would  
almost break her heart.

The two sisters finished their morning tasks  
in silence, and without a word climbed the nar-  
row stairs that led to the old garret. Such a  
treasure-house of family relics as it was! Not  
a child of all the 10 whose development could  
not be traced in cast-off clothing and old school-  
books. There were boxes and trunks, carefully  
packed, standing primly against the wall. Old  
garments, dating back to old Squire Marcy's  
first wedding coat, hung above them. Near a  
window was a broken looking-glass, with gilt  
and ebony frame, the upper portion filled with  
a gay flower piece, and Miss Cynthia, in a sub-  
dued tone, asked Miss Sabra if she didn't re-  
member "hearing tell how sister Jemima broke  
that glass just before mother died?"

The timbers of the old roof were enormous,  
suggesting an abundance of lumber to which we,  
in these modern times, are strangers. Many  
pegs and nails were driven into them, from  
which swung paper bags filled with dried herbs,  
spearmint, boneset, pennyroyal, all diffusing a  
pleasant odor through the garret, which Miss  
Cynthia thought more agreeable than the huge  
bowls full of steaming hot herb tea, which Miss  
Sabra always made her swallow, her feet in a  
pail of hot water meanwhile, whenever she took  
cold. Two large wooden chests stood far back  
under the eaves—so large that they could never  
have been brought up the narrow stairs, but  
must have been built where they stood. In  
them were piles of old papers, years upon years  
of Springfield Republicans and Massachusetts  
Ploughmen, Old Farmers' almanacs for more  
than half a century; and there were carefully  
cherished a pile of "Journals of the House,"  
containing the doings of the Legislature when  
Squire Marcy represented the town.

Miss Cynthia gave a pitiful look into a chest,  
and then sat down in a basket of newly-sewn  
carpet-rags and began to cry. "Oh, Sabra,"  
she sobbed, "I've been used to seeing these  
things all my life. Seems as if it would break  
my heart to part with them. I've a great mind  
to bring in a bill."

"Cynthia," said Miss Sabra, "this is foolish-  
ness. There's no use in givin' way so. We  
can't help ourselves."

"Well," said Miss Cynthia, extricating her-  
self from the carpet-rags and wiping her eyes,  
"what shall we do first?"

An old spinning-wheel, which had stood for  
years in its own nook, resting after long service  
in spinning yarn for blankets and stockings to  
keep the Marcys warm, quivered a little, as  
if with grief at the coming change, and the crad-  
dle, wherein all the little Marcys had been  
rocked, rocked gently once more, in a deprec-  
atory way, as the sisters turned toward the  
closet where one or two trunks, more precious  
than the rest, were stored.

"I thought we'd better look over mother's  
things first," said Miss Sabra, opening the shut-  
ters and letting in a flood of autumn sunshine.  
A faint odor of camphor and cedar and pungent  
spices filled the closet, for this was the store-  
room for winter clothing and wraps in summer.  
The sisters' cloaks and woolen dresses hung on  
the wall. Broad shelves, piled with home-  
made blankets and patchwork quilts and com-  
fortables, filled one side of the little apartment,  
and in a band-box in one corner, carefully  
wrapped in linen and packed away in red pep-  
per and camphor, were the sisters' furs, the  
one spontaneous gift their father had ever given  
them. For Miss Sabra's and Miss Cynthia's  
wearing apparel usually represented sundry  
sacrifices of eggs and poultry and fresh butter,  
exchanged at the village store for something to  
wear. But once, when the old gentleman had  
made an exceptionally good sale of fat cattle,  
he opened his heart and purse-strings and pre-  
sented his daughters each with a set of gray  
squirrel furs, more precious in their eyes than  
sealskin or sable.

"Well, Cynthia," said Miss Sabra, "this is

the trunk of mother's things. We'd better  
open it to make sure there's nothing else in it,  
and then we'll take it down-stairs and look the  
things over. I guess they're all right, but it's  
three years, come October, since we went  
through them."

Miss Sabra knelt down before the little hair  
trunk, studded with brass nails, fitted the key  
in the rusty lock, and with some difficulty  
turned it and raised the lid. The clothing,  
yellow with age, lay neatly folded, with leaves  
of "Sweet Mary" scattered through it to give it  
a pleasant odor. But upon the top lay a fold-  
ed paper, long and blue, with a formidable air  
of business about it.

"Why, sister," said Miss Cynthia, "what is  
that?"

"I don't know," said Miss Sabra, under her  
breath; "I never put it there. I'm most afraid  
to touch it."

But Cynthia, more impulsive than Sabra, had  
already seized and opened it. She whitened to  
her lips.

"Sabra," she whispered, "it's a will!"

"Then," said Miss Sabra, "we mustn't look  
at it. We must go and give it to Mr. Denison  
right away and let him read it first. If we go  
right off now, we can get there in time to see  
him when he comes home to dinner."

So the sisters put on their sun-bonnets and  
went "cross lots" through the fields to  
Mr. Denison's house, climbing fences and open-  
ing heavy gates, taking with them the mysteri-  
ous document which was of such terrible mo-  
ment to them. It was duly delivered to Mr.  
Denison and the story of its discovery told.  
"And whatever could have possessed father to  
put it there is more than I can tell," added  
Miss Sabra.

But Mr. Denison was already absorbed in  
reading the will and hardly listened to Miss  
Sabra's story. They waited, breathlessly,  
trembling in every limb, wondering what was  
coming to them, fearing the worst, not daring  
to hope for good fortune. But presently Mr.  
Denison turned on them a beaming face,  
saying:

"This is all right. It is duly signed and  
witnessed, and I am the executor. You are  
given the use of the real estate for your lives,  
or until you marry"—Miss Cynthia blushed—  
"and the stock and furniture and farming uten-  
sils are given you outright. Now we'll have  
it probated right away. And I must say I'm  
glad of this. It's just as it should be."

Miss Cynthia broke down and cried like a  
baby, and Miss Sabra's eyes were full of tears  
as she said: "Now, Cynthia, ain't you glad we  
didn't bring in a bill?"—Julia A. Sabine.

**WAGE WORKERS' LIQUOR BILL.**—There are  
some facts connected with the Internal Revenue  
which should be faithfully studied by every  
citizen. During the last year 624,000,000 gal-  
lons of beer were used, which would be 10.83  
gallons for every one in the land, babes in-  
cluded. During the same time 70,763,010 gal-  
lons of whisky were drunk, or 1.19 gallons per  
capita. One hundred and ninety-one million  
twenty-three thousand six hundred and sixty-  
three pounds of tobacco for smoking and chew-  
ing are reported, or 3.22 pounds for each person.  
There were 3,510,372,539 cigars consumed, or  
59.2 per capita, and 1,310,556,512 cigars, or  
22.1 for each one. The *Tribune* remarks in  
relation to these figures: "It remains to add  
that, supposing cigars to average only 5 cents  
each, and cigarettes 20 cents a package, tobacco  
a dollar a pound in retail forms, beer 5 cents  
a glass and spirits 5 cents for half a gill (prices  
which are certainly not as high as those paid by  
most consumers), the cost of these articles to  
the people of the country is over \$1,189,000,-  
000, or \$19.82 for every inhabitant. This  
burden is borne by about 20,000,000 wage-  
earners, however, and for them it averages  
\$59.46 yearly. All the money that trade unions  
have added, or ever will add, to the wages of  
labor, will not equal half the sum spent last  
year, mainly by working people, in the con-  
sumption of liquor alone, which costs them much  
over \$800,000,000." Accepting these state-  
ments as reliable, it follows that at least half of  
the American nation is made up of fools, and  
the other half has hardly good sense. Just  
think of the sums lavished on appetite! The  
complaint about hard times seems shameless.  
Here is a splendid chance to reform and bring  
on universal prosperity. There is need for it  
among the disciples of Christ, for they are as-  
sisting in this foolish expenditure.—Midlands.

**BRYANT'S SIMPLICITY OF HEART.**—A very  
pretty anecdote is told of the late William Cul-  
len Bryant, the poet, by a former associate in his  
newspaper office, which illustrates the good  
man's simplicity of heart. Says the narrator:  
"One morning, many years ago, after reaching  
the office, and trying in vain to begin work, he  
turned to me and remarked: 'I cannot get  
along this morning.' 'Why not?' I asked.  
'Oh,' he replied, 'I have done wrong. When  
on my way here, a little boy flying a kite passed  
me. The string of the kite having rubbed  
against my face, I seized it and broke it. The  
boy lost his kite, but I could not stop to pay  
him for it. I did wrong. I ought to have paid  
him.' This tenderness of conscience went far  
toward making the poet the kindly, noble, hon-  
orable and honored man that he was, whose  
death was felt throughout the land.—Phila-  
delphia Call.

**CONFIDENCE** is a plant of slow growth in an  
aged bosom.—William Pitt.

### Thorwaldsen—The Celebrated Sculptor.

(Translated from the German of HANS CHRISTIAN ANDER-  
SEN by PROF. GRANVILLE F. FOSTER.)

The moon is supposed to be relating the story.  
Several years since, in the city of Copenhagen,  
I looked through the window of a dwelling be-  
longing to the poorer class. The father and  
mother were sleeping, but the little son was  
lying awake. I saw the bed-curtains of figured  
calico move and the little child peeped forth.  
At first, thought I, he is interested in the great  
clock, fixed to the wall, which was painted in  
glaring red and green; above sat the cuckoo,  
beneath hung the heavy leaden weights and  
the long pendulum, whose ball was a brass disk,  
brightly polished, going ever backward and  
forward with the measured monotonous tick,  
tack. But it was not the clock that attracted  
the child's attention, but his mother's spinning-  
wheel, which stood directly beneath. Of all  
things in the house, this was the most coveted  
object to the boy, and yet had he never dared  
to touch it, the least attempt causing him to be  
rapped on his fingers for his pains. During  
whole hours, while his mother was spinning,  
would the boy sit motionless by and intently  
observe the whirling spool and rapidly turning  
wheel, while all the time his developing mind  
was filled with peculiar thoughts. Oh, if he  
could only once turn the spinning-wheel, what  
a heaven of delight it would be! Now father  
and mother were sleeping, as he perceived on  
the one hand, while on the other there stood  
the coveted spinning-wheel. First a little  
naked foot is stretched forth, then the other,  
and finally two bare little legs are seen. There  
he stands before the bedstead. He pauses to  
examine once more whether his father and  
mother are asleep. They are indeed asleep;  
how happy for him! How quietly he glides in  
his little, short nightgown to the spinning-  
wheel and commences to spin. The whir be-  
gins. It grows louder as quicker and quicker  
the wheel is turned. I kissed his flaxen hair  
and deep-blue eyes—'twas a beautiful picture.  
At this moment his mother awakes, moves  
quickly the curtains aside, and looks out to  
behold a goblin or some diminutive ghost.

"In the name of Jesus!" cries she, and anx-  
iously strikes her husband on the side. He  
suddenly awakes, rubs his eyes with his hands,  
and looks at the little, nimble fellow. "Ah,  
indeed it is Bertel!" cries he. Just here my  
eye looks away from the humble cottage, for I  
have so many things to see! At the same time  
I looked into the rooms of the Vatican, where  
the marble gods stand. My beams fell on the  
Laocoon group, and the very stone seemed to  
sigh. I pressed a still and quiet kiss on the  
breasts of the Muses, and it seemed as though  
these were heaving. At length my beams rest-  
ed on the group of the Nile, represented as a  
colossal god. There he stood, leaning on the  
Sphinx, full of thought and dreaming as he  
considered the fleeting centuries passing before  
him. Near by, little Cupids are busy in play  
with sportive crocodiles. In a cornucopia sits,  
with folded arms, a very young Cupid, ear-  
nestly looking up at the great stern river god—  
a true picture of the little boy at the spinning-  
wheel, for the features in either case were the  
same. Living and charming appeared here the  
marble Cupid, and yet had the great wheel of  
the passing years turned a thousand times since  
½ sprang forth from its lifeless bed in the heart  
of the stone. Just as often as the little boy in  
the humble dwelling at Copenhagen has turned  
the spinning-wheel, must the wheel of time in  
the whirling course of revolving years turn  
from this early period before another age could  
appear in which it was possible for these marble  
gods to be recreated.

Since the time of the scene in the cottage  
many years have passed away. Yesterday I  
looked down on the east coast of Zealand; here,  
amid lofty hills and beautiful forests, stood an  
ancient knight's manor, with red walls. In the  
waters of the moat swam beautiful swans. In  
the rear of the manor appeared, somewhat in  
the distance, a handsome little village sur-  
rounded with gardens and orchards, out of the  
midst of which towered to the sky the spire of  
a Christian church. Here and there, over the  
calm, quiet surface of the adjoining sea, glide  
numerous boats all lit up with torches, not for  
the purpose of eel-fishing so common in these  
waters, but for festive holiday purposes. Mu-  
sic fills the air. A song is sung. In one of the  
boats stands up the man whom all delight to  
honor—tall, vigorous-looking, handsome; cloth-  
ed in a cloak, there he stands, with his deep  
blue eyes and long white hair, the personifica-  
tion of beauty and manliness. I recognized  
him, and my mind wandered at once to the  
Vatican, and I looked again upon the group of  
the Nile and all the marble gods; and I also  
thought on the bedchamber in the humble  
Danish dwelling, where little Bertel, in his  
white nightgown, sat at the spinning-wheel.  
That long revolution of time has been accom-  
plished; new gods, liberated from their stony  
bed, stand forth to the gaze of an astonished  
world. My reveries are broken by the loud,  
continued shouts of the multitude, arising from  
the thousand boats that skim the sea: "Three  
cheers for Bertel Thorwaldsen!"

**INQUISITIVE** people are the funnels of conver-  
sation; they do not take in anything for their  
own use, but merely to pass it to another.—Sir  
Richard Steele.



## Gems of Thought.

AVOID shame, but do not seek glory—nothing so expensive as glory.—*Sidney Smith.*

THERE is something exceedingly thrilling in the voices of children singing.—*Longfellow.*

THE yoke a man creates for himself by wrongdoing will breed hate in the kindest nature.—*George Eliot.*

WE are apt to be deluded into false security by political catchwords, designed to flatter rather than instruct.—*Garfield.*

THERE are three things in speech that ought to be considered before they are spoken—the manner, the place and the time.—*Southey.*

THERE is not in nature anything so remotely distant from God, or so extremely opposite to Him, as a greedy and griping niggard.—*Barrow.*

PROFITABLE employments would be no less a diversion than any of the idle sports in fashion, if men but be brought to delight in them.—*Locke.*

LET every man take care how he speaks and writes of honest people, and not set down at a venture the first thing that comes uppermost.—*Cervantes.*

GOD is present in the consciences of good and bad: He is there a remembrancer to call our actions to mind, and a witness to bring them to judgment.—*Jeremy Taylor.*

SUBMISSION is the only reasoning between a creature and its Maker, and contentment in His will is the best remedy we can apply to misfortunes.—*Sir W. Temple.*

I THANK God that if I am gifted with little of the spirit which is able to raise mortals to the skies, I have yet none, as I trust, of that other spirit, which would drag angels down.—*Webster.*

To believe your own thought, to believe what is true for you in your private heart is true for all men—that is genius. Speak your latent conviction and it shall be the universal sense; for the inmost in due time becomes the outmost, and our first thought is rendered back to us by the trumpets of the Last Judgment.—*Emerson.*

## Chaff.

IT is a curious fact that whenever a British Parliament gets into hot water it is sure to dissolve.

THE days are growing shorter and shorter, and the hours for leaning over the front gate longer and longer.

"Is the man dead?" asked the reporter of a policeman after an accident. "Not yet," replied the officer. "The doctors haven't come."

SNOBBY—"Aw—aw—it must be very unpleasant for you Americans to be governed by people—aw—whom you wouldn't ask to dinner." American belle—"Well, not more so, perhaps, than for you in England to be governed by people who wouldn't ask you to dinner."—*Punch.*

IN response to an advertisement of a Brooklyn church music committee for an organist, the following was received: "Gentlemen, I noticed your advertisement for an organist and music teacher, either lady or gentleman. Having been both for several years, I offer you my services."

MAUD—"Well, commencement is over, thank goodness, and the seminary is closed for the summer. When do you start for home?" Nellie—"In the express to-morrow morning." "Have you anything to read on the journey?" "Yes; I am going to look over my school-books; papa might be inquisitive."

"MAMMA," said Johnnie, still smarting from a shingle application, "is the roof of anything on top of it?" "Of course it is," she said, shortly. "And don't shingles always go on the roof?" "Certainly they do." Then Johnnie was silent for quite awhile. Finally he said, in a quivering voice, "Mamma, ain't my roof upside down?"

THE story is told of Senator Evarts, of New York, that he once sent a donkey up to his farm, at Windsor, Vt., and about a week afterward received the following letter from his little grandchild: "Dear grandpa—The little donkey is very gentle, but he makes a big noise at night. He is very lonesome. I guess he misses you. I hope that you will come up soon, and then he won't be lonesome."—*Waif.*

"ONE of my ancestors won a battle during the crusades by his skill in handling his artillery," said the Baron. "But, my dear Baron," said his friend, "at the time of the crusades gunpowder had not yet been discovered." "I know that as well as you do, and so did my ancestor." "How did he win the battle, then?" "He brought his artillery to bear on the Saracens, and the stupid fools, seeing the guns, supposed that powder had at last been discovered, and fled in dismay."—*Texas Siftings.*

OFFENDED THE GOVERNING CLASS.—A telegram from Nashville says that Rev. G. C. Rankin, one of the leading ministers in Chattanooga, has been making war on the saloons. He made personal inspection of all of them on two different nights, and has since been making startling exposures. He handled the whisky men without gloves, and they are mad. The latest rumor in connection with the matter is that saloonists will boycott all business men who are members of the church.

## YOUNG FOLKS' COLUMN.

## Stella's Medicine.

[Written for the RURAL PRESS BY BECCA M. SAMSON.]

Stella's little brother Charlie was very ill; so ill that a solemn old doctor, with gold-rimmed spectacles on his nose, came three times a day to visit him, and mamma's pretty eyes were red and swollen from crying, and papa, each morning as he kissed his little daughter before going to business, would whisper softly in her ear, "Pray God, Stella, to take care of brother Charlie while I am away to-day." And Stella would promise with a look of wonder in her big gray eyes.

She was not old enough to understand what sickness meant; she knew only that she was very lonesome without her little brother to play with, and she had cried because they had carried him away from his cot in the nursery to shut him up in a big room downstairs.

The door of this strange room was always shut. The servants stole into it on tiptoe and came out of it with grave faces, but Stella could never discover what made them so sad, because when she asked them they always told her to run away and play in the garden. Stella grew tired of playing in the garden by herself. There wasn't much fun in talking to the flowers, who never did anything but nod their silly heads to everything she said. She wanted to see her little brother and ask him why he staid away from her such a long time.

It was now three weeks since she had last seen him, and so many wonderful things had happened during that time—the blossoms in the orchard had all changed into fruit, the garden was full of roses, and under the fragrant lilac bushes the old gray pussy cat had hidden away six little kittens. How Charlie would love the cunning things! How he would laugh to see them open their funny pink mouths and wriggle their tiny mites of tails!

Suppose she should carry one of the prettiest to him? They would surely let her in when they saw what she had brought for her little brother.

But when Stella reached the sick-room door she was met by a strange woman, who called herself "Nurse," and who very sternly bade the little girl run away and never dare come near the sick-room again.

This made the poor little girl very unhappy; she thought she must have done something dreadfully naughty to never be allowed to see her little brother again, and she thought the new nurse a wicked woman to punish her for nothing.

She told her papa all about it when he came home that night and asked him why everybody was so unkind to her. Her papa tried to make his little daughter understand what sickness really meant, and told her she would have to keep very quiet and be a good girl; then when Charlie had taken all the medicine the doctor gave him, perhaps he would get well and she would see him again.

Stella tried to wait patiently, but day after day passed and no little brother came. Then she grew miserable indeed, and one morning when she asked the nursery-maid, who came to dress her, if God had made Charlie well, the girl burst into tears. Everybody looked very sad that day; Jane, the house-maid, did nothing but sigh, and the cook made Stella a beautiful apple-turnover for her dinner, because, as she said, the little creature needed something to comfort her. Stella took her lunch in the kitchen, because it was too lonesome for the little girl in the dining-room without mamma to talk to.

On this particular day, as Stella sat at the big pine-wood table munching her nice tart and wishing she could carry up a piece of it to Charlie, who should come down the back stairs but the same cross old nurse, of whom Stella was so much afraid. She didn't look very cross now, only pale and tired, as she said to the cook on entering the kitchen, "I hope, Mary, you have a good fire. The doctor may be here any minute, and I must have baby's broth ready before he comes. I declare," she continued, dropping down into a chair and leaning her head on her arm as though she were about to take a nap, "I'm quite worn out with nursing!"

Before nurse had finished talking, Stella had slid down from her high chair and was up and away before any one knew she was gone. What would that fussy old nurse have done, could she have seen the little girl a moment later, standing outside the sick-room door and holding tight in her two arms a little struggling mewling kitten?

Stella had some trouble in turning the heavy door-knob, and when she did at last succeed and found herself standing in a big gloomy room, pussy, with a "meow" of terror, squirmed out of Stella's arms and scampered away as fast as it could on its weak little legs.

For a moment, the little girl was tempted to run away too. The room with its silence and darkness frightened her; and the strong odor of drugs and liniments made her feel sick.

Presently, she made out in the corner a big bed, upon which was lying a tiny, white-faced little creature, who tossed and moaned among the soft pillows, as if they were full of thorns. In a low seat by the side of the bed sat Stella's

mother. Her face was buried in the bed-clothes, and from her outstretched hand there dropped an open fan. The tired mother had fallen asleep while fanning her sick child.

Stella's two big, wondering eyes were fastened upon the little sufferer on the bed. It could not be her pretty brother—he had rosy cheeks and bright hair, while this little moaning thing was whiter than Stella's linen frock and had no pretty curls at all.

By-and-by Stella crept close to the bedside and said softly, "Charlie, the kitty-cat wouldn't stay." Then the sick child opened wide his great blue eyes, and that was how Stella knew her little brother. Now she knew why everybody was so unhappy. Now she understood why Charlie was so sad and pale. The wicked old doctor had shut him up in that dreadful dark room where he never saw the sun nor the flowers, nor heard the birds sing—dear, dear baby brother, who used to clap his hands at the pretty sunlight, and laugh when anybody gave him a flower!

How was the poor little boy ever to get well in that dreary room?

No wonder he was afraid to speak to her! Perhaps he thought she had come to give him some of that nasty medicine she saw upon the table. No, no! Little Stella knew something better than that. "I'll cure you, Charlie," she lisped in her sweet voice. "I'll find you a nice medicine to make you well."

Out of the great gloomy room stole the little girl, down the long stairs that led into the beautiful, blooming, sunlit garden, where birds were singing, bees buzzing and gay butterflies flitting about in an ecstasy of happiness. The air was as sweet and soft as the breath of a child.

Stella looked toward the window of the sick-room, from which all this beautiful world was hidden by heavy, dark shutters which were fastened tight and close as the doors of a vault. Bright roses, nodding and bobbing on their slender stems in the pretty fashion roses have, peeped here and there and everywhere for a glance between the slats of the shutters, while a trembling yellow sunbeam tried vainly to find some crevice through which to creep.

Everything was bright and beautiful except this one gloomy spot that frowned in the midst of the flowers and sunlight, as a storm-cloud frowns in a summer sky.

"Bright sun, bright sun," Stella cried, pointing with her tiny finger toward the darkened window, "yonder lies my baby brother, sad and suffering, because they have taken you away from him. If I open the shutters and let you in, will you promise to make him well again?"

And all the golden sunbeams came and gathered themselves in Stella's flowing hair. It was their way of showing how ready they were to help her.

"Gentle breeze, gentle breeze," cried the little girl once more, turning to where the soft air crept down from the tall tree tops and through the fragrant flower beds, "you come straight from heaven. Can you not bring something to make my little brother well?" And the breeze hastened to kiss Stella's cheeks, fluttering as though impatient to do her bidding.

"Bright flowers, bright flowers," whispered the loving child, holding out pleading hands to all the listening blossoms, "my little brother does not like the doctor and his bitter medicines, but he loves you dearly and will gladly take whatever you bring. Will you not come and make him well?" And the flowers nodded their pretty heads, saying "yes" in a thousand graceful ways.

Then Stella stole over the grass, softly as an angel bearing gifts from heaven, until she stood beneath the sick-room window. High upon the tips of her tiny toes she stood, reaching up her chubby arms, and with a touch of her baby fingers threw open wide the lattice that shut out from the sick child the air and light of heaven. In rushed the waiting breeze, bearing health and happiness upon its eager wings. Sunbeams darted everywhere, slaying with golden arrows the evil spirits of death and darkness that haunted the sick-chamber, while a thousand warbling birds poured forth a hymn of rejoicing for the victory. When the doctor came a moment later to pay his daily visit, he found a room flooded with air and light, and standing in the center of the floor a little girl, who pointed to where the sick child lay among the pillows, not moaning from pain, nor tossing with fever, but laughing at the merry sunbeams that danced upon the wall and holding out his feeble hands toward the roses that nodded to him from the open window.

"See," cried the little girl, triumphantly, "the good medicine has made brother Charlie well."

And the tired mother awoke from a startled slumber to fall upon her knees and thank God for the child that had brought such a blessing to her; the grave doctor smiled as he laid his hand upon Stella's bright head; and even the cross old nurse was too well pleased to scold.

From that day forth the sick child was never without Stella's medicine; it made him so well and strong that before many days he was changed from a helpless, white-faced invalid into a stout, rosy-cheeked little boy, who spent the long summer days with his happy sister chasing bees and butterflies about the beautiful garden. And all this was owing to the wonderful medicine of a wise little girl.

WHY is a young lady of the present age like a careful housewife? Because she makes a great bustle about a little waist.

## DOMESTIC ECONOMY.

## A Desirable Recipe.

IN Sacramento county, says the *Record-Union*, resides a lady who is locally famous for the excellence of her make of jams, jellies, pickles and chow-chow. The goods of her manufacture were on the market as long as she desired, and were always eagerly purchased. In recent years she has not cared to manufacture much for sale. Recently, by solicitation, she gave several ladies her method of making chow-chow, and these, to oblige others, desire the recipe to be published. While it is true that with every housewife, in her skill in the art of cookery, there is something that cannot be conveyed, a knowledge gained by experience how to produce results that she cannot explain, and in which she cannot instruct others, still a recital of her methods may lead others into equally happy results after some experimental effort. The chow-chow of Mrs. H. is thus made: Two dozen large green tomatoes, one large red onion; slice; green peppers, a half-dozen; mix, salt and let stand four hours. Then spread and drain four hours. Put in a porcelain pot, and pour over enough white-wine vinegar to cover, with one cup of brown sugar, one large tablespoonful of ground mustard, two tablespoonfuls white mustard seed, one teaspoonful celery seed, one tablespoonful ground mace. Boil all in a porcelain pot thoroughly. Seal hot.

GRAHAM ROLLS.—Mrs. Susanna Dodds gives the most minute and accurate directions for a perfect gem, of which the following is an abstract: Mix graham or whole wheat flour, which, if very coarse, must first be sifted, with ice-cold water in the proportion of two-thirds of a pint of water to a quart of flour; more wetting must be used if the flour is very coarse. Stir fast until a moderately stiff dough is formed, and knead thoroughly from 10 to 15 minutes, till the dough is fine and elastic to the touch. Roll half of it at a time into long rolls a little over an inch in diameter; cut off and shape into rolls three or four inches long and three-quarters of an inch thick, to which no dry flour is left attached. Make them rapidly and place a little apart in a pan; prick them with a fork and put the pan in a hot oven. When done, they should not yield to pressure between thumb and finger. They are to be eaten warm or cold, and are just as good rewarmed as when new. To do this, dip in cold water, cover with cloth and set in a moderate oven, when they will puff up lighter than at first. These require slow mastication, and are sweet as a nut and very nutritious.

MUSHROOM CATSUP.—After cleansing and thoroughly washing the mushrooms, stalks and all, cut each into two or four pieces, according to its size. Put the pieces in a stone jar, sprinkling salt on each layer, and let them stand for 24 hours. Then take them out of the jar and press them to extract all the juice, which must be bottled immediately and corked. Put the mushrooms back in the jar, and at the end of 24 hours press them again and bottle the juice. Again return the mushrooms to the jar and repeat the pressing process at the end of the 24 hours. Mix thoroughly the juice of the three pressings, adding pepper, allspice and one or more cloves, according to quantity, broken in pieces. Simmer and remove the scum as long as it rises. When no more scum appears, strain, and when cool, put into bottles. In each bottle put two cloves and a pepper-corn and seal airtight. In a cool, dry place the catsup will keep for years.

CUCUMBER SALAD.—This receipt is from "Good Housekeeping." Be careful to get only firm, fresh cucumbers, and not those that are at all wilted; choose small cucumbers rather than large ones, as the latter are apt to be flabby and seedy. Lay on ice until ready to use them; then wash, pare and slice as thin as possible; sprinkle salt over them plentifully and let them stand for half an hour; then press or drain all the water from them and mix with the dressing as for bean salad. Prepared in this way, the cucumbers are not as crisp as when the water is not drained from them, but they are a great deal more wholesome. A very nice salad can be made by taking two-thirds beans and one-third cucumbers; mix them together and prepare as above.

TOMATO SOUP.—Two quarts of tomatoes, peeled and sliced; three pints of broth—veal or chicken is best; one tablespoonful minced parsley and the same quantity of minced onion, one teaspoonful of sugar; pepper and salt to taste; browned flour for thickening; tablespoonful of butter, fried bread dice. Stew the tomatoes in the broth until they are broken all to pieces, add herbs and onions, stew 20 minutes, rub through a colander, season, thicken with a tablespoonful of browned flour, rubbed in one of butter; boil two minutes and pour upon the fried bread in the tureen.

SAVORY POTATOES.—Mince a quarter-pound of fat salt pork, add a teaspoonful of chopped onions and a tablespoonful of minced parsley, eight potatoes, peeled and quartered; cover with cold water and cook until the potatoes are done. Drain, mash, mound on a pie-plate, sift crumbs over them and brown in the oven.





A. T. DEWEY.

W. B. EWER.

Published by DEWEY &amp; CO.

Office, 252 Market St., N. E. cor. Front St., S. F.  
Take the Elevator, No. 12 Front St.ADDRESS ALL literary and business correspondence and  
Drafts for this paper in the name of the firm.

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Our latest forms go to press Wednesday evening.

Registered at S. F. Post Office as second-class mail matter.

## SCIENTIFIC PRESS PATENT AGENCY.

DEWEY &amp; CO., PATENT SOLICITORS.

A. T. DEWEY.

W. B. EWER.

G. H. STRONG

SAN FRANCISCO:

Saturday, Sept. 18, 1886.

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Grapevines—Lewis Roessch, Fredonia, N. Y.  
Jersey Cattle—Henry Pierce  
Mules—J. D. Rosenberger, Maxwell, Cal.  
Goats—T. H. Harlan, Williams, Cal.

See Advertising Columns.

## The Week.

We give all the space we can command the present week to the State Fair reports, which we are receiving from our editorial correspondent at Sacramento. There is necessarily much of the fair which cannot be reached in this issue—as for example the implements and machinery. These and other important matters will be presented another week, with full lists of premiums awarded. We are obliged to omit, at least for the present, any report of the Contra Costa Fair, and particulars as to the awards at Marysville and elsewhere. What with the coming agricultural events at Rohnerville, Greenville and Stockton, the gathering of the farmers at the capital, and the meetings of nominating politicians, the State seems fairly whelmed in an atmosphere whose component factors are fair and convention.

## Are We Degenerating?

The notion has somehow become current of late years, especially among the ethnologists of Europe, that there is a natural tendency in the human race to die out on any given spot unless rejuvenated by alien blood, and that this tendency is particularly noticeable in America. In proof of this curious and doubtful theory, we are referred to the relics of several distinct races that died out on this continent long before the coming of white men. It is claimed that the red Indians were in a state of degeneracy, and would have ultimately disappeared had no wave of immigration ever struck the shore; that America is the graveyard of races; that this deteriorative tendency still goes on, and that there are many evidences of a vicious departure from the normal English type in America that would certainly end in extinction were it not arrested by the constant influx of foreign blood.

It is unquestionably true that the European races have undergone great constitutional changes in America. The Englishman is short of stature, round and smooth in face, has dumpy hands, short legs, large feet, a florid complexion, a jolly temperament; is given to the animal indulgence of eating and drinking, and loves home and children. His descendant in New England is tall and slender in body, limbs, hands and feet; his skin is dry, his teeth decay early, his hair soon turns gray. He has a nervous temperament, and a romantic disposition; he is ready to emigrate anywhere, and is fond of adventure. All this has taken place within 200 years. Whether the ultimate result of this change is toward physical degeneration or not is a question for scientific observers to determine. There are some facts, however, that will do us no harm to look in the face.

There is certainly a growing distrust of old men in this country, and a disposition to relegate them to private life, at what, in Europe, would be considered the prime of their powers and usefulness. Our army generals are retired from active service by an Act of Congress at 64, and it has been urged that the judges of the Federal Courts should be shelved at the same age. The chief objection to Tilden, Thurman, Morrison and Payne as candidates for the presidency at the last Democratic convention was their age. Europeans note these facts and jump to the conclusion that our climate has cut off at least 10 years from the average period our race attains in the older country.

It is certain that the public men of Europe retain their physical vigor and mental powers to an age greatly in advance of men engaged in the same sphere of activity in this country. The greatest achievement of statesmanship in this century was the restoration of France after the Prussian conquest. And this was performed by M. Thiers at the age of 75. Beyond that age Palmerston was Prime Minister of England—a position which entailed on him the onerous duties of leader of the House of Commons. Gladstone has passed his 76th birthday, and is yet recognized as the ablest leader of the Liberal party. Gortchakoff was Prime Minister of Russia until he was 82, and died in the harness. Metternich, the great Prime Minister, was 76 when displaced by a revolution. The Emperor of Germany is 87, and Von Moltke planned the campaign which resulted in the conquest of France when he was over 70 years old. Bismarck is now 70.

England has a long roll of Chancellors who were eminent when over 80. Men above the age of 65—mostly above the age of 70—govern Europe to-day, and rule it as well as it was ever governed. Men above the age of 65 hold the most of the great judicial and civil positions. This is the measure of the mental vigor of our race in Europe. Whatever may be the cause, it is certain that very few men of that age are found in public life in our country.

## The Stockton Fair.

The pavilion for the Second District Fair being completed, was opened for exhibits on the 11th, and a large portion of the space allotted is already occupied. The fair opens on Tuesday next and a large attendance is anticipated. The RURAL PRESS has made arrangements to have a representative at Stockton throughout the week.

## Timber Claims and Timber Culture Claims.

A reader at Napa lately asked us a number of questions regarding timber claims. Going with them to Mr. C. H. Street, Secretary of the Immigration Association, we were instantly favored with clear, succinct answers on all the points involved. Believing that this information will prove interesting and serviceable to others beside the one who sought it of us, we publish it for the benefit of our readers generally.

It should first be noticed that there is a distinction between a "timber claim" and a "timber culture claim," and there are two laws—one allowing any head of a family or other person over 21 years of age to purchase 160 acres of timbered land—that is, land more suitable for lumbering than for farming purposes. Under this law a person files in the U. S. local land-office an application to purchase, and has 90 days thereafter in which to pay for the land at the rate of \$2.50 an acre.

Under the Timber Culture Act, a person is entitled to 160 acres, upon application at the local land-office and payment of \$14 fees, provided that during the first year he shall plow five acres of the land, and the second year five more and cultivate the former five, and the third year cultivate the latter five and plant trees on the first five. The fourth year he has to plant the second five acres likewise, thus making 10 acres in trees, which he must keep growing for five years thereafter. These trees must be for firewood or lumber (e. g., ash, oak, black walnut, willow, cottonwood, blue gum, etc.); fruit trees will not answer the purpose. There must be 2680 trees set out on each acre at the time of planting, and at the time of proving up there must be 760 thrifty-growing trees on each acre.

A man who has homesteaded is not thereby precluded from entering land under either the Timber or Timber Culture Act, and it is not necessary for him to reside upon the premises. It should be observed that only American citizens, or those who have recorded their intention of becoming such, are entitled to the benefits of the statutes herein referred to.

## The Geyser Hotel Case.

As disputed titles are a common occurrence arising from the inaccuracy of the original government survey, a synopsis of this case will be of interest to the readers of the RURAL. It settles the question that a title granted under an untrue government survey is valid and cannot be disturbed. The case is as follows: A certain person purchased the northeast quarter of section 13, in township 11 north, range 9 west, Mount Diablo base and meridian, acquired possession and made extensive improvements. Subsequently another person purchased the adjoining quarter section and secured the title. A new survey proved the original government survey to be wrong, and the land purchased by the second person is really a part of that in possession of the first purchaser, on which stands the Geyser hotel and other valuable improvements. Number two instituted proceedings in ejectment. The action was brought in Sonoma county and transferred to the county of Napa and there tried by the court without a jury and judgment rendered in favor of the plaintiff, from which judgment the defendant appealed. The Supreme Court has decided that a title acquired to any particular piece of land under the original government survey is perfectly valid, no matter how imperfect the survey may have been. The court says:

How then stands the case? Defendant was the owner of a house and outbuildings known as the "Geyser hotel" property.

The approved official plat of the Government of the United States showed this property to be upon the northeast quarter of section 13, with the line of demarkation between this and the southeast quarter of the section plainly laid down and running south of the premises owned by her.

She purchased the northeast quarter of the section. Plaintiff's grantor subsequently purchased from the Government the southeast quarter, and the patent refers to the same plat and surveys according to it as hereinbefore mentioned.

Under such circumstances, we are of opinion that the line as designated upon the plat, and running south of defendant's hotel, whether accurate or not, is to be deemed and taken as the true division line between the north and southeast quarter of section 13, and that neither a private survey nor parol evidence was admissible to show that the line should, in fact, run north of defendant's hotel.

## The State Fair.

## Notes of the Opening Week.

[Editorial Correspondence.]

The close of the first week of the State Fair finds a very complete and varied display of California's industrial products duly installed and awaiting the coming of visitors. The opening week did not bring great throngs either at the Park or at the Pavilion. Locally, there seems to be some dissatisfaction concerning some new ticket regulations, and some reflections are made upon the members of the State Board. We think them misplaced. In our opinion the fair is, on the whole, of high excellence, and in some respects, as for example the live-stock department, it excels any previous State exhibition. The pavilion, too, has displays which in money or time, or both, have cost more than any hitherto set up. It is too early to complain and find fault. Perhaps the inflocking during the coming week will compensate for a slow opening.

## The Live-stock.

The first grand stock parade occurred on the morning of September 11th. It was the largest aggregation of well-bred animals ever witnessed in this State. We could not but think as the hundreds of noble beasts passed before us how wide and rapid has been the development of this very important branch of our agriculture. Notwithstanding all the prominence the orchard and vineyard industries have attained, the State has been gaining most notably in horses and horned stock and in the lesser animals. The impression becomes all the stronger when it is remembered that some of our best known herds (like those of Henry Pierce and others) are not represented this year.

In the parade the horses held their usual place of honor, and the line of horses alone more than encircled the mile-track. The horse parade was headed by the fine team of grays owned by Colonel James McNasser, and driven by himself. There were 11 double teams in line. Following the double teams came 60 roadsters, standard trotters, etc., driven single. Among these were Miller's Maid, Exchequer, Lucy, Cora, Chesley, Chico and Buccaneer, Jr. Directly behind these came a long line of thoroughbreds, draft, trotters, etc., being led by the halter. In this list were the thoroughbreds Joe Daniels, the famous four-mile racer, Todhunter's Monte Cristo, Kelly & Lynch's Arthur H, and Halverson's Maggie S. These trotters were also noted: Berlin, Sterling, Prompter, Caliph and Brilliant. The rear of the line was brought up by a very long string of Normans, Clydesdales, Percherons, horses of all work, mules, etc. Among the many fine draft horses, the animal which seemed to catch all eyes was the grand dark bay Percheron stallion "Ber-tem," imported by Skillman, of Petaluma, and owned by C. E. Porter, of Central House, Butte county. Ber-tem stands 17 hands high, weighs 1855 pounds and is five years old. He is a majestic animal. Other horses were, of course, good also, and the premium list which we hope to print next week will give them fitting recognition.

## The Cattle.

The cattle were in too great profusion to admit of note-taking while they passed in line, consequently we visited them in their stalls. Nearest to the main entrance was the herd of Major Robert Beck, comprising 17 head. Major Beck has offered his stock at auction on September 15th.

A. D. Jelly, of Sacramento, showed a well-bred 2-year-old Jersey bull, Ansel, from Major Beck's stock, which he advertises for sale in the RURAL. We were quite pleased with the animal.

Next came the Ayrshire herd of George Bement & Son, which we mentioned in our report of the Golden Gate Fair last week. We obtained from Mr. Bement his last milk record, which we publish as follows:

Cow.	Days milked.	Yield	
		1 month, Lbs.	full time, Lbs.
Lally Faxon.....	297	952	7365
Sybil.....	276	910	5499
Sunshine.....	347	637	5314
Elaine.....	365	1195	8296
Marian.....	365	585	6301
Marian.....	218	772	4901
Sulana.....	365	832	5373
Cricket.....	365	779	6502
Ethel Brown.....	319	862½	7686
Loma.....	298	670	5795
Stellina.....	302	881	5719
Linda 3d.....	223	1027	4792
Lady Chapin.....	273	815	5111



Lady Merryton.....	365	1014	7714
Stellita.....	333	1147	6760
Highland May.....	365	750	6835
Highland Belle.....	283	722	5422
Maggie.....		1216	7766
S. arlight.....	317	601	5589
Mir am.....	273	786 1/4	5994
Madge.....	280	799	5534
Sunshine.....	204	821	4313
Sybillia.....	123	...	3179

Next came Senator Stanford's herd of Holsteins, of which 28 head were shown in charge of Mr. Van Buren. This herd, which made a good record at the last State Fair, has been enriched since then by the importation of three cows of the best of Smiths, Powell & Lamb's stock, which we noted in the *RURAL* at the time of their arrival last winter.

In the following stall was a good-graded dairy with young calf, owned by P. Sullivan, of Sacramento.

Next came a three-year-old and over thoroughbred Shorthorn, owned by Charles Scott, Oxford Duke, from the stock of Sylvester Scott, of Cloverdale.

The Holstein herd of F. T. Underhill, Ontare ranch, Santa Barbara, was shown by C. F. Swan, manager, and filled a host of stalls. The bull Strathmore, now at the head of the herd, was weighed on the track, and threw up the beam at 2530 pounds. There was a large group of calves. The surplus of the herd was announced for auction during the fair.

E. K. Alsip, of Sacramento, showed a very pretty yearling Jersey named Blanche of Devon.

Next came the Durhams of Hyde & Moore, of Visalia, which we noted at the Golden Gate Fair, and which seem to be favorably regarded by the visitors to the State Fair.

In the succeeding stalls were Thomas Ward's Jerseys, Col. Younger's Shorthorns and F. H. Burke's Holsteins, all of which our readers will remember as taking honorable place at the Golden Gate Fair.

J. T. McIntosh, of Chico, showed a three-year old bull, Prince Alto; and A. L. Nichols, of Sacramento, had five head of Jerseys.

R. McEnespy, of Butte county, had the whole duty of showing Devons, and did it well with a small but choice herd, headed by the bull Salute. These herds filled the long sheds nearest the entrance. Very good quarters were, however, improvised near by for a few herds. Tyler Beach's Ayrshire herd was thus quartered. Mr. Beach's bulls were especially praised when on parade. They are very shapely and handsome.

Near by were nine head of Jerseys, owned by Prof. J. D. Smith, of Livermore—excellent animals; also P. H. Murphy's six head of Shorthorns and grades—very good cattle.

Owing to the exigencies of the occasion, the balance of the cattle exhibit, in fact, quite half of it, was housed about half a mile away, on the other side of the grand stand. Seeking them there, we came first upon the 10 head of Shorthorns of R. J. Merkeley, of Sacramento. These cattle would please the lovers of the solid reds.

Following were 31 head of Galloways imported by Leonard Bros., of Mt. Leonard, Mo., and brought to California under the management of Geo. L. Goulding. This is the most notable introduction of Galloways into California and has, we understand, been so successful that more will follow. We give elsewhere something more in detail about the Galloways.

Next came Robert Ashburner's 13 head of Shorthorns, led by the noble Royal Duke, whose grand form was much praised by the on-lookers at the parade. Mr. Ashburner took the herd premium at Golden Gate Fair for Baden Duke 7th, Frantic 4th, Frantic 9th, Minstrel Gwynne 1st and Minstrel Gwynne 2d, and the decision of the committee was favorably received. Mr. Ashburner's stock, as our readers know, are bred especially for their milking qualities, and his cows show their depth in this regard to any practiced eye.

P. Stanton, of Sacramento, who has been long in Jersey breeding, showed a few good animals.

The Herefords shown by Williams & Saxe were a recent importation, and attracted much attention.

E. W. Maslin, of Loomis, Placer county, showed four head of Jerseys—very neat, handsome animals.

The show by the Marysville Live-stock Association was varied and interesting, and included good specimens of several breeds. There were two Galloway bulls; three Galloway

grades which showed the prepotency of the Galloway sire very clearly; two Arberdeen or Polled Angus bulls and eight heifers; two Holstein heifers and a two-year-old Holstein bull recently sold to R. C. Kells, of Sutter county. The Marysville Association is doing a good thing for the improvement of live-stock in the upper part of the State.

H. S. Sargent, of Stockton, had a Jersey herd of 16 head which was notably good. Mr. Sargent has been breeding Jerseys for some time, and is doubtless well known to *RURAL* readers through his advertisements. He has good blood, and handles his animals in a sensible way, believing in their merit as useful stock.

The Cotate ranch Shorthorn herd, owned by the Page Brothers and managed by Wilfred Page, numbered on Saturday last 20 head. It left the ranch two weeks before with 18 head. If the fairs were long enough there might be a trainload to return to take home. The two little newcomers to the herd were strong and hearty when we saw them and their dams doing well. The Cotate herd is one of our older herds, and has been bred with the greatest care for purity. We are glad to see herds like Page's and Ashburner's returning to the State show ring.

Peter Peterson, of Maxwell, Colusa county,



BLACK JAVA FOWLS. BY CUTTING & ROBINSON, STOCKTON.

showed 13 head of Durhams, headed by his three-year-old, Colusa Chief. Mr. Maxwell's herd entered for the over two-year-old class comprised Maxwell Chief, Belle of Antelope, 2d, 3d and 4th Belles of Antelope, and formed a very nice group of cattle.

Last in the long line of sheds were the Holsteins of J. H. White, of Petaluma. We were much taken with these cattle when we saw them at Oakland, and our judgment as given in last week's *RURAL* was evidently in accord with the committee, for Mr. White was awarded three sweepstake premiums, ten first premiums and four second premiums, aggregating \$225 on 15 animals exhibited. This is a pretty good record, certainly.

#### Sheep and Goats.

The display of Angora goats was much larger than usual this year, so we mention them first. There were three exhibitors. We mention first Julius Weyand, of Little Stony, Colusa county, because he always comes to the fair and is entitled to credit for it. Mr. Weyand showed us a band of 32 head, showing their breeding in every point. Their fleeces were beautiful beyond description. At the pavilion Mr. Weyand has a well-arranged mohair display, showing the hair at different ages, also some of the fabrics, especially the gorgeous mohair plushes now being made from the fleece of the Angora.

Thomas H. Harlan, of Williams, Colusa county, was another exhibitor and had 24 head. He made his exhibit very interesting by showing some animals, just in from the

mountains, and some with cleansed fleeces. His goats are exceeding well fleeced, holding out length where goats are apt to be deficient, sticking on hair wherever it can find lodgment over the carcass.

Moses Wick, the well-known stock breeder, of Wick P. O., Butte county, showed 10 head of Angoras; a very good exhibit, also.

The sheep classes were not very full this year. James Roberts, of Irvington, Alameda county, had 25 head of French Merinos. F. Bullard, the well-known Spanish or American Merino breeder, had a fine show, comprising 40 head good animals, well fleeced and with wool of very fine quality. R. H. Crane, of Petaluma, showed Southdowns, which he finds are increasing in demand in this State. Southdowns were also shown by George Bement & Son, of Redwood City.

#### Swine.

The show of swine, especially in Berkshires, was very good. The largest exhibitor was Andrew Smith, of Walnut Grove Farm, Redwood City, San Mateo county. Mr. Smith showed 36 head descended from his stock imported from the Queen's herd. John Rider, of Sacramento, the well-known Berkshire breeder, had 25 head of Berkshires of notable excellence. The leading exhibitor of Poland Chinas was J. Melvin, of Davisville. He had 25 head, all im-

ported or descended from imported stock. Especially noticeable was Angela Gold Dust, pig of Young Gold Dust, a famous Indiana hog; also, The King, five months old in August, and just brought out. Mr. Melvin finds the Poland Chinas all they are cracked up to be. Poland Chinas were also shown by Moses Wick, of Butte county, and P. H. Murphy, of Brighton. A very interesting show was the Durocs of Thomas Waite, of Brighton, and J. Kennedy, of Sacramento, who also showed a few Berkshires.

#### Poultry.

The poultry exhibit included many fine birds. We had not time to look them over carefully, but will take another occasion. The exhibitors were as follows: M. W. Parker, Biggs; Jasper J. Jones, Martinez; Thomas Waite, Sacramento; W. H. Hobby, Sacramento; Pacific Incubator Company, Alameda; E. I. Robinson, F. S. Tryon, J. M. Scott, P. J. Williams and W. F. Smith, Sacramento.

COPPER, SALT AND CHICKEN.—At a marriage supper in a western town, last week, about 50 people partook of boiled chicken and salad. An hour later the bride and groom showed symptoms of having been poisoned. Part of the company had left, but those remaining were also taken sick. Great fright followed, and all the physicians within reach were called in to treat the wedding guests. The chickens had been cooked and salted in a big copper kettle. It is supposed the salt caused the metal to corrode and mix with the chickens.

## The University Exhibit at the State Fair.

The display of the College of Agriculture, of the University of California, is much praised for the interesting character of its materials and the attractive manner in which the display is made. It is situated in one of the conservatories on the south-east side of the pavilion, and is visible from the main floor and the galleries, from many points of view. About 42 feet of wall space and table are occupied. There is first a background of a rich red color. Upon the center of this there is a panel upon which the word "University" is wrought out of small sheaves of cereals, the letters being so large as to be easily read from the most distant point in the building. Around the letters there is an ornamental arrangement, also of grain sheaves, which serves as a frame, and still outside of that there are various ornamental designs, also made of small grain sheaves. There are in all 213 varieties of cereals used in the arrangement, each one being clearly labeled, and no duplicate being used. There are 98 varieties of wheat, 55 of oats, 38 of barley, 14 of rye, and eight of spelts. Along the base of this wall design there is a row of bottles, each containing a variety of grain, and all beautifully labeled. This portion of the exhibit gives opportunity for a most comprehensive comparative study of the characteristics of the different varieties of cereals, both in straw and in grain, and it is being well used by the grain-growers, who spend much time in viewing and discussing the specimens.

Another feature of the exhibit is the showing of 104 varieties of fruit from the Standard orchard of the University. There are 57 varieties of pears and 47 varieties of apples, all correctly named and marked, with date of picking. This affords quite a clue to the keeping quality of some of the varieties, as for example, the De Tongres pear, picked August 9th, is still firm and beautifully colored, although six weeks from the tree, and having undergone a freight carriage from Berkeley, with the thermometer over a hundred. Some other varieties show similar durability. The correct naming of the fruit shown is made of use by many exhibitors in identifying the fruits they show.

All the grains and fruits shown were grown upon the University grounds, at Berkeley. One of the objects of the experiments is to secure authentic seed for trial by the correspondents of the Experiment Station, who are located in all parts of the State, and all can obtain seed samples of varieties they wish to try by applying to Prof. E. W. Hilgard. The Standard orchard is open to similar public use. Scions can be obtained at the proper season, either for budding or grafting, and thus many varieties may be obtained without cost for trial in all the conditions of soil and climate which exist in the State.

Aside from the agricultural products, the University exhibit is ornamented with photographs showing all the larger buildings of the University, and a table is devoted to the various publications of the institution, which are given to all who are interested. The conservatory in which the display is made is furnished with seats, and the cool air and attractive sights make it quite a place of resort in the pavilion.

## Black Java Fowls.

We give herewith an engraving of a pair of Black Java fowls, as bred by Cutting & Robinson, of the California Poultry Farm, Stockton. The Black Java fowl is one of the latest breeds introduced, and is of American production, with little or none of the blood of the Java of 25 years ago. The breeders, in their catalogue, give this description of the breed:

In them we have the best possible make-up for a valuable table fowl, viz., breast deep and full, body long, broad and deep; just the right shape to put on flesh where it is most needed. They have a rich yellow skin, which is very desirable for market poultry. They have single combs; their color is a rich, glossy black, with metallic reflections, and large, handsome tails and sickle feathers. They have smooth black shanks; bottoms of feet yellow. They are totally unlike any other known breed. They are early and persistent layers of very large tuff-colored eggs; are good setters, and will defend their chicks equal to a game. The Javas differ from most other birds in one important respect, and that is, they breed truer to form and feather, and breed less culls and more good birds, than many other varieties. The Javas are a remarkable bird, and are in a high demand for their many excellent qualities. They are sure to make their mark wherever introduced. In weight they nearly equal the Brahmas and Cochins.



## Sacramento County State Fair Display.

The county exhibit for Sacramento county is made under the auspices of Pomona Grange No. 2, E. Parsons being intrusted with the arrangement furnished. The display occupies about twice the space taken by any other county, and as there are fewer contributors some of the individual displays are of great extent and variety. J. Rutter, of Florin, has three large tables well laden with a grape collection of 38 named varieties of wine and table grapes; also a collection of figs and English walnuts. Mrs. Purrington, of Sacramento, also has a display of grapes and a collection of orchard fruits in variety, fruit in glass and dried fruit—the latter of excellent quality and well displayed. Her exhibit is ornamented with a large bouquet of natural grasses laden with silkworm cocoons, producing a pleasing effect. Another large exhibitor is Mrs. Lansing, of Sacramento, who has a fine display of fruit in glass and jellies; also fine apples and pears. Near Mrs. Lansing's stand is a neat collection of cut flowers from the capitol grounds. Mrs. R. S. Lockett, of Brighton, occupies two tables, one with a great variety of deciduous fruits and vegetables, and the second table with a handsome display of grapes and raisins. A novelty in Mrs. Lockett's exhibit is a cotton plant with unopened bolls.

The next table has a group of exhibits from several growers. There are peaches and grapes by H. O. Morgan; grapes by M. Sprague; peaches by G. T. Rich, of Florin; table grapes by Jacob Seitz, and fine boxes of almonds from W. H. Williamson. G. Wilson, of Brighton, shows a collection of grapes, and D. Hull has a display of quinces.

The next large exhibitor is P. H. Murphy, of Brighton. He has two well-filled tables, one of about 30 varieties of table grapes—a very handsome display. His second table has an assortment of orchard fruits, and fruit in glass, fine almonds and figs. In another place, Mr. Murphy has a good show of large vegetables. Weinstein & Lubin fill a table with choice fruit from their ranch near Mayhew's station.

The vegetable department of the Sacramento exhibit is very fine. W. O. Davis, of Florin, shows four varieties of watermelon—majestic specimens. P. H. Smith, of Sacramento, has one variety of watermelon—very good. Felice Gabriella fills a table with a general assortment of "garden sass" which is much admired. W. W. James, G. F. Bronner, J. H. Hamilton, John Williams and P. M. Artz all show either squashes or melons of mammoth proportions.

E. F. Aiken, of Glen Gardens, has the best collection of the squash family we ever saw, embracing a number of varieties but little known, as the New China Red squash, Cocoonut squash, Turban squash, etc. He has also fine specimens of the Pera cucumber, and a sack of peanuts. Mr. Aiken's collection is worth much study.

E. Greer, of Sacramento, has a very interesting exhibit of alfalfa of different cuttings, showing the wealthy growth of the plant in the Sacramento valley. H. W. Foster shows two varieties of wheat. Other samples of wheat, in sheaf and sack, were shown by A. M. Plummer, T. C. Perkins, John Reith, Thomas Morse, E. Vitrus, and the Natoma Vineyard Co. The judges will have to say which is best. Sacramento field growths were well shown by the tall corn, 17 feet high, by G. W. Hancock, and by W. E. Grimshaw. Mr. Hancock had alfalfa trying to reach up to his corn.

Isaac Lea, of Florin, had a unique display of oranges, olives and licorice root. Mr. Lea's licorice plants have grown fast and filled the soil with roots. His introduction of the plant has attracted the attention of an Eastern man who is the largest manufacturer of licorice products in this country, and he has lately visited Mr. Lea's place to see about his crop, prospective supply, etc. A number of others have started the plants. Growers must look out about getting the plants started where they are not wanted to remain, as the plant will probably be hard to eradicate. The member of the same genus, *glycyrrhiza*, indigenous to this State, is a pestiferous weed.

Daniel Flint, the pioneer hop-grower, has a bale of hops and heavily laden hop plants which are very handsome. Mrs. J. R. Lockett has flax straw and thrashed seed. O. E. Hughes has an example of early-bearing walnut, showing nuts of the second crop borne on a three-year-old tree.

There is a case of bread made up of the baking of a number of house-wives. The samples made us so hungry that we had to escape from the vicinity without waiting to take the names. We were somewhat similarly affected by a grand pyramid of preserved and canned fruits and jellies—the manufacture of Mrs. H. Cronk-hite, who has taken many premiums for her masterpieces in this line. This year she does not make a full display, and yet her collection of these articles and of domestic wines is very fine. Around the base of the pyramid are fruits grown without irrigation by E. Greer, a notable item being a seven-pound bunch of Flame Tokay grapes.

A very artistic display is made by D. H. Clippinger of his dried fruit—dried by sun-heat under glass. The fruit is very fine, and the arrangement upon a rustic terraced-table is very attractive. Mrs. W. H. Hobby shows some very good dried figs.

Included in the Sacramento county exhibit are some very creditable local manufactures. George Maddux, of the Capitol Pottery, shows drain-pipe and sewer-pipe, crocks and jars of all kinds and of extra quality. His grease-traps are excellently adapted to keep drains from filling up, and such arrangements should enter into every system of house-sewage. McCreary & Co. show mill products very artistically. All the flour shown is made from Sacramento-county wheat. The mill rollers shown attracted much attention.

Dairy products included a fine jar of butter from Nellie Burns, of Sacramento, and another without a card, suspected of being from the dairy of Hon. William Johnston, of Richland.

## San Joaquin County State Fair Exhibit.

Occupying the most prominent place on the main floor of the pavilion, and arranged in a style fit to attract and delight, is the San Joaquin county exhibit, made under the auspices of Pomona Grange, No. 3. The space secured for the display was but 30 feet square, but the material would have well filled twice that area, for the contributions were more liberal than was anticipated. The moving spirit in the enterprise was Mrs. J. L. Beecher, of Stockton Grange, for she has a genius for such matters, and was gladly accepted as a leader by the others, and they all worked zealously under her leadership. E. R. Elliott, of Lodi Grange, was chairman of the Pomona Grange Committee; Ezra Fiske, Master of Pomona Grange, No. 3, and S. C. Waters, of Washington Grange, were constant in their efforts in setting up and expounding the display to visitors. Mrs. E. J. McIntosh, of Woodbridge Grange, remained all through the fair and did grand service. Mrs. W. C. Ramsey, of Stockton Grange, Mrs. E. G. Williams and Mrs. W. B. White, of Woodbridge, were also busy with the display, the latter two for a portion of the time only.

The display occupies a square space inclosed in a neat manner, and in the center is a high rectangular framework covered with blue cloth, in the shape of a canopy, and looped up gracefully at regular distances at the sides. Over the front, in letters made with small heads of wheat, are the words, in oval position, "San Joaquin County," and beneath, in letters of evergreen, set with red berries, are the words, "Pomona Grange." The canopy is pleasingly dressed with wheat and barley heads, grasses, corn-tassels, pampas-grass plumes, etc. In front is a flower-bed rich in colors and perfume, and at the side a miniature garden, in which is seen fresh growing wheat, barley, corn, beans, peas, carrots and strawberries in bloom. By the side of it is a farm-yard museum, in which are displayed, in very natural arrangement, stuffed hens and chickens, ducks, lamb, owl, birds, etc., designed and constructed by Mrs. E. G. Williams and Mrs. McIntosh. The lamb was from the flock of W. L. Overhiser. Upon a larger canvas are displayed, in the shape of an immense bouquet, a great variety of native grasses, grains and other products, this design being dedicated to Flora. It was arranged by Mrs. Beecher and Mrs. McIntosh from a selection of native grasses furnished by Mr. J. D. Hoffman, of Lodi.

The exhibit, as a whole, would repay hours of study. The following is the list of contributors and materials, which will be read with interest:

D. A. Learned: Raisins, almonds, pecan nuts, walnuts, live boxes of grapes—four varieties.

M. Garfield: Dwarf and running beans, two varieties of squash seeds, Arkansas pea and lettuce, three varieties of flower seeds, pomegranates, pears and apples.

Mrs. Wm. B. West: Loquat seeds, specimens of painting on plush, tidy, magnolia seeds, French walnuts, very large and fine, and ten boxes of dried and crystallized fruits.

Mrs. E. S. Beecher: Apple and grape jellies, five varieties of flower seeds, lace edging and insertion, figure of pea in wheat, also a cake.

Mrs. J. L. Beecher: Three dozen glasses jelly, 22 varieties; one dozen raspberry jam, five jars

sealed fruit, one case seeds containing 165 varieties, three varieties potted meat, four varieties fruit stones, beet seed, Swiss chard, onions, red corn, variegated corn, flower stands, lentil, sample pomegranate.

Lucius Alling: Cuck wheat.

Mrs. W. F. Sibley: Four varieties flower seeds, one set cradle shams, dried grasses, cornflowers, samples of wheat in figures.

Mrs. J. L. Beecher, Jr.: Painting on velvet, lambrequin and table scarf, worsted knit slippers, point lace ties.

Mrs. Alge Kelsey: Samples flower seeds.

Mrs. A. Rose: Two varieties potted meat, lambrequin in worsted embroidery.

Mrs. Joseph Hale: One dozen jellies, seven jars sealed fruit, of plums, two kinds of peaches and pears.

Mrs. W. D. Ashley: Five varieties of corn, beet seeds, varieties watermelon seed, cucumbers, peas, beans, tomato, parsley and balsamine seed, onions grown without irrigation, almonds from trees grown from cutting which was planted in 1856, now eight feet in circumference; jar dried figs.

Mrs. J. Adams: Five varieties of fruit, in jars, of 1884; crystallized fruits, jellies and crab apples, pampas and other grasses, and four varieties of seed; pickled capers grown on plants sent out by the College of Agriculture, Berkeley.

W. F. Sibley: Specimens of club wheat, black barley and soil where raised, sheaf of bearded wheat, Cuban Queen watermelon.

Mrs. Sabin: Samples flax seed and "four o'clocks."

Mrs. Kuhl: Ten varieties of flower seeds, five varieties of beans, flax, eggs, native oats.

L. A. Richards: Samples of wheat and specimen of soil where grown—West Side, San Joaquin river.

J. D. Peters: Bald barley, chevalier barley and common barley. Exhibit of buhach, also three specimens of rye.

Jos. Hale: Five specimens of Heath and cling-stone peaches in alcohol; dried figs.

G. W. Andrews: Specimens of seven-headed wheat; corn on stalks.

C. A. Bachman, San Joaquin river: Specimens of barley and wheat.

Miss Alice Ashley: Specimens of beaten brass.

Mrs. Dohrmann: Specimens of kindergarten school work.

D. Hildreth: Wheat (Salt Lake Club), winter sown, produced 40 bushels per acre; sample soil where grown.

G. F. Stafford: White Australian wheat.

L. A. Richards, West Side: Two varieties wheat and specimen of soil.

Chas. A. Beecher: Giant or ironclad watermelon; also seed from specimen which weighed 72½ pounds.

Mrs. W. H. Post: Two jars pickles, four jars fruit, wheat and barley.

W. L. Overhiser: Salt Lake club wheat, barley, oats and corn.

Mr. Middlekoff, Linden: Specimens giant sunflowers.

C. V. Thompson: Four white cucumbers, one Hercules club gourd, and garlic.

Mrs. James Marsh: Seeding clingstone peach.

Mrs. Pickings, of Lodi, a lady 82 years of age, contributed a bed-quilt, which is one of 18 which she pieced during the past year.

Mrs. E. Williams: Two samples green corn, field beans and two varieties squash.

A. J. Woods: Peaches, two varieties; apples, five varieties; pears, three varieties, and Hungarian prune.

Mrs. A. J. Woods: Bag carpet, one bed-spread, one jar buckwheat and one of pop corn.

Crown Mills, Stockton: Specimens of flour and cornmeal.

Sperry's Mills, Stockton: Samples of wheat, rye, flour and Germea.

Stockton Broom Factory (A. Hemingway): Eight samples brooms.

Norman E. Alling: Sample of club wheat in sheaf.

Mrs. N. E. Alling: Box of dried figs.

Miss Annie Smythe: Six glasses of apple jelly.

Mrs. J. H. Lander: Six glasses apple jelly.

Mrs. Charles Merrill: Eighteen glasses jelly in variety.

Mrs. W. L. Overhiser: Five glasses jelly, seven varieties seeds, six jars canned fruit, flowers and grasses.

Mrs. S. P. Sabin: Samples of orange cling peaches.

Mrs. E. M. Stowe: Cut flowers.

Mrs. E. P. Cogswell, Bellota: Three varieties corn.

Mrs. Boisellier, Stockton: Specimen of beeswax.

A. P. Buell, Stockton Box Factory: Case of 12 boxes.

J. M. Beecher: Six miles from Stockton, east—samples of white wheat.

Miss Sadie Russell, Linden: Log cabin quilt containing 5411 pieces; elegant crazy quilt.

Mrs. J. D. Utt: Four pieces point lace.

Miss Eva Utt: Three pieces point lace.

Mrs. W. C. Ramsey: Two embroidered picture frames, lambrequin, table scarf embroidered on plush.

Mrs. Alex. Chalmers, Stockton: Crocheted and couched specimens of fancy work.

Miss Eva Phillips: Wheat figures for decorations.

Jim Wah: China squash, seeds and green beans.

Stockton Paper Mills: Five samples in bales.

H. C. Southworth: Two samples White Australian wheat.

P. Fitzgerald: White Australian wheat.

W. J. Gray, Linden: Sample white wheat.

T. E. Ketchum, Linden: Barley and wheat thrashed and in sheaf, superior White Australian; three samples of pears, two of apples.

Bachman & Brant: Fine display of chicory—seed, root, dried, parched and ground fine and coarse.

Minnie Shippee: Plaque of oil painting.

C. O. Burns, China Hall, Stockton: Two jars cherries.

F. R. Elliott: Early Spanish corn, sweet corn, broom corn, sheaf of white Australian wheat, seven varieties of wheat, namely, Propo, Club, Chili, White Australian, Red Chaff and sack Tuscan wheat.

Mrs. R. N. Willing: A specimen hat.

Miss Sadie Hemphill: Point-lace work.

J. House: Sample Siberian crab-apples.

Mrs. E. Sabin: Two floor mats, dusting bag, stocking bag, six jars mixed pickles, log-cabin quilt, and jar pickled figs.

Robert Howes, Stockton: One sample of barberies on branch.

Mrs. J. Nelson: One box pressed figs, 1 jar dried

Mrs. F. W. Langhaust: Embroidered table cover.

Miss Alida Allison: One slumber robe.

Miss Nellie Hutchins: Sofa pillow.

Mrs. J. M. Fowler: Corn-husk mat.

Mrs. C. Allison: Jar of pickled figs, two samples of almonds, dried grasses.

James Talmadge: Jar of castor beans and a growing plant of same.

Mrs. E. S. Sabin: Jar sunflower seeds and one candied orange peel.

Mrs. J. Bunch: Two drawn worsted mats.

apples, 1 jar cherry plums, 2 jars grapes and pears mixed, 1 jar crab-apples, 1 jar applesauce, 2 jars pear pickles, 2 jars purple plums, 1 jar apricots of 1884, 1 plate pomegranates.

Mrs. E. J. McIntosh: Hair wreath, seed wreath, can mutton tallow; a miniature ranch, prepared by Mrs. E. J. McIntosh and Mrs. E. G. Williams, of Woodbridge.

A. J. Nelson: Sample of wheat.

Daniel Sheen: Squashes and samples of sweet potatoes, box of Mohomic potatoes.

John E. Thompson, Woodbridge: Sample of beets, sample of quinces, box of grapes, two varieties of Egyptian corn.

E. Fiske: Two samples of wheat (Australian and Propo), one of barley, two of corn, sample white figs, plate of pears, two jars almonds, one of peas, one of dried figs, watermelon seeds, bottle white grape vinegar.

Henry Beckman: Sample Snowflake wheat.

H. W. Cowell: Sample of rye.

Mrs. Dustin: Jar soft soap, dried grasses, samples wheat and three samples seed.

Mrs. Eva Toni: An Indian bed-quilt.

Mrs. Henry Beckman: A slumber robe.

Miss Mabel White: A silk bed-quilt.

Mrs. McAfee: Original Indian corn, (husk on each kernel,) sorghum seed, Egyptian cora.

E. Thorp: Sample broomcorn.

Mr. Emde: Sample of tobacco and of red pepper.

G. P. Martin: Cotton plant and hemp plant.

C. P. Allison: One sheaf of oats.

James A. Anderson: Sixteen nursery trees, eight varieties of fruit, two varieties of peaches (Salt Lake, Chung and Salway).

Joseph Putnam: Eight varieties apples, seven varieties pears, two varieties of peaches, and a bale of hops.

S. C. Waters: Sample of tomatoes.

T. Clements: Sample of tall corn and sample of hops on pole.

Mrs. E. G. Williams: Jar of figs, two jars of prunes, one jar of pears, one jar of plums, two jars of almonds, one sample of niacreme work, sample of beardless barley, sample of Egyptian seven-headed wheat, and one jar of black walnuts.

Andrew Meyers: Sample of bald barley.

C. P. Munson: Sample of wheat.

Wm. Young: Sample of wheat.

Mrs. Gerrard: Sample of wheat, one sample of barley, and an embroidered table cover.

George Hogan: Samples of wheat and corn.

J. F. Stafford: Sample of wheat.

Samuel Woodruff: Samples of corn and barley.

C. Bainer: Two boxes grapes (four varieties), and sample of pomegranate.

J. D. Huffman: Seventeen varieties of native grasses and five samples of wheat.

George Houskins: Sample Pride of Butte wheat.

## Smaller Exhibits from Several Counties.

There are in the pavilion a number of small but very interesting exhibits representing certain counties, but not brought in as comprehensive displays. They are the thoughtful contributions of enterprising residents, who, rather than have their counties unnamed, have brought such materials as they could command on the moment.

There is from Nevada county a small collection of fruits, including pears, peaches and plums. Near by is a collection of ores from the Nevada county mines, which is rich and interesting. Chunks of gold-bearing quartz, said to be worth \$2000 each, lie around like two-bit pumpkins. In a case there are boxes of native gold, nor more protected than the dried peaches in the other county exhibits. Of course, such an exhibit has plenty of visitors, and credit for it is due to Senator A. Walrath, of Nevada City.

Shasta county is represented by a small but good fruit collection, sent by F. W. Fish, of Stillwater, Shasta county. There are also large onions—fine specimens. An interesting special feature is the season's growth of a grapevine, the main branch being 22 feet long and the laterals added make a season's growth of 165 feet, without irrigation.

Sonoma county is not officially represented in the pavilion, but W. J. Hunt, of Sebastopol, has a fine display of dried fruit, prepared by his Improved Alden drier, which is as handsome as one can find anywhere.

Moses Wick gives Butte county an entrance by his exhibit of a fine sack of Propo wheat.

Colusa county's wheat crop is represented by good samples of Sonora and Nonpareil by E. G. Morton.

B. N. Bagbey makes the visitor wish there was a general display from Sutter county, because of the excellence of the Indian corn and broom corn which he brings from his ranch at Kirkville.

Yolo county has also a vexing hint of its wealth of production in some grand specimens of King Philip corn in ear and on the stalk; also evergreen millet eight feet high, from the ranch of John G. Silva, on the Yolo side of the Sacramento river.



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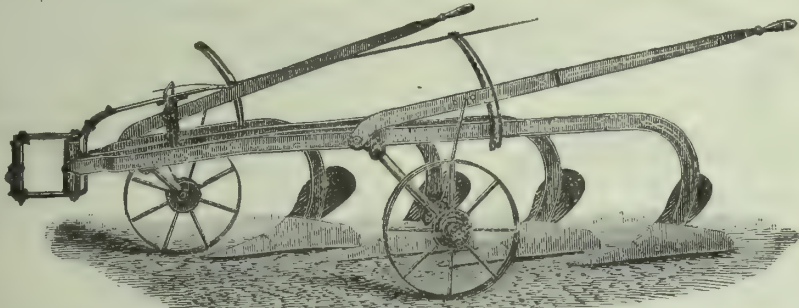
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Manufactured by the BENICIA AGRICULTURAL WORKS,

Are the only Successful BENCH BEAM GANG PLOWS made with STEEL BEAMS, STEEL BOTTOMS and CAST-STEEL SHARES. They have HIGH BEAMS, WIDE TIRE, WROUGHT IRON CARRYING WHEELS.

They are so constructed that there is ample space under the beams and between the bottoms to let the stubble and weeds freely pass through. "Perfect" Gang Plows are made with either three or four bottoms or plows, each cutting eight or ten inches, securely ganged together, making a Gang Plow which is unequalled for Lightness of Draft, strength, durability, and Good Plowing Qualities, and is in reality a "Perfect" Gang Plow.



LANDSIDE VIEW OF "PERFECT" GANG PLOW.

Hubs and Boxes of carrying wheels are detachable, and when worn out can easily be removed to put new ones in their place.

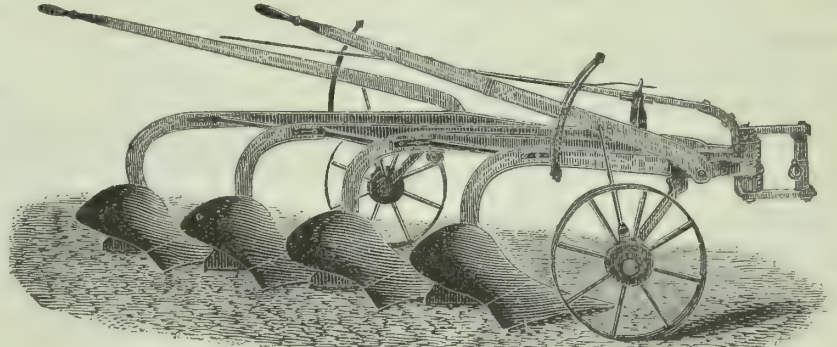
Each carrying wheel is provided with its own Regulating Lever by which the driver can easily adjust either side of the plow to make it run level and true.

The Regulating Levers are very long and securely bolted to the steel frame of the plow, and coupled to the crank axles by a heavy piece of round iron, which is adjustable to the regulating levers at three different holes, enabling the driver to adjust his plow so that he can handle it with the greatest ease.

The "Perfect" Gang Plow is also provided with a long Land Gauge Lever, by which the driver can adjust his plow to take more or less land as he may desire.

There is no danger of breaking the crank axles of the "Perfect" Gang Plows, as they are made of heavy 1 1/2-inch round iron, and are fastened to the frame by wrought iron brackets.

If you contemplate purchasing a Gang Plow, don't fail to call and see the "Perfect" Gang before you purchase.



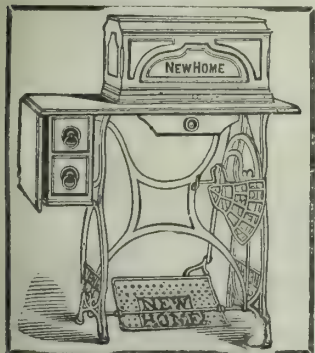
MOLDBOARD VIEW OF "PERFECT" GANG PLOW.

The "Perfect" Gang Plow will plow in any soil, as the bottoms are shaped after patterns that have been found to work equally well in adobe and free soils. The moldboards are made of the best iron center steel, chemically hardened, and well polished.

### PRICE LIST.

No. 1-3-Gang, 8-inch, with set of extra shares.....	\$75 00
No. 2-3-Gang, 10-inch, with set of extra shares.....	80 00
No. 3-4-Gang, 8-inch, with set of extra shares.....	80 00
No. 4-4-Gang, 10-inch, with set of extra shares.....	90 00

The "Perfect" Gang Plows are lighter draft, stronger, more durable, and do better plowing than any wood frame Bench Beam (commonly called "Stockton Gangs") Gang Plow ever manufactured.



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Do you want a sure, safe and reliable Cough Syrup? Are you troubled with a Cough, Cold, Bronchitis or Lung Complaint? Do your Babies keep you awake all night with Hacking Coughs, Colds in the Head, etc. Do you want something reliable in the house to meet these emergencies? We answer to all: "Go to your Druggist and get a Bottle of the Arkansas Cough Syrup, and be troubled no more." Price, 50 cents per Bottle!

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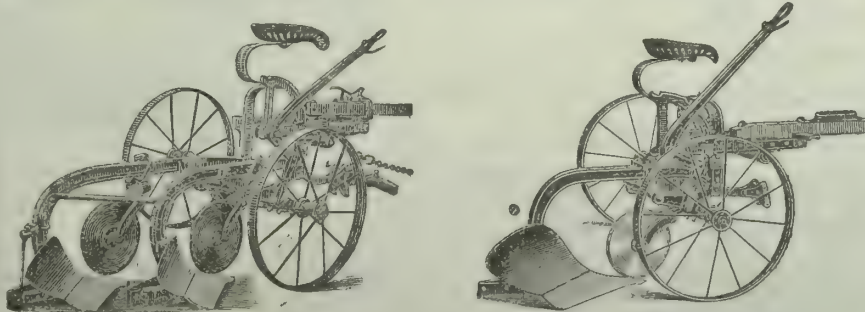
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## The Jay Eye See Sulky & Gang Plows KING OF THE TURF.

Steel Beams, Steel Wheels, Steel Frames,



And best of Hardened Steel Plow Bottoms, with Land Gauge Attachment.

The J. I. C. Gang with 2, 12, or 14-inch bottoms, weighs only 600 pounds. The J. I. C. Sulky, with 14 or 16-inch bottoms, only 400 pounds. It cannot be strained or broken. It is the easiest managed, because it is furnished with a Power Lift and the lowering and raising of the plows is done by the horses.

ORDER A J. I. C. ON TRIAL AND BE CONVINCED.

Prices same as for Iron Frame Plows.

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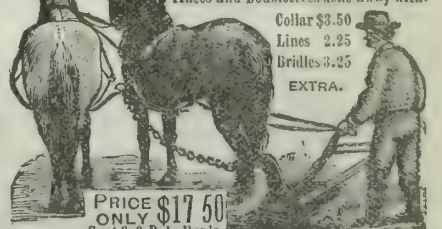
On the new extension of Southern Pacific Railroad, on the lands belonging to R. T. BUELL, Esq., near Los Alamos, Santa Barbara county, Cal. Parties desiring to visit the property now, can go via San Luis Obispo and take the cars from thence to Los Alamos, thence by stage to the Colony. 20,000 acres of the best lands in California, subdivided into 20, 40 and 80-acre farms; \$20 to \$30 per acre. INTERNATIONAL IMMIGRANT UNION, 401 California St., San Francisco.

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SINGLE, DOUBLE, TRIPLE AND QUADRUPE FURROW.

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The Latest and Greatest Improvement of the Age in Plows. One Season's Experience has Thoroughly Demonstrated their Adaptability to the Various Soils of California.

UNIVERSALLY PRONOUNCED AN UNQUALIFIED SUCCESS!

For Lightness of Draft, Ease of Management, Strength, Durability, and Quality of Work,

## THE "NEW DEAL" IS WITHOUT A PARALLEL.

It is much neater in appearance than any wood frame plow, and weighs some 300 pounds less than any other Gang Plow sold in California. The beams are made entirely of steel, which give at once lightness, great strength, and durability. Having no tongue, and the team being hitched close to the work, it can be run as close to the fence as an ordinary single plow.

FOUR GANG.



One of the greatest points in favor of the "New Deal" Plows is their **ECONOMY**, an important feature in these times. They are not expensive, and the amount and quality of work that can be done with them simply cannot be approached by any other plows manufactured. The "New Deal" is no untried experiment, but the outgrowth of years of study and observation, with a full appreciation of the demands of the times, and fully approved by the most rigid tests.

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**DOUBLE CRANK AXLE**, making the plows self-leveling, at any and all depths, requiring not a single lever to raise and lower the plow.

**UNIQUE WINGING DEVICE**, which, by changing one pin, wings the shares up or down.

3-Gang, 8-inch.....\$75 00  
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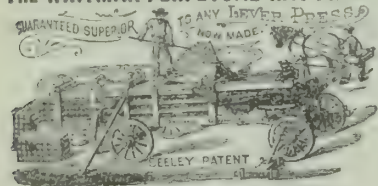
4-Gang, 8-inch.....\$80 00  
4-Gang, 10-inch.....90 00

All with Extra Points.

Also Agents for the **JOHN DEERE MOLINE GANG, SULKY and SINGLE PLOWS, SOUTH BEND CHILLED PLOWS, SCHUTTLE FARM and SPRING WAGONS, KEYSTONE DISC HARROWS**, all kinds of Large and Small Farming Implements, **HOWE SCALES**, Etc.

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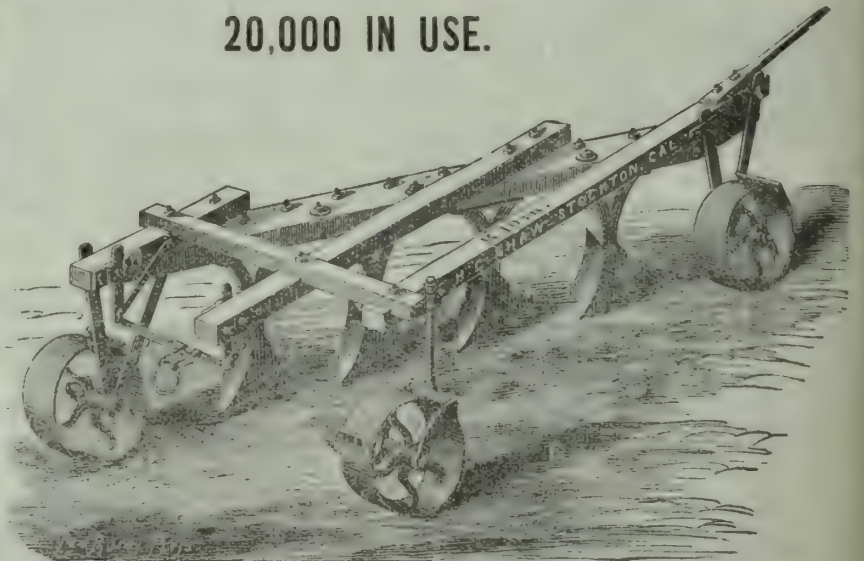
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## H. C. SHAW PLOW WORKS,

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**STOCKTON, - - CALIFORNIA.**



## The Farmers and Dairymen at Philadelphia.

A circular just received from Mr. Reall, president of the American Agricultural and Dairy Association, says that the National Convention of that body, to be held at the Continental hotel, Philadelphia, Sept. 15th and 16th, promises to be largely attended by leading men in agriculture and kindred pursuits from all sections of the Union, and the proceedings will be of much interest. It will be a meeting of congratulation over the success of the oleomargarine law, and practical steps will be taken to secure the re-election of the friends of the measure who served in the last Congress; also, to organize for the protection and advancement of agriculture in all its branches in all sections of the country.

We learn from the *American Dairymen* of the 2d inst. that Mr. Reall visited President Cleveland in the Adirondack mountains and invited him to attend the convention. As a representative of the great agricultural industry of the country, Mr. Reall was very kindly received by the President, who showed a disposition to be present if possible.

Among others whose attendance is expected are Hon. Wm. Mahone, of Va.; Hon. C. E. Atkinson, M. C., and Daniel Ermentrout, M. C., from Penn.; Hon. Columbus Delano, ex-Secretary of the Interior, Ohio; Hon. Wm. Weld, Editor London, Can., *Advocate*; Alex. Charles, Editor Iowa *Farmer*; Judge Cutter, O.; Hon. J. J. Stranahan, O.; Francis B. Thurber, and James H. Seymour, N. Y.; Hon. S. S. Caldwell, Penn.; ex-Gov. Price, of N. J.; Hon. Wm. L. Scott, of Penn.; Hon. Warner Miller, N. Y.; Hon. J. B. Everhart, M. C., of Penn.; Hon. F. C. Bunnell, M. C., of Penn.; Hon. James Buchanan, M. C., N. J.; Hon. A. C. Thompson, M. C., O.; Hon. W. F. Beasley, of Baltimore, and Hon. Beriah Wilkins, of O. All in sympathy with the objects of the association are invited to attend the convention, and will be admitted to all its privileges.

## W. R. Strong & Co.'s Display.

The exhibit of this enterprising Sacramento firm of nurserymen, seedsmen and fruit-shippers occupied a prominent place at the entrance to Horticultural hall. The contents of the booth were many and varied. There was a fine collection of nuts and seeds of all kinds—home-grown and imported; a display of fruits and vegetables grown upon farms in Placer and Sacramento counties belonging to the firm. We noticed especially a large collection of almonds, including two fine seedlings of Senator Roulter. Prominent in the exhibit is a photograph of the first full train of California deciduous fruits ever sent East—an undertaking effected largely through the enterprise of Strong & Co. On one morning of the fair we had a pleasant ride with Robert Williamson to one of the firm's farms, occupying a commanding site about two miles from the city. Here we found 130 acres in a fine state of cultivation, with 90 acres closely set in nursery, and with a large supply of vigorous, healthy trees for this year's trade. They have a Heald centrifugal pump which we saw throwing 1000 gallons of water per minute from an 8 inch bored well, 110 feet deep. Mr. Williamson has just built himself a fine residence on this farm.

## Foot-hill Lands.

While at the State Fair we heard from many parties of the gratifying advancement in the values of agricultural lands. Mr. J. F. Madden, of Newcastle, assured us that lands which were bought of the railway company in 1883, at \$3 per acre, are now worth \$25 to \$50 per acre—wild land upon which no improvements have been made. Much of the bearing orchards and vineyards are paying a good interest on a valuation of \$750 per acre. Sometimes good land can be had cheap owing to the necessity of immediate sales. Such a case, we are informed, is that announced in our advertising columns by S. C. Osborn, of Applegate, Placer county, who has to sell a certain amount to close out an estate, and we are told that only enough will be sold to meet immediate obligations. It seems worth looking into by those who are thinking of foot-hill lands.

## Our Agents.

OUR FRIENDS can do much in aid of our paper and the cause of practical knowledge and science, by assisting Agents in their labors of canvassing, by lending their influence and encouraging favors. We intend to send none but worthy men.

JARED C. HOAG—California.  
G. W. INGALLS—Arizona.  
E. L. RICHARDS—San Diego Co.  
R. G. HUSTON—Montana.  
GEO. McDOWELL—Santa Clara Co.  
FRANK W. SMITH—Utah and Colorado.  
M. S. PRIME—Marin Co.  
W. J. TULLIS—Humboldt Co.

## Don't Fail to Write.

Should this paper be received by any subscriber who does not want it, or beyond the time he intends to pay for it, let him not fail to write us direct to stop it. A postal card (costing one cent only) will suffice. We will not knowingly send the paper to anyone who does not wish it, but if it is continued, through the failure of the subscriber to notify us to discontinue it, or some irresponsible party requested to stop it, we shall positively demand payment for the time it is sent. LOOK CAREFULLY AT THE LABEL ON YOUR PAPER.

## Inducements to Subscribers.


To favor subscribers to this paper, and to induce new patrons to try our publication, we will furnish, to those who pay fully one year in advance of date, if REQUESTED, the following articles (while this notice continues), at the very greatly reduced figures named at the right:

- 1.—The Agricultural Features of California, by Prof. Hilgard, 188 large pages, illustrated, cloth, with colored maps (full price \$1).....\$0 25
- 2.—World's Encyclopedia, 794 pages, 1250 illustrations; (exceedingly valuable).....50
- 3.—Dewey's Patent Elastic Binder (cloth cover), name of this paper stamped in gilt.....50
- 4.—Niles' Stock and Poultry Book for Pacific Coast, pamphlet, 120 pages, illustrated.....25
- 5.—Kendall's Treatise on the Horse and Diseases, 89 pages, instructive illustrations.....05
- 6.—To New Subscribers, 12 select back Nos. of the RURAL PRESS, "good as new".....Free
- 7.—Any of Harper's, Frank Leslie's and most other first-class U. S. periodicals, 15 per ct. off regular rates.
- 8.—Pacific Coast and Eastern Dailies, Books and Periodicals, except special publications, we can usually give 10 to 15 per cent off advertised retail rates.
- 9.—March of Empire, by Mallie Stafford.....25
- 10.—Life Among the Apaches, 322 pages, stiff cloth.....25
- 11.—\$1 worth of choice seeds, to be selected from a list of 107 flower and 82 garden seeds, as previously published, or which list we will send on application.....25
- 12.—Dewey's Pat. Newspaper Fileholder (18 to 36 in.).....05
- 13.—European Vines Described, 63 pages.....05
- 14.—Webster's Dictionary, 634 pages, with 1500 illustrations; very handy and reliable.....50
- 15.—Architecture Simplified, 60 pages.....15
- 16.—Beautiful Poetic Review, entertaining and instructive, 35 pages (a handsome and pleasing present).....25

NOTE.—The cash must accompany all orders. Address this office, No. 252 Market St., S. F. Send for any further information desired.

PERCHERONS FOR JAPAN.—A carload of Norman Percheron horses, from Danham's Oak Lawn Farm in Illinois, passed Sacramento on the 9th, bound for Japan.

**Colic in Horses & Cattle**  
also  
**Wind-galls & Sore cords**  
are  
**Cured by Perry Davis' Pain-Killer**



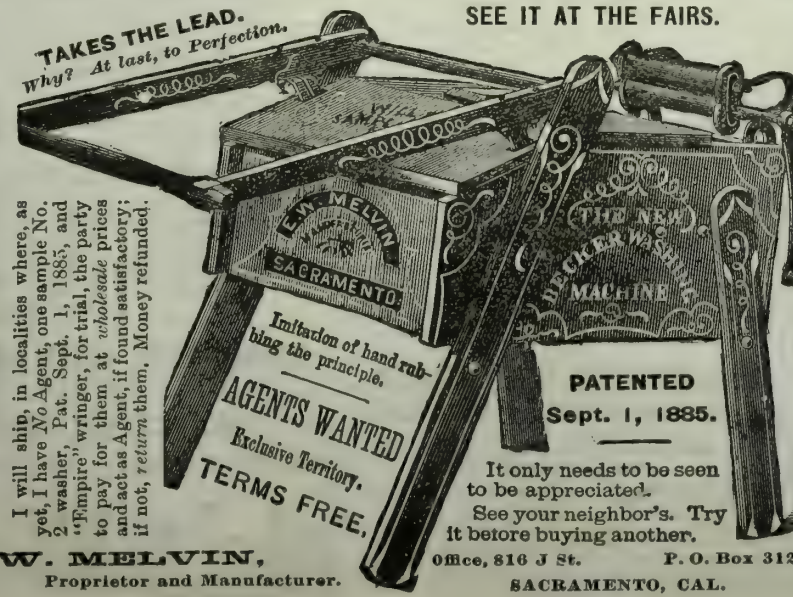
Mr. W. H. WEST, of Glen's Falls, N. Y., who has had considerable experience with canal horses, writes as follows: "I feel it a duty I owe to send you my testimony of the great healing properties of Perry Davis' Pain Killer. Have used it continually for the past eight years, and for my canal horses have found nothing equal to it. It is the only thing to use on horses that are roading continually, for wind galls and sore cords. It is the best medicine ever made for a horse, used either internally or externally."

**Perry Davis & Son, Prop?**  
Providence R. I.

N. B.—For colic in horses, half small bottle in a half pint of warm water or milk.

## SPECIAL OFFER!

**GOOD FOR 30 DAYS.**  
**TAKES THE LEAD.**  
Why? At last, to Perfection.



IMITATION OF HAND RUB-BING THE PRINCIPLE.  
**AGENTS WANTED**  
Exclusive Territory.  
**TERMS FREE.**

**E. W. MELVIN,**  
Proprietor and Manufacturer.

## Complimentary Samples.

Persons receiving this paper marked are requested to examine its contents, terms of subscription, and give it their own patronage, and, as far as practicable, aid in circulating the journal, and making its value more widely known to others, and extending its influence in the cause it faithfully serves. Subscription rate, \$3 a year. Extra copies mailed for 10 cents, if ordered soon enough. If already a subscriber please show the paper to others.

## Cheap Money for Farmers.

Farmers in this State will be glad to learn that they can borrow on mortgage any amount, from \$5000 to \$500,000, from S. D. Hovey, 330 Pine St., San Francisco, at 6 to 7 per cent and taxes. \*\*

## HALL'S SARSAPARILLA

Cures all Diseases originating from a disordered state of the BLOOD or LIVER. Rheumatism, Neuralgia, Boils, Blotches, Pimples, Scrofula, Tumors, Salt Rheum and Mercurial Pains readily yield to its purifying properties. It leaves the Blood pure, the Liver and Kidneys healthy and the Complexion bright and clear.

**J. R. CATES & CO. PROPRIETORS,**  
417 Sansome St. San Francisco

## CHAMBERLIN AUTOMATIC

Machine-Made

"STANDARD"

SHOT-GUN

CARTRIDGES.

Sold by all Dealers  
in Ammunition.

**DEWEY & CO**  
**PATENT**  
**SOLICITORS.**  
252 MARKET ST. S. F.  
ELEVATOR 12 FRONT ST. S. F.

## TAPE WORM

REMOVED alive in two hours, with head complete, or no charges. More than 1000 Tape Worms removed at my office. Send for circular giving symptoms. Medicine sent by express C. O. D. for \$10. PROF. SHIPLEY, 930 Market St., near Baldwin Hotel, San Francisco, Cal.

## Situation Wanted.

A married man, recently from the East, wishes a situation as coachman or to do general work. Understands management of horses thoroughly. Best of references given. Address, JOHN CRANDALL, Davisville, Cal.

## SEE IT AT THE FAIRS.

## ERIE BLACKBERRY.



Hardy as the hardest, large as the largest, unsurpassed in productiveness, of good quality and Early. Just what everybody should have.

**MONMOUTH STRAW BERRY**  
an improved Crescent, having a perfect blossom, fifty per cent. larger, earlier, firmer, of better quality, the same bright color, great productiveness and everlasting foliage of the Crescent. **Golden Queen Raspberry**, Lawson-Comet Pear, Japan

Plums and a host of other valuable novelties with all the old varieties of both Orchard and Small Fruits worth growing. 200,000 Peach Trees, 75,000 Apple Trees, the largest stock of Blackberries in the U.S. and an enormous stock of Grape Vines. Price List—also full descriptions of novelties free; GUIDE TO FRUIT CULTURE 10c. ORCHARD & GARDEN, the best horticultural journal 50c. \*Yt. J. T. LOVETT, Little Silver, N. J.

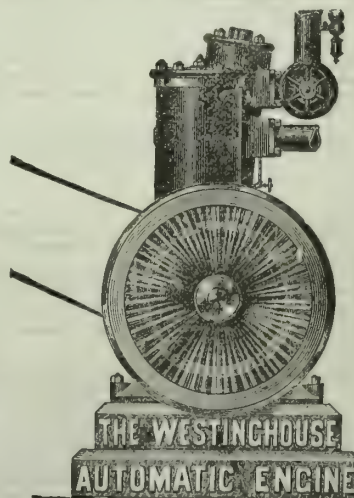
## How to Eradicate from the Soil Mustard, Tar-weed, Cockle, Wild Oats, Etc.

Some Practical Words from a Practical Pacific Coast Farmer. The Farmers of the Pacific Coast Lost Many Thousands of Dollars on the Crop of 1886. Mustard, Tar-weed, Wild Oats and the Numerous Other Weeds do it.

Our present system of summer-fallow cultivates and increases, but does not destroy, these terrible pests. They increase year by year more than 500 fold. It means ruin to the farmers and bankruptcy to every material interest of the country. Can we destroy these weeds and avert this fearful calamity? He who can tell us how to do this confers a great favor on the farmers of this country worth millions of dollars. Well, here now is the benefit without charging a cent for it.

Soon after harvest start an *Acme* harrow through the stubble. Set it to cut three inches deep. One section, three horses and a driver will cut 15 acres a day. Two sections and six horses will cut 30 acres a day. The stubble will not interfere, as the *Acme* never chokes up. One time passing over it will cover all the seed, as the *Acme* turns every particle of the soil. The seed being covered insures its germination with the fall rains, it grows all winter, and in the spring when you summer-fallow you turn the weed, instead of the seed, under and you kill all that has vegetated. Follow this course a few seasons and you have the land cleansed of these fearful pests. The *Acme* harrow will soon supersede all other harrows. In fact, we have no use whatever even now for other harrows except to harrow growing grain. Take your summer-fallow. Set your *Acme* at full depth. It will cut five inches deep, is better than a second plowing, and puts the ground in a splendid condition for seeding. Take sod; plow four inches deep, mash down with roller, pass over both ways with an *Acme*, and you have a seed-bed like a garden. No tool ever invented will prepare ground for wheat, barley or oats, timothy or alfalfa, half so well as the *Acme*. On our mountain and other lands where wild oats and cockle prevail, and where the seed lies on the ground after harvest, if you wish to cultivate the land every year, run the *Acme* over the stubble after harvest, all that seed will come up in the fall and most of it can be killed by your spring plowing.

I have penned these reflections for the good of my fellow-farmers. They are the results of close observation and of actual trial. I firmly believe they are correct and that trial will satisfy the farmer.



**1,300 Engines now in use.**  
**40,000 Horse Power now running.**  
**Sales 2,000 H. P. per month.**

Send for Illustrated Circular and Reference List.

## PARKE & LACY,

Sole Agents for Pacific Coast & Territories  
21 and 23 Fremont St., San Francisco.

## California Inventors

Should consult DEWEY & CO. AMERICAN AND FOREIGN PATENT SOLICITORS, for obtaining Patents and Caveats. Established in 1860. Their long experience as journalists and large practice as Patent attorneys enables them to offer Pacific Coast Inventors for better service than they can obtain elsewhere. Send for free circulars of information. Office of the MINING AND SCIENTIFIC PRESS and PACIFIC RURAL PRESS, No. 252 Market St., San Francisco, Elevator, 12 Front St.



## Breeders' Directory.

Six lines or less in this Directory at 50c per line per month.

### POULTRY.

O. J. ALBEE, Santa Clara. Thoroughbred poultry.  
E. C. CLAPP, South Pasadena, Cal. Light Brahmas and Plymouth Rocks. No fowls for sale. Eggs from first-class stock, after Nov. 1st.

E. H. FREEMAN, Santa Clara, Cal., importer and breeder of Wyandottes, Langshans, L. Brahmas, P. Coshins, B. and W. Leghorns, Bl. Br. R. G. Bantams.

AXFORD INCUBATOR—Best in the world; never beaten in competition; from \$37.50 to \$50.00. Pekin and Rouen Ducks; best in the State; \$7.50 per trio, or \$2.00 each per doz. Eggs, \$3.00 per doz. For particulars address I. P. Clark, Mayfield, Cal.

CALIFORNIA POULTRY FARM, Stockton, Cal. Send 2-cent stamp for Illustrated Catalogue.

W. O. DAMON, Napa, Wyandottes, W. and B. Leghorns, P. Rocks, L. Brahmas, Pekin Ducks.

MRS. M. E. NEWHALL, San Jose. White and Brown Leghorns, Langshans, Plymouth Rocks, Light Brahmas, Pekin Ducks and Bronze Turkeys.

GEO. B. BAYLEY, 1317 Castro St., Oakland, Importer and Breeder of all the best known and most profitable Land and Water Fowls. Publisher of the Pacific Coast Poultryers' Hand Book and Guide. Price 40 cents. Send 2-cent stamp for Illustrated Circular.

JAS. T. BROWN, 18 Georgia St., Los Angeles, Cal. Breeder of Thoroughbred Poultry of the leading varieties. Send for circular and price list.

T. D. MORRIS, Sonoma, Cal. Tuolouse and Embden Geese, Bronze and W. Holland Turkeys, and all leading varieties of Thoroughbred Poultry.

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D. H. EVERETT, 1616 Larkin St., S. F., importer and breeder of Thoroughbred Langshans and Wyandottes.

J. N. LUND, Box 116, Oakland, Cal. Wyandottes, Langshans, L. Brahmas, P. Rocks, B. Leghorns, B. B. R. Game Bantams, T. Guineas, Hom'g Antwerp Pigeons.

D. D. BRIGGS, Los Gatos, Cal. Fancy Poultry breeder

### HORSES AND CATTLE.

T. P. A. WILLIAMS, Columbia, Boone Co., Mo., breeder and importer of Thoroughbred Horses.

ONTARE RANCH, three miles west of Santa Barbara, Cal. Coach Horses, Draft Horses, Trotting Bred Horses and pure Holstein-Friesian Cattle. Francis T. Underhill, Proprietor; C. F. Swan, Manager.

LEONARD BROS., Mt. Leonard, Mo., importers and breeders of Galloway, Aberdeen-Angus and Shorthorn cattle.

M. D. HOPKINS, Petaluma, importer of Thoroughbred Shorthorns and Red Poll cattle for milking strains.

HYDE & MOORE, Visalia, importers and breeders of Shorthorn cattle. Young stock for sale.

J. A. BREWER, Centerville, Alameda County, Cal. Shorthorns and Grades. Young stock for sale.

R. J. MERKELEY, Sacramento, breeder of Norman, Percheron Horses and thoroughbred Shorthorn Cattle.

Estate of M. E. BRADLEY, San Jose, Cal., breeder of recorded thoroughbred Shorthorn Cattle and Berkshire Hogs. A choice lot of young stock for sale.

E. W. STEELE, San Luis Obispo, Cal., breeder of Thoroughbred Holstein and Jersey Cattle.

J. R. ROSE, Lakeville, Sonoma Co., Cal., breeder of Thoroughbred Devons, Roadsters and Draft Horses.

SETH COOK, Danville, "Cook Farm," Contra Costa Co., breeder of Aberdeen Angus, Galloways and Devons (Registered). Young stock for sale.

H. S. SARGENT, Stockton. Thoroughbred Jersey Cattle, and Poland-China Hogs from imported stock.

PETER SAGE & SON, Lick House, San Francisco, Cal. Importers and Breeders, for past 14 years, of every variety of Cattle, Horses, Sheep and Hogs.

WILLIAM NILES, Los Angeles, Cal. Thoroughbred Poultry, Cattle and Hogs. Write for circular.

OOTATE RANCH BREEDING FARM, Page's Station, S. F. & N. P. R. R. P. O., Penn's Grove, Sonoma Co., Cal. Willard Page, Manager. Breeders of Short Horn Cattle, English Draft Horses, Spanish Merino Sheep and Berkshire Swine.

THE BEST HERD OF JERSEYS, all A. J. C. C. registered, is owned by Henry Pierce, San Francisco.

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E. W. WOOLSEY & SON, Fulton, Sonoma Co., imp'rs & b'drs Thoroughbred Merino, & Jersey Cattle.

EASTON MILLS, Lakeville, Sonoma Co., thoroughbred Spanish Merino Sheep. Choice rams for sale.

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L. U. SHIPPEE, Stockton, Cal., importer and breeder of Spanish Merino Sheep, Durham Cattle, Red Duroc and Berkshire Swine. High graded Rams for sale.

JULIUS WEYAND, breeder of pure-blooded Angora Goats, Little Stony, Colusa Co., Cal.

KIRKPATRICK & WHITTAKER, Knight's Ferry, Cal., breeders of Merino Sheep. Rams for sale.

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## IMPORTANT!

That the public should know that for the past **FOURTEEN YEARS** our Sole Business has been, and now is, importing (**Over 100 Carloads**) and breeding improved Live Stock—Horses, Jacks, Short Horns, Ayrshires, and Jerseys (or Alderneys) and their grades; also, all the varieties of breeding Sheep and Hogs. We can supply any and all good animals that may be wanted, and at very reasonable prices and on convenient terms. Write or call on us. **PETER SAGE AND HOMER P. SAGE.**  
San Francisco, Cal., Oct. 22, 1884. **PETER SAGE & SON, Lick House, S. F.**



### Headquarters for all Varieties of FANCY CHICKENS,

DUCKS, TURKEYS, GEESE, PEACOCKS, Etc.

### EGGS FOR HATCHING

Publisher of "Niles' Pacific Coast Poultry and Stock Book," a new book on subjects connected with successful poultry and stock raising on the Pacific Coast. Price, 50 cents, post-paid. Inclose stamp for information.

ALSO BREEDER OF

### Jersey & Holstein Cattle, and Hogs.

Address, **WILLIAM NILES, Los Angeles, Cal.**

### MARTINEZ, } ALHAMBRA POULTRY YARDS { JASPER J. JONES

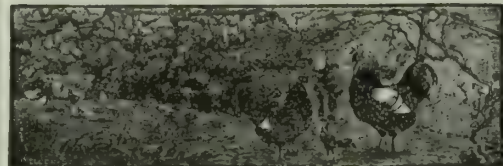
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Proprietor.

—BREEDER OF—

### HIGH-CLASS POULTRY.

Clean sweep on Plymouth Rock Chickens at Great California Poultry Show at San Francisco, Jan. 11th to 16th, 1886. The best is the cheapest. Illustrated Catalogue sent free on application; worth \$1. to any breeder of poultry. Send me your name on a Postal Card; 5000 copies of fine Illustrated Catalogue for free distribution.



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#### Thoroughbred JERSEY CATTLE For Sale.



BULLS—East Mameluke, A. J. C. C. No.; Demont, Millard, A. J. C. C. No.; Waterman, P. C. J. C. C. No. Cows, Heifers and Calves, all registered, or will be, in P. C. J. C. Club N. R., at reasonable prices. Write for what you want. No catalogues. Address **H. S. SARGENT, Stockton, Cal.**

#### Cattle and Horses for Sale.

The undersigned proposes to sell at AUCTION, during the SAN JOSE FAIR, which holds from September 27th to October 2d, a lot of

#### HIGH-GRADE HOLTSEIN BULLS.

I shall also offer for sale my

#### Thoroughbred Holstein Bull, Ansonia,

At the same time and place.

I also have for sale some

#### Fine Roadsters and well-bred Speedy Stallions,

That may now be seen on my farm. If not sold before they will also be offered at the San Jose Fair. W. L. Johnson has charge of my stock there.

EMILY D. KNOTT,

La Honda, San Mateo Co., Cal.

### FOR SALE.

#### HOLSTEIN-FRIESIAN CATTLE

FROM THE HERD OF

HON. LELAND STANFORD,

On his Ranch at Vina, Tehama County, Cal.

For prices and catalogue address

MR. ARIEL LATHROP,

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Cor. 4th and Townsend Sts.,

San Francisco, Cal.

#### FRENCH DRAFT STALLIONS,

Kentucky Jacks and Jennets,

Work Horses and Mules

FOR SALE.

Some of the Stallions were imported from Europe, others from Illinois, and some young ones were bred in California from imported stock. The prices will be less than animals of equal value can be purchased elsewhere.

Call at or address Patterson's Ranch, Hueneme, Ventura County, or Patterson's Ranch, Grayson, Stanislaus County, or for further information call on or address **JAMES M. PATTERSON, No. 8 Davis St., San Francisco.**

JOHN D. PATTERSON.

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Fruit Engravings, The finest, best and cheapest Photographs and Engravings of Fruits, Vegetables, Houses, Farms, Landscapes, etc., made by S. F. PHOTOGRAPHING CO., 859 Clay St., S. F.

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Recommended by Professors Hilgard, Cooke, etc.

#### Powdered Potash & Caustic Soda

KILLS GOPHERS, INSECTS, Etc.

Makes a pure Soap at a cost of \$1 per 125 lbs. Send for directions to **T. W. JACKSON & CO., 304 California St., S. F.**

#### Italian Sheep Wash.

EXTRACT OF TOBACCO

Free from Poison.

Cures the rough skin, the SCAB OF THE SHEEP. The BEST remedy known. Costs less than 1 cent per head for dipping. Reliable testimonials at our office. For particulars apply to **CHAS. DUSENBERG & CO., Sole Agents, No. 314 Sacramento St., San Francisco.**

CHAS. DUSENBERG & CO., Sole Agents, No. 314 Sacramento St., San Francisco.

#### Calvert's Carbolic

#### SHEEP WASH

\$2 per Gallon.

After dipping the Sheep, is useful for preserving wet hides, destroying the vine pest, and for wheat dressings and disinfecting purposes, etc. **T. W. JACKSON, S. F., Sole Agent for Pacific Coast.**

#### THOROUGHbred

#### SPANISH MERINO SHEEP.

Have taken the First Premiums at the State Fair for the last three years.

CHOICE

BUCKS AND EWES

FOR SALE.

ORDERS PROMPTLY FILLED. Address

FRANK BULLARD, Woodland, Cal.

#### LITTLE'S CHEMICAL

#### FLUID SHEEP DIP.

Price Reduced to

\$1.25

PER GALLON.

Twenty gallons of fluid mixed with cold water will make 1,200 gallons of Dip.

It is superior to all Dips and Dressings for SCAB in Sheep; is certain in effect; is easily mixed, and is applied in a cold state. Unlike sulphur or tobacco, or other poisonous Dips, it increases the growth of the wool, stimulates the fleece, and greatly adds to the yield. It destroys all vermin. It is efficacious for almost every disease (in internal and external) sheep are subject to.

FALKNER, BELL & CO.,

San Francisco, Cal.

#### STENCIL PLATES.

We have an arrangement by which we can furnish our readers with Stencil Plates for marking boxes, bales, and sacks of produce, at greatly reduced rates during the continuance of this notice in our columns. Address

DEWEY & CO.,

252 Market St., S. F.

#### ALMOND HULLERS

FOR SALE BY

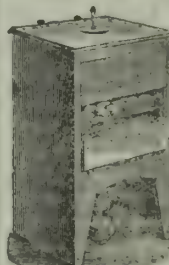
#### A. O. RIX,

Washington Corners, - California.

Are you using Wellington's Improved Egg Food for Poultry? If not, why not? Every Grocer, Druggist and Merchant Sells this Egg Food.

## INCUBATORS.

### THE PACIFIC INCUBATOR!



Awarded the Gold Medal at the State Fair, Sacramento, and at the Mechanics' Institute Fair of 1885 as the best machine made. It will hatch any kind of Eggs better than a Hen.

Send Stamp for Illustrated Circular to **GEORGE B. BAYLEY, Manufacturer, 1817 Castro St., Oakland, Cal.**

N. B.—A large line of Poultry Appliances, such as Wire Netting, Bone Mills, Chopping Machines, etc., for sale at the lowest rates. The Pacific Coast Poultryers' Hand Book and Guide; price 40c.



#### The Halsted

Incubator Co.

1011 Broadway,

Oakland, - Cal.

Price from \$20

up. Model Brooder

from \$5 up.

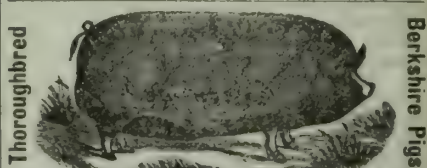
Thoroughbred

Poultry and Eggs.

Send for new Circulars

containing much valuable information.

### SWINE.



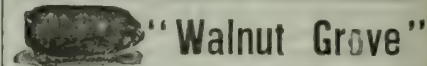
For Sale at our Farm at Mountain View.

From our Thoroughbred Berkshire Boar and Sow, which we imported from England in 1880. Pigs from imported Boar and Sow, \$25 each; from imported Boar and Thoroughbred Sow, \$10 to \$20. Our imported Pigs are as nice Pigs as there are in the State. Address

**I. J. TRUMAN, San Francisco, Cal.**



From imported stock direct from England, bred by Russell Swanwick, President Royal Agricultural College Farm, England, from the Celebrated STUMPY and SALLIE FAMILIES. Young stock always for sale at lowest possible rates. Address **ANDREW SMITH, Redwood, or 218 California St., S. F.**



#### Registered and POLAND-CHINA HERD

Thoroughbred.

My herd consists of the best strains that can be found. Stock all recorded in A. P. C. R. I have a fine lot of spring, summer and fall pigs, also a few choice yearling sows, for sale. Prices to suit the times.

**J. MELVIN, Davisville, Cal.**



ARE YOU USING

#### Wellington's Improved Egg Food For Poultry?

IF NOT, WHY NOT?

NOTE.—Eggs have now doubled in price and will continue to advance to 50 or 60 cents per dozen, and from this time on every one should feed this Egg Food in order to have plenty of Eggs to sell at those profitable prices.

#### Excelsior Improved Hot Water Incubator.

NOTE.—This is the only Incubator in the world which is run literally without any expense whatever, saving the full price of the machine every year used—in oil alone. We use NO LAMP, no oil, no heating apparatus with the machine, and guarantee it to run strictly to any degree.

#### EGG TESTER

The long-needed Tester just patented. Testing six eggs at a time, as quick as one at a time by the usual process, and six times as effectually.

Alfalfa, Grass, Clover, Vegetables, Flower, Fruit, and Seeds of every variety.

**B. F. WELLINGTON,** Proprietor, Inventor, and Importer and Dealer in Seeds, 425 Washington St., San Francisco, Cal.

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INCORPORATED 1883.

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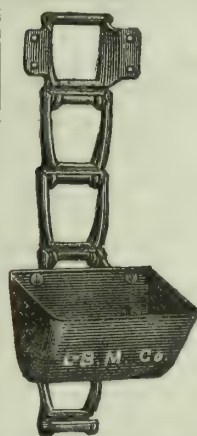
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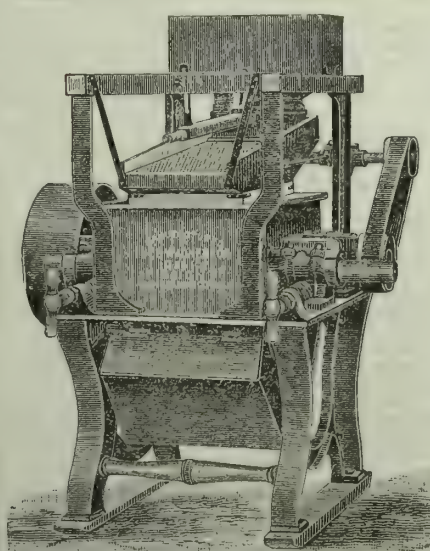
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**1000 ACRES**  
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## CHEAP LANDS FOR SALE.

**5680 Acres** of rolling adobe hills, situated in Tehama County. Well watered by numerous springs, etc. Several thousand acres suitable for cultivation. Good two-story House, Barn and other out-buildings. Seven miles of fine wire fence.  
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Also, a tract of 20,000 acres adjoining, can be bought at a great bargain. Title, U. S. Patent.  
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## CALIFORNIA STATE FAIR—1886. At Sacramento, Sept. 6th to 18th. TWO WEEKS.

**The Attention of the Farming Community** of this State is particularly called to the Liberal Awards, and advantages offered for

**COUNTY EXHIBITS.**  
The importance of an exhibit made by separate counties, showing the productive qualities of the various sections of our State, has become more apparent each year since the system was inaugurated by this Board. Recognizing the interest made manifest in the past by both the public and the exhibitors, through whose energy and enterprise valuable agricultural lands have been brought to the notice of the world, and counties with small populations have increased in a manifold degree, by reason of the producer having come forward with his products that were of such quality as to enable him to meet all competitors, the Board have deemed it proper to increase the premiums in this Department, and to that end have appropriated \$2000 to be distributed among the various counties making displays under the following provisions:  
To those who may have charge of the exhibits, we would call their attention to the fact that these awards will be made for the most extensive, perfect, and varied exhibit of Farm Products (exclusive of live stock) exhibited as a County Production. Thus it will be seen that it is to be wholly devoted to the products of the farms located in the county where the exhibit is made from, and does not include manufactured goods of any kind or character except those grown and raised in the county from whence the display comes.  
For the best display, as per explanation above, First premium of \$500, cash. The remaining exhibits shall receive premiums in proportion to their excellence, as compared with that receiving the First Premium. Competition to be between counties only. That is to say, that the entire exhibit made by one county must compete against the entire exhibit of another county. The premium awarded to each county exhibit will be paid to the committee in charge of said exhibit.  
The State Board of Agriculture earnestly desires the hearty co-operation of the various subordinate Granges throughout the State, in making this exhibition of California's products a success, whereby the varied products of different localities may be fully shown. We would ask the appointment of a committee from the Grange in each county to call upon and urge the patrons to make a display representing their respective counties.  
Address the Secretary at Sacramento for Premium Lists and other information.

**JESSE D. CARR, President.**  
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## S. H. MARKET REPORT

NOTE.—Our quotations are for Wednesday, not Saturday, the date the paper bears.

## Weekly Market Review.

## DOMESTIC PRODUCE, ETC.

SAN FRANCISCO, Sept. 15, 1886.

The past week an active demand ruled for both wheat and barley at advancing prices up to Tuesday, when a bearish feeling set in. In fruits and the general produce market a fair degree of activity prevailed, with slight fluctuations in prices. Semi-public cables received to-day are as follows:

LIVERPOOL, Sept. 15.—WHEAT—Cargoes off coast: Buyers have made a pause, which will be only temporary; cargo s on passage and for shipment: Buyers hold off, hoping to obtain some concession; Mark Lane, weaker; Cal. wheat, off coast, 34s 6d; Cal. wheat, just shipped, 35s; Cal. wheat, nearly due, 34s 6d; English country market, steady; French country market, quiet; Liverpool wheat, spot, very dull; Liverpool wheat, Cal., 6s 8½d to 6s 11½d; weather in England seems less settled.

## Foreign Review.

LONDON, Sept. 13.—The *Mark Lane Express* in its review of the British grain trade for the past week says: Owing to continued wet weather, it will be impossible to make any early delivery of sound native wheat. For this reason the market points to no such big drop in values as was expected during dry weather. Sales of English wheat during the past week were 31,538 quarters at 34s 5d, against 57,192 quarters at 31s 1d during the corresponding period of last year. Foreign wheat is steadily by bad weather. Trade was slow and tedious. Seven cargoes arrived; 2 were sold, 12 withdrawn and 6 remain—three Chilean, two Californian and one Oregon. Despite large arrivals, English wheat is firm, although slow of sale. Flour is in large supply, and a fraction cheaper. Grinding barley is 3d lower. Beans, peas and corn are unchanged. Oats are dull and 3d cheaper. Linseed is cheaper; Calcutta seed is quoted at 40s 6d, ex ship.

## New York Wheat Market.

NEW YORK, Sept. 11.—Wheat has been comparatively quiet. There have been reports of bad weather in Great Britain, and reports of a purpose to reduce the duty on wheat imported into France, but these had been slight and temporary influences in strengthening values. The export trade was sluggish in the early part of the week, but toward the latter part it improved to a moderate extent. Spot closed ½¢ lower; options, ½¢ lower and heavy, as follows: September, 86½¢; October, 87½¢; November, 89½¢; December, 90½¢; January, 92½¢; and May, 97½¢.

## London Wool Market.

LONDON, Sept. 14.—There was a good attendance at the wool sales to-day. Sales were spirited and prices maintained.

## Eastern Wool Markets.

BOSTON, Sept. 14.—Wool is active and higher. Ohio and Pennsylvania X fleeces, 33¢ lb; XX and XXX and above, 35¢ lb; Michigan X, 32¢. The stock of foreign wool is reduced and holders are very firm under the influence of strong advices from London.

## New York Hop Market.

NEW YORK, Sept. 11.—The market remains quiet, but prices hold firm. The only goods offered are inferior domestic and miscellaneous foreign of 1885, prices ranging between 15¢ to 20¢. Pacific coast, 1886, quoted at 35¢ to 37¢; New York State, 1885, prime, 24¢ to 25¢; medium, 20¢ to 22¢; low grades, 15¢ to 18¢; Pacific, 1885, common to choice, 16¢ to 22¢.

## California Products at the East.

NEW YORK, Sept. 11.—Fruits—Green, dull and tending downward; California peaches, 50¢ to \$1.50 per basket; pears, \$1.25; plums, 75¢ to \$1.50; grapes, 50¢ to \$1.25; raisins, weak.

Canned Goods—The general market is quiet, but steady. Tomatoes, very firm, with light offerings for forward delivery; peaches, dull; corn, steady; salmon, quiet; canned peaches, \$2.25 to \$2.50; pears, \$2.25; plums, \$2; grapes, \$2; apricots, \$2.25; Columbia River salmon, \$1.55.

## Honey—Extracted, 5½¢.

Seeds—Moderately active, at full prices. Sales are reported of three cars California yellow mustard and one car brown do.; both September shipments, on private terms. California yellow quoted at 5½¢ to 6½¢.

## Local Markets.

BAGS—The market is without essential change, as the bulk of the demand has been met, and it is thought that the over-supply in the interior will meet much not yet supplied. Standard Calcutta wheat bags are quoted at 6¢ to 6½¢.

BARLEY—The market gradually advanced up to to-day under well concentrated stocks and a good consumptive demand. To-day the market appeared weaker, under heavy receipts but closed firmer. Call sales to-day were, at the morning session: Buyer season—100 tons, \$1.05; 400, \$1.05½; 100, \$1.05½; 500, \$1.05½; 600, \$1.05½. Buyer 1886—400 tons, \$1.01; 100, \$1.01½. Seller season—100 tons, 92¢; 100, 92¢; 200, 92½¢; 300, 92½¢; 400, 92½¢. Seller 1886—500 tons, 92½¢; 300, 92½¢; 300, 92½¢; 100, 93¢. No. 1 Brewing, buyer season—200 tons, \$1.25; 100, \$1.25. Buyer 1886—100 tons, \$1.01½. Seller season—100 tons, 92½¢; 400, 93¢. Seller 1886—100 tons, 93½¢; 200, 94¢; 300, 93½¢. Seller 3 days—100 tons, 93¢ to 1¢.

BEANS—New are beginning to come forward, causing dealers with stocks of old to exert themselves more, so as to work them off before free receipts of new come forward.

CORN—The market is depressed by heavy supplies of Western on the market.

DAIRY PRODUCE—Free shipments, on orders, of pickled butter is being made by jobbing houses. Gilt-edged in rolls is scarce and slightly higher. Cheese is stronger at a slight advance.

EGGS—The market is the same as reported last week.

FEED—Ground feed is firm. Choice to extra choice hay is in good inquiry at a slight advance. The following is the range for hay: Barley, \$5 to \$8; oats, \$6 to \$10; wheat, \$8 to \$12.50, with something extra selling slightly higher.

FRUIT—Full particulars elsewhere.

DRIED FRUITS—Receipts of this year's curing are coming forward, but for this week's issue it is impossible to obtain correct information regarding the market.

HOPS—Dealers are reticent, but it is claimed that they are in the market for choice; they will not name prices, preferring for sellers to state what they will take.

HONEY—The market continues to hold to strong prices, with receipts barely up to shippers' wants. Quotations are reported unchanged.

OATS—The market is weak under heavy receipts and only a moderate consumptive demand.

WHEAT—The market is reported at a deadlock, as buyers are trying to break prices, but holders will not submit to the lower bids. At to-day's call quite a raid was made by the bears causing quite a drop. Transactions on call were as follows: Morning session:—

Buyer season—100 tons, \$1.45½; 100, \$1.45½; 100, \$1.45½; 200, \$1.45½; 100, \$1.45½; 500, \$1.45; 1000, \$1.44½; 400, \$1.44½; 300, \$1.44½; 200, \$1.44½; 600, \$1.44½; 100, \$1.44½; 700, \$1.44; 400, \$1.43½; 300, \$1.43½; 100, \$1.43½; 1900, \$1.43½. Buyer 1886—100 tons, \$1.40; 100, \$1.39½; 100, \$1.39½; 200, \$1.39½; 100, \$1.39½; 500, \$1.39. Seller 1886—200 tons, \$1.36½; 100, \$1.35½; 1000, \$1.35½; 100, \$1.35½; 100, \$1.35; 200, \$1.34½ per cwt. Afternoon session—Buyer season—200 tons, \$1.44; 100, \$1.43½; 400, \$1.43½; 600, \$1.43½; 2000, \$1.43½; 100, \$1.43½; 1000, \$1.43½; 1200, \$1.43. Buyer 1886—300 tons, \$1.39½; 500, \$1.39½; 700, \$1.39½; 300, \$1.39½; 600, \$1.39½; 400, \$1.39. Seller 1886—300 tons, \$1.35½; 200, \$1.35½; 200, \$1.35½; 100, \$1.35½; 100, \$1.35½ per cwt.

[COMMUNICATED.]

## Market Information.

## Cereals.

Wheat has ruled strong throughout the week and as usual the range of prices paid was higher than quoted by the daily press. The tenacity with which farmers hold and export buyers' necessities create the improvement. It is now admitted that the quantity of bright white and Chili wheat is quite light to what it was last year, but the quantity of Sonora and dark coast is largely in excess of last year. Sonora is fully 2½¢ per cental below the same grade of white wheat, while the dark coast is all of 5 to 10¢ per cental less than bright white.

Oats have ruled weak and in buyers' favor throughout the week, under steady and free receipts from Oregon and Puget sound, and only a moderate consumptive demand in our market.

Throughout the week barley has ruled strong, with some difficulty reported for buyers of bright No. 1 feed in having their wants met at even 97½¢ cts, although the daily papers quoted No. 1 feed at 92½¢ cts; that the latter was wrong and calculated to help buyers can be seen by seller season on call selling at over 93¢ cts, and seller options on call are always from 2 to 4¢ per cental lower than actual sales by sample. Dark feed is steady with a wide range in prices. Brewing barley is very stiff with a growing impression that the quantity in this State is less than heretofore claimed. Shipments to the East continue. A vessel is on the berth taking in Chevalier for Europe, while free shipments are being made to the East, some going forward to Australia. The crop of Chevalier is the largest harvested in this State, with the quality generally good.

Rye is moving off fairly well, but buckwheat is slow, with quotations nominal.

Western corn is still in oversupply with concessions necessary to effect sales, but California corn is virtually out of the market.

The very latest European advices continue to confirm previous reports of short wheat crops in France, England, Germany, Australia-Hungary, Italy and India. The latest mail advices from New York give cable reports to the effect that the shortage in France is much more than thought; and so as not to make bread sell too high, the French Government is considering the advisability of lowering the duty on imported wheat.

Heavy receipts of barley to-day caused a weaker feeling in feed varieties.

The bears on call made a raid on wheat and sent options down from two to three cents. The call board appears to be managed like mining stocks, by what seems to be one or two cliques, who put it up or down as they choose. The clique, it is thought, are short on actual wheat, and are forcing the price down on call to get farmers to sell at lower prices.

## Feedstuff.

Interior advices report a larger consumption of hay than at this time last year, while the shipments by water and also by rail from here are also larger; but owing to the very heavy crop of ordinary qualities poor to good rules very low, but choice to extra is scarce and commands good prices.

Bran and middlings continue in good request at full prices. Cracked corn is a shade lower, but ground barley continues strong, as does oilcake meal.

Carrots are coming in quite freely, yet receipts are cleaned up each day.

## Dairy Produce.

Cheese continues to hold to strong prices, with now and then some consignments placed at a slight advance on current quotations. Stocks are only moderate, with a good trade demand ruling.

The hot weather which obtained up to Monday lessened the receipts of butter, creating a strong and higher market for gilt-edged that was hard. The bulk received was soft and hard to sell. The market is well cleaned up at the close for good to gilt-edged, but poor is in overstock. Pickled butter continues to be taken by the trade, with sales reported to be increasing.

Eggs, like butter, have a wide range. While strictly choice, fresh-laid near-by sells at 30¢ cts and even 32½¢ cts, fair are slow at 20¢ cts, with some poor "as is" sold at 15 and 10¢ cts. The hot weather

of last week caused many consignments to become almost worthless. Receipts of Eastern are less, but the stock is large with the quality poor.

## Fruits.

Table grapes held to strong prices throughout the week, with at the close to-day black varieties under lighter receipts selling for more money. Wine grapes are reported to be doing better, owing to considerable damage claimed to have been done by the hot weather, last week. Peaches under free receipts, and canners not paying over 75¢ cts, have been barely steady. No sales were made on the wharf over \$1 for the more choice varieties.

Berries are going out of market, causing better prices to obtain for strawberries and raspberries.

Apples are in better demand, but no higher yet. Stocks are better cleaned up and an improvement is looked for if receipts are not too large.

Poor pears continue a drug, but choice are scarce and wanted by the trade and also canners.

Figs are in good supply with only a moderate demand ruling, causing all that do not come up to choice to be sold at shaded prices.

Cantaloupes and watermelons, after making quite a sharp advance, fell back under cooler weather, closing barely steady at quotations.

California oranges are in oversupply, with some difficulty met in effecting sales, owing to the slack demand.

Limes and lemons are weak at lower prices.

Some very choice mountain plums came to hand the past week which were sold at from 75 to 85¢ cts a box from stores in a small way to the retail trade. Other plums and also prunes ruled steady, although a better cleanup is reported.

## Hops.

There is nothing new to report. Picking is progressing quite favorably. General reports are to the effect that the quality is not above an average, which will cause choice to fetch extreme prices. Both private and press advices from Europe and the East are of a favorable character for sellers. Buyers report more inquiry from brewers East, with samples wanted.

## Live stock.

Cooler weather since Saturday has stimulated consumption and caused retail butchers to buy more liberally. All the stalls are full, whereas up to Saturday last the stalls were not one-quarter full. Slaughterers report killing from twice to three times as many cattle and sheep since Monday as they did the like days the preceding week. Beef cattle are reported to be in liberal supply at unchanged prices, although a stronger tone is noted. The same remarks apply to mutton sheep. The impression prevails that an improvement in the price of beef cattle is not at all unlikely within the next 20 days. Choice lambs and calves continue scarce. Black hogs are in fair request. Packers with the turn in the weather are beginning to inquire for hogs suitable for their use, but, as yet, have not bought any, preferring to wait until later on in next month. In horses there is no particular change since last week's issue. Work horses and car horses are offering quite freely, but the demand is not active. Carriage horses are inquired for, with several sales, well-matched, kind disposition and having fine appearance, made at from \$600 to \$1000. The latter price appears to an extreme and is only reached in exceptional cases.

The following are to-day's meat prices: Beef—Stall-fed, 7¢ to 7½¢ lb; grass-fed, extra, 6¢ to 6½¢; first quality, 5½¢ to 6¢; second, 5¢ to 5½¢; third, 4¢ to 4½¢. Calves, small, 9¢ to 10¢; larger, 7¢ to 8¢ lb. Mutton—Ewes, 4½¢; wethers, 5¢. Lamb—Spring, 6½¢ to 7¢ lb. Pork—Live hogs on foot, 3½¢ to 4¢ for grain and dairy feed; 2½¢ to 3¢ for soft; dressed, 6¢ for hard, and 5¢ for soft. Grass-fed stock sell on foot, gross weight, at one-half the price they fetch dressed; stall-fed, on foot, fetch one-third less than they sell at dressed.

## Miscellaneous.

The tonnage movement compares with last year at this date as follows:

	1886.	1885.
On the way.....	286,069	225,239
In port, disengaged.....	76,017	109,789
In port, engaged.....	67,260	12,373
Totals.....	429,346	347,401

The above gives a carrying capacity as follows: 1886, 686,962 short tons; 1885, 562,180 short tons; increase over last year, 124,782.

Tonnage on the way to Portland, Oregon, 49,012 tons; same time in 1885, 36,223.

Some time ago mention was made in the PRESS of retail poultry dealers combining to dictate to wholesale dealers, and to-day the latter combined so as to again get better prices for poultry. Which will succeed it is hard to say. The market has held strong throughout the week for choice stock, which has been in light receipt.

Bayos beans of this year's crop were received on Monday last. They sold at \$1.40 on the wharf; the quality was only fair.

Charters for vessels closed very weak yesterday, but ship-owners are trying to get wheat down so as to advance charters.

## Vegetables.

Choice potatoes continue scarce and have fetched high prices throughout the week, but poor to good have been in liberal supply, necessitating concessions to effect sales. Owing to the difference in quality, there is a wide range in values; as an example, while poor Early Rose sold as low as 50¢ cts extra, choice were in active demand at \$1.10 on the wharf. The same range of prices obtained in other varieties.

Pickling onions have ruled steady with receipts cleaned up daily; but silverskins have been slow and heavy under heavy receipts and only a fair demand. The market closed weak.

Sweet potatoes, after advancing to \$1.25 for something extra, fell back under heavy receipts to \$1 on the wharf. The demand continues good.

This year's dried okra was received the past week, but, owing to the liberal supply of green, is unsalable.

Green okra, egg plant and green peppers have ruled steady throughout the week.

Cucumbers advanced to 25¢ cts a box, but closed weaker to-day under free receipts.

Summer squash are scarcer and higher; but mar-

rowfat squash are in excessive supply with sales hard to effect at over \$8 per ton for the best on the wharf.

Tomatoes under lighter receipts moved up to all of 20¢ cts a box, but with more liberal supplies fell back again, with a weak closing to-day.

In cabbages and other vegetable there are no changes to note.

## Wool.

London and Eastern advices report strong markets with higher prices paid, owing to heavy competition between buyers. In our market all fall wools received find a quick and ready market at about the same prices at which spring sold. There is considerable complaint of seeds. Consignors generally claim that there are more seeds in wools this year than for several years past, yet buyers take seeds and all, so anxious are they for wools. Although higher quotations are given this week, yet fancy clips sell at an advance on top prices named. S. F., Sept. 15, 1886.

## Domestic Produce.

WEDNESDAY, Sept. 15, 1886.

BEANS AND PEAS.		POTATOES.	
Bayo, cts.....	1 40 @ 1 50	New cts.....	@ -
Butter.....	1 25 @ 1 50	Burbank.....	@ -
Peas.....	1 75 @ 1 80	Early Rose.....	65 @ 1 10
Red.....	1 10 @ 1 12	Golden Wonder.....	@ -
Pink.....	1 07 1/2 @ 1 12 1/2	Jersey Blue.....	1 10 @ 1 20
Large White.....	@ -	Petaluma.....	@ -
Small White.....	1 75 @ 1 80	Tomatoes.....	@ -
Lima.....	2 00 @ 2 25	River reds.....	80 @ 1 00
Field Peas, blye.....	1 00 @ 1 50	Humboldt.....	@ -
do green.....	1 00 @ 1 12	do Kidney.....	@ -
do Niles.....	1 25 @ -	do.....	90 @ 1 15
BROOM CORN.		do.....	@ -
Southern.....	@ -	Pearless.....	90 @ 1 15
Northern.....	@ -	Salt Lake.....	@ -
CHICORY.		Sweet.....	3 1/2 @ 1 15
California.....	@ -	POULTRY AND GAME.	
German.....	6 1/2 @ 7	Hens, dor.....	6 00 @ 7 50
DAIRY PRODUCE, ETC.		Broilers.....	5 50 @ 7 50
BUTTER.		Broilers.....	3 00 @ 5 00
Cal. fresh roll, lb.....	20 @ 27 1/2	Ducks, tame.....	3 50 @ 5 50
do Fancy brands.....	30 @ 32 1/2	do Mallard.....	3 00 @ 3 50
Pickle roll.....	20 @ 22 1/2	do Sprig.....	1 75 @ 2 50
Firkin, new.....	15 @ 18	Gespe, pair.....	1 50 @ 2 50
Eastern.....	@ -	do Gooding.....	@ -
CHEESE.		Wild Gray, dor.....	@ -
Cheese, Cal., lb.....	7 @ 10	White do.....	@ -
Eastern style.....	10 @ 13	Turkeys, lb.....	16 @ 19
EGGS.		do Dressed.....	@ -
Cal., ranch, dor.....	29 @ 32 1/2	Turkey Feathers.....	@ -
do store.....	20 @ 27 1/2	do.....	@ -
Ground.....	1 35 @ 1 45	Sal and wing.....	10 @ 30
Oregon.....	@ -	Ships, Eng., dor.....	@ -
Eastern.....	10 @ 12	do Common.....	@ -
Utah.....	20 @ 21	do.....	@ -
FEED.		do.....	@ -
Bran, ton.....	15 50 @ 17 00	do.....	@ -
Ground Barley.....	20 @ 27 1/2	do.....	@ -
Hay.....	5 00 @ 12 50	do.....	@ -
Middlings.....	16 00 @ 17 00	do.....	@ -
Oil Cake Meal.....	26 50 @ 28 50	do.....	@ -
Straw, bale.....	35 @ 50	do.....	@ -
FLOUR.		do.....	@ -
Extra, City Mills.....	4 12 1/2 @ 4 50	do.....	@ -
do Country Mills.....	4 00 @ 4 37 1/2	do.....	@ -
Superfine.....	3 00 @ 3 50	do.....	@ -
GRAIN, ETC.		do.....	@ -
Barley, feed, cts.....	85 @ 97 1/2	do.....	@ -
do Brewing.....	1 60 @ 1 70	do.....	@ -
do new.....	1 10 @ 1 15	do.....	@ -
do Oats.....	1 35 @ 1 45	do.....	@ -
do Corn.....	1 20 @ 1 35	do.....	@ -
Buckwheat.....	1 00 @ 1 10	do.....	@ -
Corn, White.....	@ -	do.....	@ -
Yellow.....	1 30 @ 1 35	do.....	@ -
Small Round.....	1 30 @ 1 35	do.....	@ -
Nebraska.....	1 05 @ 1 15	do.....	@ -
Oats, new.....	1 20 @ 1 25	do.....	@ -
do No. 1.....	1 27 1/2 @ 1 30	do.....	@ -
do No. 2.....	1 20 @ 1 25	do.....	@ -
do black.....	1 12 1/2 @ 1 15	do.....	@ -
do Oregon.....	1 25 @ 1 45	do.....	@ -
do.....	1 10 @ 1 25	do.....	@ -
Wheat, No. 1.....	1 30 @ 1 35	do.....	@ -
do No. 2.....	1 30 @ 1 35	do.....	@ -
Choice milling.....	1 40 @ -	do.....	@ -
HIDE.		do.....	@ -
Dry.....	@ -	do.....	@ -
Wet salted.....	8 @ 9 1/2	do.....	@ -
HONEY, ETC.		do.....	@ -
Boeswar, lb.....	22 @ 22	do.....	@ -
Honey in comb.....	8 @ 10	do.....	@ -
Honey in comb.....	11 @ 13	do.....	@ -
do.....	4 @ 4 1/2	do.....	@ -
do.....	3 1/2 @ 4	do.....	@ -
Oregon.....	@ -	do.....	@ -
California old.....	17 1/2 @ 20	do.....	@ -
do new.....	27 1/2 @ 32 1/2	do.....	@ -
ONIONS.		do.....	@ -
Pickling.....	35 @ 50	do.....	@ -
Silverskin.....	10 @ 60	do.....	@ -
do.....	10 @ 60	do.....	@ -
Walnuts, Cal., lb.....	7 1/2 @ 9	do.....	@ -
do Chile.....	7 1/2 @ 9	do.....	@ -
Almonds, bshl.....	6 @ -	do.....	@ -
Salt shell.....	10 @ 12	do.....	@ -
Brazil.....	11 @ 12 1/2	do.....	@ -
Peasants.....	10 @ 12 1/2	do.....	@ -
Peasants.....	3 @ -	do.....	@ -
do.....	11 @ 14	do.....	@ -



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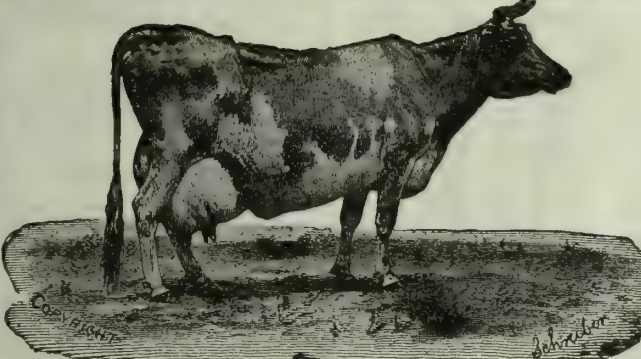
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C. H. PHILLIPS.

OFFICERS.  
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ISAAC GOLDTREE, Vice Pres't.  
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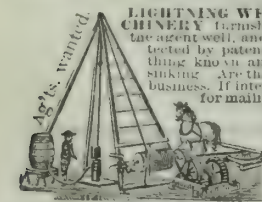
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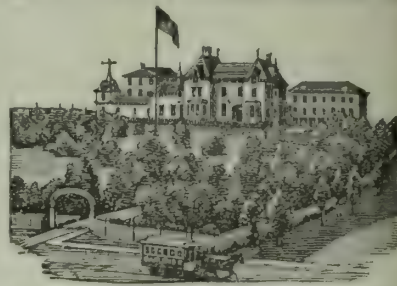
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FAMOUS ENTERPRISE

Self-Regulating WINDMILL

Is recognized as THE BEST.

Always gives satisfaction. SIMPLE, STRONG and DURABLE in all parts. Solid Wrought-iron Crank Shaft with DOUBLE BEARINGS for the Crank to work in, all turned and run in adjustable babbitted boxes.

Positively Self-Regulating. With no co. springs, or springs of any kind. No little rods, joints, levers, or anything of the kind to get out of order, as such things do. Mills in use 6 to 12 years in good order now, that have never cost one cent for repairs. All genuine Enterprise Mills for the Pacific Coast trade come only through this agency, and none, whether of the old or latest pattern, are genuine except those bearing the "Enterprise Co." stamp. Look out for this, as inferior mills are being offered with testimonials applied to them which were given for ours. Prices to suit the times. Full particulars free. Best Pumps, Feed Mills, etc., kept in stock. Address,

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San Francisco Agency—JAMES LINFORTH

120 Front St., San Francisco.

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to sell the

## MISSOURI STEAM WASHER

Active, honest persons all over the country, with or without team.

(Extracts from Reports of Purchasers.)

MARY J. TAPPAN, Rensselaer, N.Y. They cost all other washers I ever saw. JOHN R. HARRIS, JR., N.Y. The best washers I ever saw. H. H. PERMAN, Contra Costa Co., Cal. Everybody likes them and everybody wants them.

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MRS. JOSEPH SWIFT, Santa Fe, N.M. The most useful article I have ever seen. ANNA K. HARRIS, Contra Costa Co., Cal. I have used it on articles from linen to cotton to wool, and it cleans everything perfectly.

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MRS. J. H. WHEELER, Kansas City, Mo. This washers cost me less than the best of them, and it cleans everything perfectly.

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For particulars how to use the same, apply to

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## Feed the Land and it will Feed You!

FERTILIZERS and IRRIGATION.

## THE CALIFORNIA BONE MEAL AND FERTILIZER CO.

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## CALIFORNIA FERTILIZERS,

Ammoniated Bone Super-Phosphate, Pure Bone Meal and Special Fertilizers for all Crops.

Our Fertilizers lessen cost of irrigation, increase the yield, improve the quality of crop, and are cheaper than barn-yard manure.

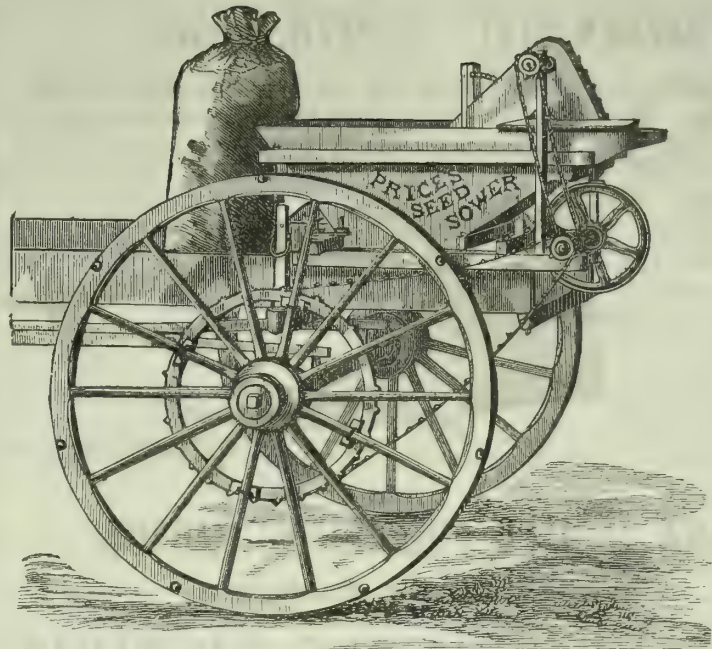
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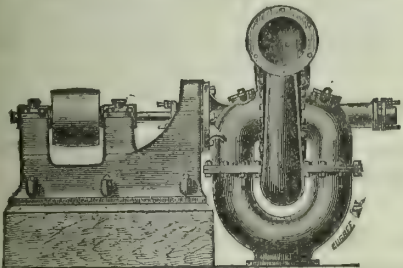
Sows a strip 100 feet wide at each passage (working width in wheat, 80 feet). Sows as evenly as a Force-feed Drill.

The supply of grain to the distributor is governed by the speed of the team, feeding rapidly when the team walks fast, and slowly when they walk slowly. Will sow an acre of ground as thoroughly with 80 pounds of seed as any other machine of its class will with 100 pounds. Sows 20 acres per hour with ease. Saves its cost in seed grain over any other machine every 200 acres sown. Warranted as above. Order on Trial. Price on board cars, \$40. Send for large, illustrated circular.

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WE ALSO CARRY IN STOCK THE LARGEST LINE OF

## MACHINERY

In the UNITED STATES,

Consisting of Wood and Iron Working Machinery. Pumps of every description.

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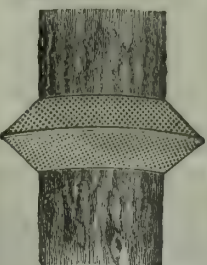
Rheumatism, Neuralgia, Pneumonia, Paralysis, Asthma, Sciatica, Gout, Lumbago, and Deafness.

Everybody should have it. G. G. BURNETT, Ag't. 327 Montgomery St., S. F.

Price, \$1.00. Sold by all Drug gists. Call and see DR. CHAS. ROWELL. Office—426 Kearny St. San Francisco.

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Will destroy every Codlin Moth Larva that crawls up or down the tree. The best, cheapest and simplest trap now invented. No orchardist can afford to do without this trap. It is a sure cure for the codlin moth. For further information, address G. W. THISSELL, Winters, Yolo Co., Cal.



## \$1000 REWARD

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Illustrated circular mailed free.

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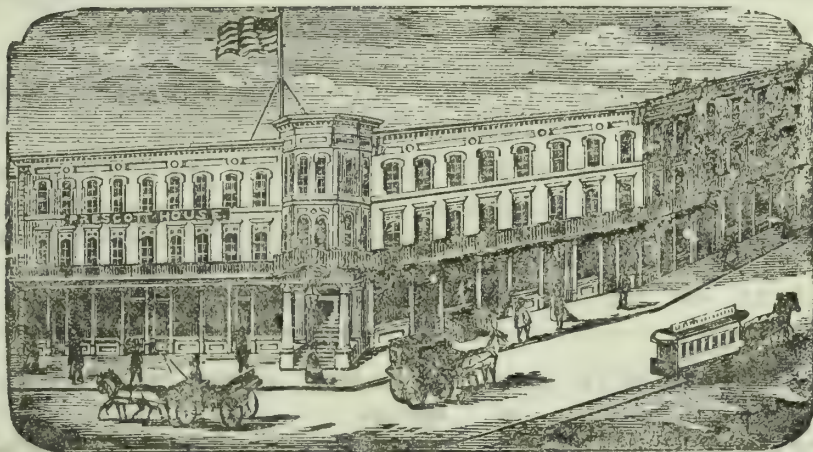
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S. W. Corner Kearny and Montgomery Avenue, San Francisco.

Free Coach to and from the House.

J. W. BECKER, proprietor.

ESTABLISHED 1864.

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## PACIFIC FRUIT COMPANY,

(SUCCESSORS TO HOWE & HALL.)

WHOLESALE AND COMMISSION DEALERS IN

## CALIFORNIA GREEN

## Raisins,

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Between Washington and Jackson,



## AND DRIED FRUITS,

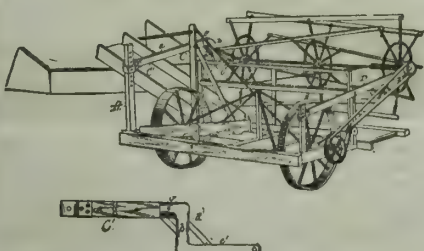
## Oranges,

## BEANS, PRODUCE, Etc.

## REEL SUPPORTING ARM

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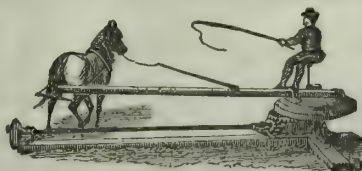
## HARVESTERS.



ALL PERSONS ARE HEREBY NOTIFIED THAT THE device shown in the above engraving is covered by Letters Patent awarded to me by the U. S. Government, and are warned against making and using the same without my consent.

All those desiring the Angular Supporting Arms or in formation about them, will be furnished therewith by addressing

JOHN B. GEMMILL,  
Red Bluff, or Tehama, Cal.



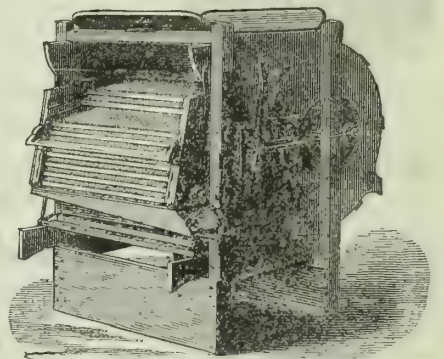
HORSE POWERS, WINDMILLS, TANKS and all kinds of Pumping Machinery built to order. Awarded Diploma for Windmills at Mechanics' Fair, 1885. Windmills from \$65. Horse Powers from \$50. F. W. KROGH & CO., 51 Beale Street, San Francisco.

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FREE! New Book of Fancy Works with 100 Illustrations, 130 New Stitches, 10 Special Offers. 200 Picture Bulletin, 48 column story paper, all for 4 cents postage. NATIONAL BAZAR, No. 7 WEST BROADWAY, NEW YORK.

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OUR IMPROVED HAND SEPARATOR is a double combined machine, possesses two shoes (instead of one, as in machines of other manufactures), nine riddles and a large independent screen. Each shoe is equal in power and capability to the one in any other mill, and by the operation of the two, double efficiency is secured. Our 28-inch mill will clean from 400 to 600 bushels of seed grain per day, according to the condition of the grain, and we guarantee that all barley, oats, or other foul seed will be thoroughly removed with complete satisfaction.

By an ingenious set of Barley Riddles, which accompanies each mill, wild oats will be separated from barley—a feat which no other machine has yet accomplished. We ask you to give our mills a trial. We guarantee that you will find them precisely as represented.

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Call and examine the most complete Threshing Outfit in the world. Saves \$30 per day over any other. (Perfect Guarantee.)

## WINDMILL.

After many years' experience in the invention and manufacture of Windmills, among which may be named the "Hercules," "Saunders," "Cyclone," "Eureka," the subscriber has perfected a mill that infringes no patent; will face the wind; is direct action; solid wheel; no wood screws, pivots, loose joints, flapping sections or spider legs to get out of order. Is beautiful, strong, not liable to get out of order, and in cheapness below any other. Send for pamphlet of the "Eureka Improved Windmill." Pumps of various kinds at very low rates. Address

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## COMMERCIAL HOTEL.

A. & J. HAHN, Prop'rs,  
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Rates, \$1.25 to \$2 Per Day.

Stage offices for Collegeville and Oakdale, Roberts and Union Islands, and J. A. C. Mineral Springs stages. The most desirable location in the city. Refurnished and refitted in the best style for the accommodation of the public.



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## "GARDEN CITY" CLIPPER PLOWS.

Wood Beam Slip Share, Stubble and Sod Plows.  
Hardened Moldboards, Shares and Landsides.

No. 19½, Double Shin Steel Tapering Landside, 12 in. cut, 77 lbs., \$20.  
No. 21, Double Shin Steel Tapering Landside, 14 in. cut, 90 lbs., \$22.

### STUBBLE and SOD PLOW

Sizes, 12 & 14 Inches.

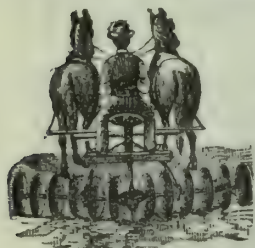
These Plows, as the name indicates, are intended to do old ground plowing. They are a medium between the more bold or abrupt old ground plow and the long, slow-turning breaker. They work nicely in old ground, being preferred by some to the regular Stubble Plow, and turn tame sod, such as Blue Grass, Timothy, or Clover, admirably. They are numbered 19½ and 21. We make with them steel beam, also. The numbers of the steel beam plows of this style are 519½ and 521.

## LA DOW JOINTED PULVERIZING HARROW.

SUPERIOR TO ALL OTHERS, BECAUSE IT IS

**Simple, Durable and Flexible.**

THOUSANDS IN USE GIVING ENTIRE SATISFACTION.



### POINTS OF SUPERIORITY:

It will do better work.  
It is much easier for the team.  
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It has a lever to change the angle.  
It is not heavy on the horses' necks.  
It has no side-draft.  
It leaves no ridge at the center.  
It has a wrought iron frame.  
Its chilled bearings cause it to wear longer and work easier.  
It is easy to ride.  
It conforms to uneven surfaces perfectly.  
It has self-feeding oil cups. Best Disc Harrow in the world.

It can be made rigid if desired.

WE HAVE THE FINEST CARRIAGE REPOSITORY ON THE PACIFIC COAST.

Agents for David Bradley Manufacturing Co. A full stock of Plows, Harrows and Cultivators on hand; also a full line of extras. Agents for the celebrated Milburn Hollow Iron Axle Wagon, McCormick Mowers, Reapers and Twine Binders, and Randolph Headers.

If you have not our Catalogue, send for it. Mailed free to any address.

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## IMPROVED CHAMPION CIDER MILLS AND PRESSES.

Senior, \$40. Medium, \$30. Junior, \$25.  
MOST EASILY WORKED.

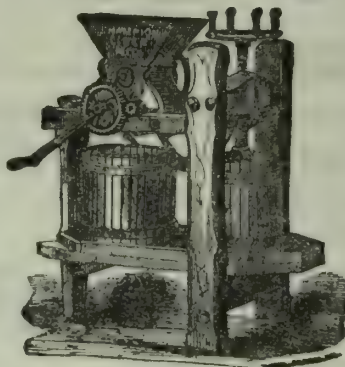
Built Stronger and will Last Longer  
Than any other Cider Mill manufactured.

THEY HAVE AN ADJUSTABLE THROAT,  
Which adapts them to all kinds and sizes of fruit.

The Grinding Rollers are Adjustable.

They Grind Finer than Other Mills.

They are Light, Substantial and Handsomely  
Finished.



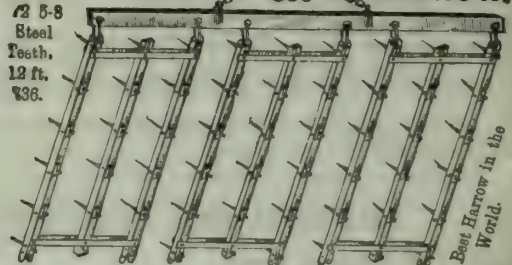
## MILBURN HOLLOW IRON AXLE WAGON.

Lightest, Strongest, Cheapest  
Wagon in the world.

Wheels run through boiling oil. Best and  
strongest wagon in the world. Every one  
guaranteed. BUY NO OTHER.

## TRUMAN'S IRON HARROW.

2 5-8  
Steel  
Teeth,  
12 ft.  
\$36.



All Iron and Steel. Takes any-sized Teeth.

All Iron and Steel. Each Harrow will take any  
sized tooth from ½ to 1 inch.

The BEST Harrow in the World for the Farmer  
and the BEST for the Dealer.

### THE BEST SELLING HARROW.

A very light-weight Harrow. A thorough pulverizing Harrow.  
Each section independent. The Merchant, by keeping 10 sections,  
can instantly furnish a Harrow of 30 to 150 teeth, for two to ten  
horses, and any sized teeth. A GREAT CONVENIENCE.  
Send for Prices. Prices Greatly Reduced.

## GRAND SUCCESS OF THE

# Houser Combined Header & Thresher

IN THE HARVEST FIELD FOR 1886.

280 Houser Harvesters in Field Work.  
300,000 Acres of Grain Harvested  
this Season with the Houser  
Machines.



No Failures. No Dissatisfaction. All did  
Good Work. They are Pull Machines.  
Our Standard make is a "Belt," but  
will build them "Geared"  
to Order.

The Houser for 1887 will have an increased capacity of Cylinder and Separator, and the Cleaner will be the BEST that can be made. AN IRON STRAP BRAKE will be put on the Drive Wheel, rendering a runaway impossible, and every improvement added to the Harvester which the experience of the season of 1886 has proved practical.

The Houser Harvester enables the farmer to RAISE WHEAT AT A PROFIT, and do his own harvesting. With 4 men and from 14 to 24 animals will cut, thresh, clean and sack, ready for market, an average of from 20 to 40 acres a day. It is all that can be desired in a Combined Harvester. As light as is consistent with the strength required to cut, thresh and clean heavy or badly-lodged grain. There are a number of Combined Harvesters that will do fair work in average standing, clean grain, but for heavy, weedy, badly-lodged grain, the Houser has no equal. It has never failed to do good work.

BEWARE OF EXPERIMENTS. BUY THE "OLD RELIABLE" HOUSER AND YOU TAKE NO CHANCES.

EXTRAS WILL BE FURNISHED FOR 1887 AT REDUCED PRICES.

WE ALSO BUILD TO ORDER THE MINGES, SHIPPEE, AND POWELL COMBINED HARVESTERS. Send for Circulars, see, or correspond with those who have run the "Houser." Address

STOCKTON COMBINED HARVESTER and AGRICULTURAL WORKS, Stockton, Cal.



# PACIFIC RURAL PRESS

SANTA CLARA VALLEY FAIR EDITION—TWENTY PAGES.

Vol XXXII.—No. 13.]

SAN FRANCISCO, SATURDAY, SEPTEMBER 25, 1886.

{ \$3 a Year, in Advance  
SINGLE COPIES, 10 Cts.

## California Fruit at the East.

We publish, upon another page, a letter from Chicago, concerning the condition in which the Eastern sale of California fruit finds itself. The writer is H. Weinstock, of Sacramento, one of our most prominent interior merchants, and who is also a fruit-grower—thus being both directly and indirectly interested in the prosperity of the fruit industry. Hearing that Mr. Weinstock was going East, partly with a view of studying the Eastern marketing of California fruit in his own interest, we asked him to prepare a series of letters, in which his observations and conclusions might be presented to fruit-growers in general. This he consented to do, and we have in this issue of the PRESS his first letter. It describes a condition of affairs which must be considered most deplorable to the fruit-growers, but it is a condition which can be remedied, and it is with reference to such future action on the part of the growers as will prevent a recurrence of the evil that we desire to publish Mr. Weinstock's observations. Our fruit men should have the fullest light on this year's experience at the East, so that something can be done this fall and winter to arrange better methods and policies for next year. To this work let all address themselves. Let all who have valuable information contribute it for the public benefit through our columns. Discussion during the next two months may prepare the fruit-growers for important action at the great Fruit-growers' Convention, in November, or at some other convention which may be called for the purpose. Mr. Weinstock's letters will open the subject, and we invite all who either approve or disapprove of his conclusions to take part in the discussion, so that the best policy can be adopted. It is for the interest of all that this should be done. We cannot see that either growers or shippers can derive much advantage from the conditions which things are in this season.

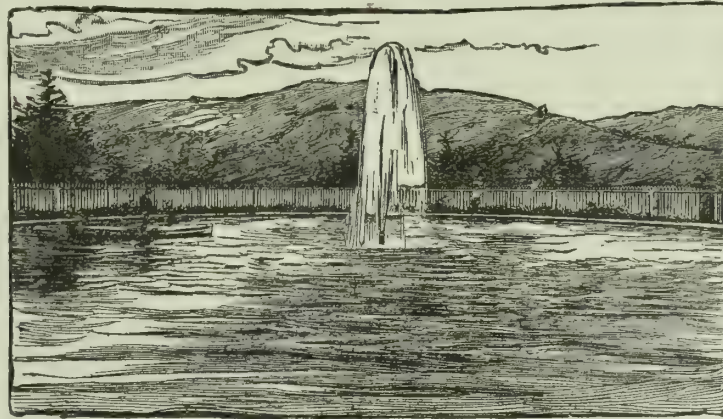
**GOOD FOR FRESNO RAISIN-MAKERS.**—The *Expositor* of the 4th inst. states that Geo. W. Meade & Co. have secured from the railroad people a reduction of \$45 on the freight rates on carload lots of raisins from Fresno to Stockton—en route for the East. The former rate was \$75 per car, and the future rate will be \$30. This is an important reduction, and we feel assured that the firm's efforts in the premises will be fully appreciated by Fresno raisin-growers. The firm is working for a reduction on Eastern rates and feels quite confident of securing it. Fresno county will ship about 150 carloads of raisins East this year, and this reduction means an increase of \$6750 in the producers' pockets.

**A CUCURBITACEOUS SERPENT.**—One of the vegetable curios at the Mechanics' Fair is a "snake cucumber," shown by F. M. Tenney, of San Jose. At its thickest it is the size of an average man's arm, and if straightened out would measure about seven feet in length; but it winds and twists into the shape of a rudely-formed capital "B."

**EGYPTIAN WINE.**—A German wine-grower has produced an excellent quality of wine from the yield of a vineyard occupying a large tract of land near Cairo, and his success has stimulated the Egyptian Government to give every encouragement to grape culture in Lower Egypt.

## The Bidwell Peach.

We give on this page an engraving of the new peach which was shown at the last meeting of the State Horticultural Society, as described in our report of the meeting which appeared in the RURAL of Sept. 4th. It originated on Rancho Chico, upon a shoot from a seedling peach stock upon which apricot had been



A HILLSIDE RESERVOIR IN BERKELEY.

budded, and when the top died the shoot was allowed to grow and form a tree. In time it bore the peach which was first noticed on the day of General Grant's funeral last year, and which was of such good quality that Mr.

## The San Jose Fair.

The nineteenth annual fair of the Santa Clara Valley District Fair Association will open in San Jose on Monday next, September 26th. This year's fair seems to be under the joint auspices of the San Mateo and Santa Clara Valley Agricultural Association, which will conduct the Pavilion display, and the

Santa Clara Valley Agricultural Society, which will manage the display of live-stock and the racing program at the park. There seemed to be some doubt about obtaining the State appropriation for a fair under joint control of the



A NEW CALIFORNIA PEACH—THE GEN. BIDWELL.

Gray proposed to name it the General Grant peach. When it came before the Horticultural Society last month, it was referred to a committee, who pronounced the variety worthy of propagation and further trial. As there is already a peach named General Grant, the committee advised that the new peach be named the General Bidwell, which was approved by the society. The peach is a handsome, yellow free-stone. It ripens one week later than the late Crawford, and is especially valuable on that account.

MOUNTAIN and forest fires have been of frequent occurrence the past two or three weeks, in the central counties of the State.

## A Hillside Reservoir.

Many people are now deriving their water supply from tunnels in the hillsides. It has been found that water can be thus obtained at an elevation which admits of its being distributed over wide areas either for house use or irrigation. In some places in the southern counties tunnels have been run in near the sources of small streams, and thus a much greater supply has been developed than found its way into the streams originally. In other cases the beds of such streams have been tunneled under and the underground conduits of water cut off, and thus again supplies have been developed. Tunnels into the hillsides nearly always yield water, though the amount differs widely. Sometimes not enough will be obtained to pay for the cost of the tunnel; again, the supply of a town or a considerable area of irrigated land will pour forth and sometimes risk the lives of the workmen who are opening way for it. Many times a man living near the hills can do much better by digging a horizontal well into his hillside, and thus secure running water, than he can by digging a vertical well and then be at the trouble of pumping it to the surface.

The neat little engraving on this page shows one of the hillside reservoirs of the Alameda Water Company, which supplies the town of Berkeley with water. The reservoir is rather more than 350 feet above the sea water, which is but about two and a half miles distant—that is, the sea water which enters the Bay of San Francisco. The tunnel which supplies the reservoir is quite a little higher on the hillside. It was bored about ten years ago, and is now yielding a steady supply of water, which is carried for about two miles south and west to the different parts of the town. The reservoir was made in a natural depression on the hillside, and required but little embankment.

## Polar Cranks.

Two more cranks have started in search of the North Pole. No doubt there is something fascinating in trying to solve the riddle of the veiled Sphinx of the North. No doubt there is a little romance in spending a winter in the Frozen Zone, spearing the walrus, chatting with thick-lipped, blubber-eating Esquimaux, sleighriding under the auroral lights with the thermometer 60° below zero, and coming home and telling long stories in books and magazines about it. But, after all, what right has Colonel Gilder and his companion, or anybody else, to go off and lose themselves in Arctic ice and snow, and expect any one to fit out expeditions to search for them? Let the fools who persist in believing the Pole can be reached, go after it with the assurance that if they are lost nobody will regret it. And if the worn-out hack politicians and captains of the saloon brigade can be induced to undertake the trip, it might be good economy to give them an encouraging outfit, and then pass a law making it a felony for any one to go in search of them.

MYRON H. CRAFTS, a pioneer of San Bernardino valley, died recently of pneumonia, at the age of 69, at his home place near Crafton. He was well known in that region, having lived there since 1859. The land boom had just struck his property, which has lately been cut up into small tracts and much of it is already contracted to the new colony settling there.



## FORESTRY.

### Tree Seeds and the Board of Forestry.

EDITORS PRESS:—Baron Von Muller, a distinguished forester and botanist of Australia, has sent to our board the seeds of the principal forest trees of that island. Among them there are doubtless some much better adapted to our interior climate than is the blue gum. The blue gum (*Eucalyptus Globulus*) is native of a comparatively humid climate, and is therefore better suited to our coast climate than it is to the dryer portions of the country. I have never seen the *E. globulus* reproduce itself—that is, seeds sprouting under the old trees, except at Santa Monica and San Francisco, almost immediately upon the coast. This is an indication as to the climate to which it is best adapted.

I should be glad to furnish some of these seeds to any person who will give reasonable assurance that he will propagate them and give a report of their success. I am inclined to think that the best course for our board will be to have the seeds propagated by a nurseryman and then distribute the trees. I should therefore like to hear from the nurserymen on this subject.

I desire to call the attention of our nurserymen to another point, and that is that one of the provisions of the proposed law setting apart a day for the planting of trees in this State will materially advance their interests. This provision proposes that a prize be given for the best forest plantation brought to the attention of the board, and also making it the duty of every road-master in the State to plant and care for at least 100 trees per annum on such highways as the supervisors may direct. Our board thinks that this will add considerably to the demand for young trees. We need all the help that we can obtain, and we want the nurserymen to put their shoulder to the wheel and aid us in this important movement.

ABBOT KINNEY,  
Chairman State Board of Forestry.

San Gabriel, Cal.

[The blue gum seeds itself freely on the east side of San Francisco bay. The attention of our readers is called to the offer of the board to give tree seeds to those who will try them and report results. The secretary of the board is Sands W. Forman, and the office is room 42, Nevada block, San Francisco.—EDS. PRESS.]

THE FORESTRY COMMISSION'S SURVEY.—Hubert Vischer, whom we have mentioned previously as being connected with the State Board of Forestry Commission, returned from an official visit to Bear river and the southern portion of the county on Saturday. Yesterday afternoon he left on the train for Hydesville, where his conveyance was awaiting him. He has completed his investigations in this county, which he considers the best lumber section of the State, taking all things into consideration. Our splendid harbor, the many and convenient avenues by which rafts of logs are brought to the mills, the convenience of the several railroads, all enter as premises of his complimentary syllogism. The only thing in his estimation which is dwarfing our lumber interests is the dangers which menace vessels in entering our harbor. Deep-sea vessels are virtually precluded from engaging in our commerce. Mr. Vischer further stated that on his next visit he hoped to see Humboldt bay in a greatly improved condition.—*Humboldt Standard*.

## THE DAIRY.

### Carrying Out the Oleomargarine Law.

Dispatches from Washington mention the details being arranged for the enforcement of the new law against bogus butter. A series of oleomargarine stamps have been completed, and they will be supplied to collectors of internal revenue as rapidly as they can be printed. The first series of the denomination of \$6 is for the manufacturer, and bears a picture of the treasury building. The second stamp of the series is intended for packages. The border and ornamentation is printed in bright green, and in the center is a pretty design in black ink representing a farmer and mechanic on either side of a shield bearing the stars and stripes. Attached to the body of the stamp are a number of coupons, each indicating 10 pounds, so that the value of the stamp may be made to correspond to the weight of the package. The last of the series is the export stamp, which is also printed on green and bears a medallion representing a magnificent ocean steamship under full headway. Blanks are left on this stamp to be filled up by the collector, showing the weight and contents of the package and giving any other information required by law. The entire series is characterized by the newness of the design and execution, and meets with approval in official quarters.

Acting Secretary Fairchild has issued a cir-

cular to all custom officers, calling attention to Section 10 of the Oleomargarine Act, making provision for the collection of an internal revenue tax of 15 cents per pound on all imported oleomargarine, in addition to the regular import duty, and also providing that this additional tax must be paid before the removal of the goods from the custody of the Government.

#### What the Manufacturers Say.

Some manufacturers of oleomargarine have protested to the Treasury Department against the construction placed by the Internal Revenue Bureau on the second section of the act regulating the manufacture of that compound. The law imposes on "oleo oil, natural and other articles of like nature," a tax of the same amount as is imposed on oleomargarine. It appears that there are a number of firms engaged in the manufacture of oleomargarine, whose business is to purchase and combine the various ingredients into a marketable article, and if the component articles are subject to tax, as has been held by the Revenue Bureau, the result will be to compel these manufacturers to pay a double tax, as they are also required by law to place stamps on the finished article when compounded.

It is also stated that certain firms are making large quantities of what is known as "oleo oil," which is sold and used solely as a lubricant for machinery. If the strict construction already given to the law by the department is adhered to, this material will also be subjected to the tax imposed on oleomargarine. The matter is now under consideration by the Internal Revenue Bureau, and it is believed that when Commissioner Miller returns the construction that has been placed on the second section of the act will be modified so as to relieve the material of the tax. Circulars have been sent to all collectors, requesting information as to the number of oleomargarine factories in each district, the average production and other information, with a view to adjusting the clerical force of the bureau to meet the demands of business when the act shall go into operation.

## HORTICULTURE.

### What has Horticulture done for California?

By EDWARD J. WICKSON.

[An address delivered at the Contra Costa County Fair at Pacheco, Sept. 8, 1886, and published by request.]

For a number of years the advancement of horticulture has been a favorite theme with California poets and orators, and in general conversation. Many years ago the excellence of California fruit was recognized and the planting of fruit trees was urged, but within the last few years the public has been excited in a far more serious fashion. So great and so general has become the disposition to exalt horticultural industries that perhaps three-quarters of all our agricultural talk and writing is concerning fruit and fruit products. When I received the invitation from your president to address you upon this so popular theme, I was at a loss to know what of novelty could be introduced in the discussion of a matter which has been already so thoroughly presented to the people of California. It has occurred to me, however, that perhaps a short time may be profitably spent in an inquiry as to whether fruit-growing has done enough to warrant its present prominence in the public mind; whether it has justified the intelligent and unselfish efforts to which the pioneers in fruit growing, like your honored Strentzel, have given their valuable lives; and whether it still promises anything to really justify the great expectations which are so freely expressed on every hand. I think perhaps these questions are often answered merely with a reference to our glorious climate and perhaps on account of how much some man or some neighborhood has accomplished. I shall endeavor to find a broader basis upon which to establish an answer to the question: "What has horticulture done for California?"

Different people and different classes of people are apt to look upon a question, to a degree, at least, according to its bearing upon their usual lines of thought and action, or at least, for our own purposes in this discussion, we may consider them as so doing. In each case the investigator brings to light facts which seem to him of the chief importance. Let us, then, summon before us a number of witnesses to testify as to what horticulture has done and is doing for the State. Let the business man declare what it has done for the purse, the doctor recount its influence upon the pulse, the philosopher its services to the head, the preacher its effect upon the heart, and the statesman close the discussion with a word of its influence upon the quality of our citizenship.

First, then, the merchant:

#### What has Horticulture Done for the Purse?

Too many in answering this question cite individual instances of large profits from fruit-growing, and use them as exponents of the general value produced. This is not a safe argument, and it could be met by cases of individual failure and disaster quite as great in their way as the individual successes. We

must find broader, surer ground. It is better to rule out the personal equation and seek an aggregate result. Suppose we allow that all the fruit sold for consumption in this State be set apart as the actual cost of producing the whole crop. It is certainly a liberal estimate of the cost. This would then give us only the horticultural produce which is shipped out of the State as the profits on the year's labor and interest on the capital invested. The accurate records of the railway companies show the following amounts of the different horticultural products shipped out of the State during 1885:

	Pounds.
Citrus fruits.....	22,476,960
Deciduous fruits.....	22,909,780
Dried fruit.....	5,794,160
Raisins.....	6,203,340
Canned fruits and vegetables.....	28,949,380
Nuts.....	1,762,260
Onions.....	521,000
Potatoes.....	6,283,400
Vegetables.....	6,588,800
Wine.....	30,272,600
Brandy.....	2,532,230
Total.....	134,293,940

This amount of horticultural products laden in cars at 11 tons each, which I am told is about the average weight, would require 6104 cars to convey it, and they would make a train nearly 40 miles long.

But there is another way to show the deeds of horticulture to the State, and that is in the increase of the taxable property which can be directly traced to it. Hon. E. W. Maslin, secretary of the State Board of Equalization, has furnished me with the total assessed valuation of certain counties in 1876 and 1886 which show how important the increase is. I choose a few counties where the main interest is horticulture, and to which people have come to make homes because of the fruit resources of the localities. Take the following counties, for the years named, leaving out the assessed value of railways in all cases:

County.	1876.	1886.
Fresno.....	\$ 7,630,431	\$ 14,130,118
Los Angeles.....	14,156,622	37,560,880
Napa.....	7,909,186	11,873,261
San Bernardino.....	2,484,480	8,089,305
San Diego.....	2,409,202	9,961,282
Santa Clara.....	27,294,234	37,929,395
Solano.....	9,117,775	16,799,603
Sonoma.....	14,866,098	25,606,905
Contra Costa.....	6,938,670	14,247,039
Totals.....	\$2,809,698	\$175,797,788

Here is, in nine counties of California, an increased valuation of \$82,988,090 in ten years, which may be traced to the horticultural industry. Certainly it has done something for the public purse.

#### Horticulture and Health.

Let us turn, now, to another measure of the service to the State and to humanity which may be fairly credited to the horticultural industry—its influence upon physical health and the prolongation of life. It is a fact apparent to every observer who directs his attention to it, that thousands have been rescued from untimely graves by enlistment in California horticultural arts. Hither they fly from all the unkind regions of the earth to find, in our outdoor life and delightful horticultural work, a healing balm which brings color to the cheek, strength to the muscles and makes existence a joy and not a burden. It can be clearly shown that California horticulture is reducing the world's death rate, prolonging human life and increasing its effectiveness; filling households with light instead of the shadow of the dark valley. Almost every community has those, and often among its most valued citizens, who have almost experienced a renewal of youth and who can gladly testify that "gold that buys health can never be ill-spent." Opportunities which our State affords for other kinds of profitable work can claim a share in this noble service of prolonging life, because of our beneficent climate; but to horticulture pertains more credit than to all other occupations combined.

But there is another influence which the doctor would attribute to California horticulture, and that is, the general good effect of an abundance of choice fruits and vegetables in building up the general health of the people. It is said that California life stimulates one to undue haste in work and soon wears out the worker. A generous fruit diet, which tends to cool the blood and tone up the system, may enable us to sustain the wear of our rapid style of thought and action. Who can measure the value of the influence which chases the dullness and pain from the brain, banishes dyspepsia, and makes the dull eye and swimming head of biliousness exceedingly rare? It would be hard to prove that the proverbial open-heartedness, cordiality and tireless activity of California is not to some degree due to the contributions which horticulture makes to our diet. The bacon and flapjacks of pioneer times have been largely replaced, or at least attended, by the succulent vegetables and juicy fruits. It is interesting, too, that those regions which in early times poured out in greatest quantity the demoralizing metal, yield now, in rich profusion, "blooming ambrosial fruit of vegetable gold."

#### Horticulture and Intellectual Culture.

Let us turn now to the philosopher and ask him if he finds aught of benefit in the great prevalence of horticultural arts in the commonwealth. Little cares he either for the purse or for the pulse, and counts such judgments far in-

ferior to a standard of his own. It is to the head he directs his inquiry, and in the utterance of words, which are signs of ideas, he will measure the influence of occupation upon the man. What powers of mind does he find awakened and strengthened by thoughtful horticultural work? All agricultural arts thrive by the application of earnest thought. Brains are a good fertilizer, as one has remarked. There are men who merely plow when the ground is soft enough; scatter the seed and reap the crop at some convenient time after the grain is ripe without much thought of improving the quality of the crop or of increasing the yield, and there are men who stick in trees, leave them to struggle with weeds and drouth and bugs, and then gather the little fruit which runs this gauntlet of adversity; but such men are not the best types of grain-growers or horticulturists. The very word *horticulture* conveys the idea of discriminating care, diligent effort—in short, the application of thought as well as force to achieve desirable results. All of our choice fruits are the results of culture, of the arrangement of natural conditions and direction of agencies by the mind of man. The improvement of a choice fruit is analogous to the advancement of the human race—the wild types, both in fruit and in man, are inferior. There is no change in species, but an infinite variation, which extends from worthlessness to the highest utility and nobility. Now, while this great change is being achieved in the fruit, what is the effect upon the mind of man, which is its architect and builder? Most assuredly it is to stimulate it to new activity, to suggest new and progressive ideals of excellence, to awaken a more cultured and refined taste, to increase the appreciation of the beautiful and the love of it—in short, to promote intellectual development. Has it done this in California? It certainly has, and no other industry can rival it in this service. Go into any of our fruit fairs or fruit growers' meetings, or better still, into the orchards of our most careful and successful fruit-growers. Watch these men as they look at a new variety of fruit to make a critical examination of it. See them turn it about and fix their eyes upon it until every hue of the colors is judged according to the high standard of excellence which they have set up—until every curve of its outline is mentally measured. A painter could not do more for his beautiful model than the trained and devoted horticulturist does for his fruit.

Then view him as he shapes his trees in the orchard to attain his idea of symmetry and to secure strength and fruition and just the proper distribution of sunlight and shade, to perfect the fruit and protect the tree. From a switch, fit to dust the jacket of a truant schoolboy, he develops a shapely tree. The sculptor hews down his block of marble until its outline presents to the eye the lovely image he carries in his mind; the horticulturist starts with a single bud and directs the forces of nature until he builds up his tree, causing it to gather strength here and to throw out graceful branches there, until it stands forth, stalwart, symmetrical and peerlessly beautiful with its springtime silver and its autumn gold. What an eye has he for form! What a knowledge of the methods of growth! What an intelligent linking of cause and effect! Indeed our philosopher, inquiring into the intellectual aspects of agricultural arts, will select the wide-awake, enthusiastic, thinking horticulturist as a splendid exemplification of the enlistment of intellect in industry.

#### Horticulture and Morals.

But we have other directions in which to explore the contributions of horticulture toward the advancement of California. We have endeavored to prove it good for the purse, for the pulse, for the head. The preacher might call all these standards of value too low. He would say you must ask if it is good for the heart. The influence of environment in molding character is too well known to need argument. The services of horticulture in beautifying homes and making them more attractive to the young, are generally recognized. There has been enough written on this one subject, from the classic age to the present, to fill a library. I will quote a few sentences from a recent writer:

That which makes the home attractive and beautiful, which furnishes the best models of taste, which appeals to the better nature always, which brings the child continually close to Nature in her perfect forms of tree and plant and flower, is playing no mean part in molding character and shaping the future life. Yet this is the very work horticulture is doing. It surrounds the child with models of grace and beauty—teaching nature's own lessons through the eye, deep down into a human soul. The power of the home life is intensified and strengthened, and the young life thus touched and softened by gentle and refining influences yields more readily to the truth and to proper home-training—for nature, in every form, is reverent, humble and obedient. Have we not a right to expect that manhood will show a higher moral culture, a purer taste and a more symmetrical character as the results of such home influences?

That such has really been the case is the verdict of history. To be impressed with the moral work of horticulture in California one has only to observe the change which is rapidly coming over our ranch homes. The desolate habitation, with its dreary, wind-swept, arid surroundings, is becoming obsolete, and in its place see the tasteful cottage, with its clambering vines, the garden with its wealth of shrub and flower, and beyond them the bowers of orchard bloom, and the vineyards spreading their



rich green carpets over the arid plains and hillsides. Any preacher will tell you that he can easier reach the heart when his flock is sheltered in such homes as these, and the moral tone of the community strengthens and deepens as these homes are multiplied.

Horticulture and Citizenship.

Last of all the statesman: what has horticulture done for the State? It has come down from the fathers of the Republic that the stability of the Government depends upon the character of her sovereign citizens. Give a people industry, which earns prosperity, promotes physical health, fosters intellectual growth, develops true moral sentiment, and you will have a government whose citizens will be contented, strong, progressive, enlightened and upright. Horticulture is now doing more to people this glorious commonwealth of California with such citizens than any other of our industries, and we cannot too highly honor those who, by early deeds, pointed the way for others to follow, or by glowing prophetic words stimulated others to effort and achievement.

The Future of Horticulture.

Granting, then, these services of horticulture to California, are we at the end or still at the beginning of her work? This is a question of the greatest moment. It can be best answered by the logic of facts. We have seen what a vast amount of horticultural products were sent beyond the borders of the State last year. Is it enough for the United States? We can safely say no, and for these reasons: First, the present year has shown an increase of 25 per cent in the shipment of citrus fruits, and yet they have brought better prices than for years. It will show an increase in the shipment of deciduous fruits although it has not been a year of full bearing—in fact, it has in many respects been a very short year in certain fruits. The present year will show a wonderful increase in the shipment of dried fruits because the railroad war brought freights so low that the State was swept clean by the shippers, and they sent a good deal of sweepings along with the good fruit. For all that, the shipments hardly made an impression upon the great Eastern appetite; and Eastern fruit-dealers are writing of the bare condition of their markets and the splendid outlook for California dried fruit. Unfortunately, excepting prunes and raisins, the short fruit crop and the eagerness of the canners will leave comparatively a small amount of fruit for drying this year. California canned fruit is again at flood tide, and this year's product will be large. If the proper standard is maintained in quality, the demand for the fruit will increase rapidly from year to year.

The field toward the South and East for California vegetables is one which promises to be of great importance to our horticulture, providing reasonable rates of freight can be secured.

There has been so much said during the last year of the opportunity for shipping fresh fruits to the East, and of the almost indefinite extension of the business which would be possible if California fruit could be placed within the reach of the middle and lower classes, that I need not enlarge upon that point. It seems unquestioned that if good fruit can be given them at moderate prices, it would tax our producing capacity to supply them. In view of the continued and sweeping disasters to fruit trees in the great Northwestern States, and even farther east, the field seems well opened to California producers, but how to best reach it and profit by it is still an unsettled question, although our constantly increasing shipments seem to fully insure an ultimate solution and one favorable to our interests.

What the East Purchases Abroad.

To give some tangible features of the opportunity at the East for increased supplies of California horticultural produce, I have prepared, from the report of the U. S. Bureau of Statistics, the following statement of the value of imported products for the 11 months ending the first of June, 1886:

Seeds.....	\$1,498,625
Figs.....	595,038
Lemons.....	2,182,186
Oranges.....	1,766,889
Prunes.....	1,998,705
Raisins.....	2,861,619
Preserved fruits.....	797,427
All other fruits.....	1,386,680
Almonds and other nuts.....	1,190,175

Total.....\$14,187,344

Olive oil.....	\$ 593,583
Vegetables.....	2,377,787
Wines.....	6,234,667
Brandy.....	1,040,182

Here is a value of over \$21,000,000, including only articles which we have already demonstrated can be produced in the highest excellence in California, and this value will increase as the country grows.

Collateral Branches.

What we can do in collateral branches of horticulture can hardly be estimated. Let me mention but three items in the production of which a beginning has already been made. Take the camphor tree, a member of the laurel family, a beautiful evergreen, perfectly hardy and a most rapid grower. I hold in my hand a sample of crude gum camphor, made in the University laboratory from leaves and twigs from a tree growing in my own garden in

Berkeley, and which has been twice cut back to a stump to secure material for experiments, and has again made a new top within a year. It is a tree which should be widely distributed in this State for its valuable wood and perhaps for camphor-making. We pay to foreign nations now about \$140,000 per year for crude camphor gum.

I show you also a piece of another plant which we are growing at the University in Berkeley, and distributing to all who desire to test its growth in this State. It is the true Sicilian sumac, used by the tanners, and we paid the people of the Mediterranean \$3,614,503 last year for sumac. And here is still another horticultural product; the boys will recognize it. It is a piece of licorice-root grown in California by Mr. Lea, of Florin, Sacramento county. Last year we imported over 25,000,000 pounds of licorice-root, at a cost of \$1,232,037.

But I will not weary you with sketches of opportunities. These will serve to illustrate the point I would make: that in our climate we can grow what the great Eastern and Western States cannot produce—articles which we can supply them and receive the money which now goes out to foreign nations.

The Application.

Concluding, then, that horticulture has done great things for California, and may do even greater things in the future, it becomes pertinent to inquire what special importance this fact has for the county of Contra Costa. In the first place, you have a county splendidly adapted by nature for growing many kinds of fruit. This is evident to any one who visits your lovely, sheltered valleys, your warm hillsides, and who knows the composition of your soils—of which Professor Hilgard, after careful analysis of samples from the very region in which we now are, says: "Its fruit product cannot fail to be both abundant in quantity and high in quality."

More than this, you have the fullest practical demonstration of horticultural worth, thanks to the pioneers who early planted trees and vines. Another reason for increased horticultural interest in this county is its nearness to the great markets of the State and the prospect that new railway lines will bring its hitherto somewhat isolated valleys within an hour or two of the metropolis.

Means of Advancement.

What ways, then, lie open to secure the fuller development of this favored region, not alone in fruit but in live stock and dairying, for which some of your valleys are already famous? This county agricultural society, under whose auspices we are assembled, is an important agency. Uphold the hands of those who are striving to elevate and improve it. Bring your best produce, and show by your interest and support that you desire that the agricultural features of the fair shall be second to none.

We have State organizations for the advancement of horticulture, but you should have local horticultural societies or clubs, unless your Granges can set apart time for the discussion of such matters. There is a vast amount of valuable local experience which should be brought out for the benefit of all. Local experience is the only sure guide in horticulture in a State where climate and soils are so diverse as in California. Your local papers at Martinez, at Antioch and at Concord are doing much good work and recording experience which is of great value, but they could serve you much better if your enthusiastic horticulturists should meet at stated times to compare products and experience. Such horticultural clubs are now doing excellent work in nearly all the fruit-growing neighborhoods of the State. They are bringing the fruit-growers to a better acquaintance and enabling them to act unitedly and more effectively in the promotion of their industry.

Another piece of advice which I would give you is to make greater use of the University, which is only across the hills from you. The College of Agriculture is well fitted to be of service to you. Send your boys and girls to be trained in horticultural arts and the sciences underlying them. We do not believe, as a general proposition, that a youth can learn too much, but we recognize the fact that all cannot pursue long courses or enter far into abstruse studies. We, in the College of Agriculture, stand ready to teach your young people what they can learn in the time they can command for the purpose. If they cannot come for four years, send them for one; if not for one year, then for three months. They can come without examination and without price, it being only understood that they are taking a special course or pursuing a special study. If you cannot send us pupils, then send us descriptions and samples of things which you wish information about. Send your grapes and wines to be analyzed and tested; send us your bugs, if you are so unfortunate as to have any, and we will try to tell you something more than the Latin names for them; send for our reports, if you desire to read them, and apply for our seeds, scions and plants, if you will faithfully try them and report to us the results for the public benefit. We are set up at Berkeley to make ourselves useful to the agriculture of the State, and how can we be useful to you unless you tell us what you want?

[The address closed with a few general remarks, suggested by the occasion.—EDS. PRESS.]

Nut-growing in California.

EDITORS PRESS:—There are, probably, but few persons in California aware of the State's progress in nut growing, which at no distant day promises to be one of the most remunerative of her many agricultural industries. There is hardly a section of the State where peanuts, walnuts and almonds cannot be grown with a profit. Every requisite condition in soil and climate has been found wherever these crops have been tried, but with other varieties the industry has hardly passed the experimental stage. The growth can be seen by the following comparative crop summary in pounds, for the past three years:

Years.	1883.	1884.	1885.
Walnuts.....	500,000	750,000	1,250,000
Almonds.....	700,000	250,000	1,050,000
Peanuts.....	.....	750,000	518,000

The walnut crop last year showed a most gratifying increase over the productions of former seasons, and this year's crop is estimated to be all of 20 per cent greater than that of 1885. The California walnut is so favorably known on this coast and at the East that it is sought in preference, owing to its freshness and excellence of taste, to the imported. As yet, the principal sources of supply are Los Angeles, Santa Barbara, San Bernardino and Ventura; but the late Northern Citrus Fair, held at Sacramento, brought out samples grown in Northern California which show that, by careful cultivation, that section will take as high a rank as Southern California for the product. The prices obtained are always good, leaving a round profit after the trees come into full bearing. It is not at all likely that the industry can be overdone, for we have the entire United States for a market.

The almond output of the State last year was of a general good quality. The season opened with bright prospects under light stocks, which would, undoubtedly, have been realized but for the ill-advised increase in consignments of large producers to the Eastern distributing points. These free consignments broke the market and brought about a general demoralization of trade in the article, the effects of which have just been lost in the almost total consumption of stocks, so that the incoming season will be entered with a lighter stock than last year, with a larger demand, owing to consumers being better accustomed to the superior quality, on an average, of California almonds over the imported. From all that can be ascertained, producers, or at least the larger proportion, will sell this year's crop for cash here, rather than consign to the East and be subject to delays, heavy expenses, and the general uncertainties that follow shipping to the East on account.

The outlook for the industry is bright, for many of the larger Western cities now draw their supplies wholly from this State, while in the far East the prejudice against California almonds is dying out, giving encouragement to the belief that at no distant day the far East will be an active competitor for our product.

The first place as a peanut-growing State has been, and is still, held by Virginia; but large dealers who handle the peanuts grown in the various Southern States state that those raised in California equal the best. The falling off in last year's crop compared with that of 1884 is accounted for by the low prices that obtained in the season of 1884-85; but as the prices for the season just drawing to a close are said to have been fairly remunerative, more attention, it is claimed, has been given to their cultivation. Probably to produce the best results the same method must be adopted here that obtains in Virginia, where it has been acquired from long years of actual experiments. There the peanuts are generally hand-picked, all the faulty and blemished nuts removed, and the balance cleaned and polished by machinery or a system of revolving brushes, which gives the shells a smooth appearance, greatly adding to their attractiveness and causing them to be purchased at high figures, when the unpicked are neglected even at considerably lower prices. The stock on the market now is light and the incoming crop is likely to meet with a fairly active demand at remunerative prices.

San Francisco, Sept. 11, 1886.

Myrobolan Stock—A Correction.

EDITORS PRESS:—In your report of the proceedings, of August 27th, of the society in the discussions on Myrobolan stock, you say:

"John Rock, in answer to a question, spoke in favor of the Myrobolan stock for low, moist land. The growth on it seems to be good, but usually 10 to 15 per cent will be lost."

Please correct this, and give the question also, which was asked by Mr. A. T. Hatch: "How does the peach succeed on the Myrobolan?" To this I replied that I had peach trees growing on it six years, on wet ground where peach stock had died from too much water in winter. Ten to 15 per cent had been lost in nursery in peach trees worked on Myrobolan stock that had not well united.

San Jose.

JOHN ROCK.

[Mr. Rock is right. We remember the discussion just as he described it. In writing from our notes we must have been guilty of a mental lapse, and unconsciously left out the connecting statements which he mentions. We regret the error, and hope all who read the discussion will note the correction.—EDS. PRESS.]

THE STOCK YARD.

Suggestions for the State Fair Directors.

The following, addressed to the Board of Directors of the State Agricultural Society, was placed before that body last week by the cattle breeders whose names are appended:

GENTLEMEN: The undersigned respectfully represent:

First—That they are breeders of cattle, not "cattle traders."

Second—That they bring their cattle to the State Fair for exhibition purposes and to instruct the public in the merits of the different breeds which they represent and advocate.

Third—That the handling, feeding, transportation and exhibition of said cattle are a matter of great care, serious expense and considerable risk.

Fourth—That the value of the premiums awarded and divided among the several competing herds is not in itself an adequate return for said care, expense and risk.

Fifth—That the breeders look to and consider the opportunity of favorably displaying, and thereby advertising their cattle, as the main recompense for the outlay and risk incurred.

They therefore desire to call your attention to the following facts:

a. A large proportion of the most desirable exhibition stalls have this year been allotted to cattle traders and to cattle breeders who have brought cattle to the fair not to exhibit but to sell.

b. A majority of the breeders of cattle have by this action on the part of the association been crowded into such distant and undesirable stalls that their stock might almost as well have been entirely removed from the premises of the association at all times excepting during the parade.

c. That even without taking into consideration the number of "sale" cattle exposed on the grounds, there would not have been a sufficient number of desirable stalls to accommodate the cattle brought here purely for exhibition purposes.

d. That in charging an entrance fee to "sweepstakes" premiums the association is unnecessarily increasing the breeder's expenses.

The cattle breeders now beg to recommend to the association:

First—That a distinction be recognized and made between cattle sent here for exhibition and those brought on the premises for sale.

Second—That a sufficient number of stalls be built within a reasonable distance from the main entrance and grand stand, and that said stalls be reserved for the use of breeders of cattle.

Third—That breeders be not allowed to exhibit more than 25 head of any one class of cattle.

Fourth—That in the allotment of stalls all herds of one class or breed be kept as close together as practicable, and be set apart from those of another breed.

Fifth—That cattle traders' stock and sale cattle be neither allowed to compete for premiums nor to occupy the same lines of stalls as those of the cattle breeders.

Sixth—That the charge of ten per cent entrance fee to sweepstakes competitions be hereafter abolished.

Seventh—That each exhibitor of cattle be limited to one entry to each sweepstakes premium offered.

Eighth—That Rule 29 be amended to read as follows: "As fast as the judges or Awarding Committee arrive at a decision in each competing lot or ring, they shall instruct the superintendent or his assistant to there and then attach the ribbons to such animal or animals as they may designate. Such ribbons shall be indicative of the premiums awarded, and from said awards there shall be no appeal."

They recommend, gentlemen, that Rule 29, as above amended, be strictly adhered to and enforced. Finally, they ask that the cattle be exhibited during only one week, said week to commence on the Monday next after the close of the Golden Gate District Fair. They remain, gentlemen, respectfully, etc.,

WILFRED PAGE, Penn's Grove Sonoma Co.  
J. H. WHITE, Lakeville, Sonoma Co.  
GEO. BEMENT, Redwood City, San Mateo Co.  
FRANCIS T. UNDERHILL, by C. F. S., Santa Barbara, Santa Barbara Co.  
M. WICK, Oroville, Butte Co.  
ANDREW SMITH, Redwood City, San Mateo Co.  
FRANK H. BURKE, Menlo Park, San Mateo Co.  
ALEXANDER SCOTT, Napa, Napa Co.  
ROBT. ASHBURNER, Baden, San Mateo Co.  
P. PETERSON, Maxwell, Colusa Co.  
H. C. MOORE, Visalia, Tulare Co.  
R. MCSNESPY, Chico, Butte Co.  
H. S. SARGENT, Stockton, San Joaquin Co.  
THOMAS WARD, Oakland, Alameda Co.  
TYLER BEACH, San Jose, Santa Clara Co.  
ROBERT BECK, San Francisco, San Francisco Co.  
MARYSVILLE LIVE-STOCK CO., Marysville, Sutter Co., N. D. Coombs, president.  
E. S. DRIVER, Sacramento, Sacramento Co.  
PERRIN STANTON, Sacramento, Sacramento Co.  
P. H. MURPHY, Sacramento, Sacramento Co.  
R. J. MERKLEY, Sacramento, Sacramento Co.  
P. S. CHILES, Davisville, Yolo Co.  
GEO. A. WILEY, Cook Farm, Contra Costa Co.  
H. W. MEEKS, San Lorenzo, Alameda Co.  
J. D. SMITH, Livermore, Alameda Co.  
HENRY PIERCE, San Francisco, San Francisco Co.



## PATRONS OF HUSBANDRY.

Correspondence on Grange principles and work and reports of transactions of subordinate Granges are respectfully solicited for this department.

### Farmers' Convention.

About 50 farmers, nearly all P. of H., assembled at one o'clock, Wednesday, Sept. 15th, at Grangers' hall, in Sacramento.

Judge W. C. Blackwood, of Haywards, called the meeting to order, and, although at first he declined the nomination, was afterward elected and served as temporary Chairman. A. A. Krull, of Florin, was chosen Vice-President, and E. T. Pettit, of San Jose, temporary Secretary. The following committees were appointed:

On Credentials—Messrs. Hack, Dennis, Anway, Feeley, Donaldson.

On Order of Business—Messrs. Learned, Nelson, Caples, Kelsey, Welty, Brown, Wilson.

On Resolutions—Messrs. Moulton, Taylor, Pomeroy, Jackman, Doty.

The following delegates, members of the Granges named, were reported as entitled to seats:

American River Grange—D. W. Taylor, N. H. Lauridsen, Charles Studerus, A. A. Harris, P. B. Taylor. Alternates—Joseph Routier, William Bryan, J. Cornell, M. Pike, Wm. Gippin.

Eben Grange—W. C. Blackwood, O. Dennis, L. B. Anway, J. E. McDermid.

Elk Grove Grange—Gillis Doty, G. L. Garwood, E. W. Stickney, J. Winkelman, Dr. James Caples, E. H. Kerr, Wm. Bader.

Elmira Grange—G. W. Frazier.

Enterprise Grange—Isaac Lea, A. A. Krull, A. B. Burns, W. A. Birch, John Hanlon, A. M. Plummer, George Wilson.

Florin Grange—F. Perry, A. Stevenson, James Jackson, J. Reese, C. Towle, D. H. Buell.

Lodi Grange—A. J. Woods.

Magnolia Grange—Daniel Bilderback, V. W. Stell, J. W. Gautier.

North Butte Grange—A. D. Nelson.

Sacramento Grange—Myron Smith, E. Greer, George T. Rich, Oscar Flint, Joseph Sims, James Rutter (George W. Hack, proxy), S. H. Jackman, J. H. Hamilton, M. Keefe, George Hack, S. T. Hawson, Henry Watson, C. E. Mack, Jr., J. B. Welty.

San Jose Grange—D. C. Feeley, W. C. Kingsbury, Hiram Pomeroy, S. P. Saunders, E. T. Pettit, G. W. Glendenning, A. R. Woodham, C. T. Settle, S. Newhall, J. K. Holland.

South Sutter Grange—Sister Mahon, Sister Mary Donaldson, R. Mahon, Alex. Donaldson, Charles Brown.

Stockton Grange—D. A. Learned.

Sycamore Grange—L. F. Moulton.

Temescal Grange—A. T. Dewey, E. Kelsey, Newton Sewell (E. Kellogg, proxy).

Wheatland Grange—A. W. Oakley, D. Frazier.

A few who arrived later were duly admitted. James Green, I. B. Wheeler, J. J. Martin and J. C. Buttner, representatives from labor organizations in S. F., were voted honorary seats in the convention.

Four sessions were held, viz.: Wednesday P. M., and Thursday A. M., P. M. and evening, and action was had as follows:

The temporary officers were made permanent; also, Geo. T. Rich, assistant secretary.

### Platform Adopted.

We view with alarm the fact that railroad, telegraph and other monopolies are corrupting and controlling our Government. We, therefore, are in favor of our Government owning and operating all railway, telegraph and telephone lines in the United States.

We favor the limitation of vast accumulations of wealth by a system of graduated income taxation.

We favor an amendment to the Constitution providing for the election of United States senators by the direct vote of the people.

We favor free coinage of gold and silver, the abolition of national banks, the issuance by the Government of its own money, which shall be legal tender for all debts. That the bonds of the Government be paid as fast as under the law may be possible, and that the Government issue no more bonds.

We recognize the vast importance of a system of irrigation for the State of California, and that the ownership of water shall be inalienably vested in the State, and shall be administered and distributed by the State, dividing the State into districts by natural water-sheds or catchments, the expense to be borne by the districts irrigated.

We are in favor of a stringent law to punish for the adulteration of food, drinks and medicines, and the use of short weights and measures.

We are opposed to the adoption of the proposed amendment to the Constitution of the State, commonly known as the "Heath Amendment." Its approval by the people would be in accord with the wishes of the non-taxpaying monopolists of California. Our present system of railroad taxation should not be abandoned unless the Supreme Court of the United States should hold it to be invalid. If the Heath amendment is adopted, the railroad corporations will be their own assessors, and will contribute toward the support of the Government such sums only as, according to their own phrase, they are minded to pay. An examination and comparison of the official returns made for the year 1885 by the railroad corporations to the State Board of Equalization demonstrates the

fact that under the operation of the Heath amendment the State and counties would lose yearly the sum of \$478,067.32. We are opposed to the Heath amendment, which will appear on our ballots as Constitutional Amendment No. 1.

We are opposed to any increase of our standing army in time of peace.

We denounce any movement looking toward any increase of appropriation of State money for maintaining State militia.

We favor the abrogation of the Burlingame treaty and the exclusion of Chinese by all lawful means.

In furtherance of these ends, we ask the co-operation of all fair-minded people. We wage no war against classes, but only against vicious institutions. We are not content to endure further discipline of our present rulers, who, having dominion over money, over transportation, over the press and the machinery of the Government, wield unwarranted power over our free institutions, and our lives, liberty and property.

The transportation question being of the greatest importance to the farmers and manufacturers, and especially in our low-priced staple, wheat, we are in favor of the Eads Ship Railway.

Resolved, That the fees, salaries and emoluments of county officers should be reduced commensurately with the salaries paid for like services in private business.

Resolved, That women shall be placed on an equality with men in clerical employment in official positions.

Resolved, That the Central Committee be authorized to consult with representatives of other industrial organizations, whose leading purposes are in harmony with our own, and co-operate in carrying out those objects and principles.

Sentiments were expressed strongly in favor of keeping all farmers' organizations intact from those of all other industrial occupations, uniting their action only in matters of common benefit to all.

### The Ticket Nominated.

For Governor—Joel Russell, P.

Lieutenant-Governor—J. V. Webster.

Attorney-General—A. L. Hart.

Supreme Judges—Jackson Temple, D., and Jeremiah Sullivan, D. (One to be named by Central Committee.)

Controller—John P. Dunn, D.

State Treasurer—H. S. Graves, P.

Superintendent of Public Instruction—Ira G. Hoitt, R.

Clerk of the Supreme Court—J. D. Spencer, D.

For Congress—Second District, George Ohleyer, Sutter Co.; Third District, W. W. Smith, of Solano, P. (The nominations for the First, Fourth, Fifth and Sixth Districts left to Central Committee.)

State Board of Equalization—C. E. Wilcoxson, D. (Two vacancies to be filled by Central Committee.)

Railroad Commissioners—W. W. Foote, D., J. A. Filcher, D. (One vacancy to be filled by Central Committee.)

The balance of nominations were left for State Central Committee to make on due consideration.

Fifty cents was collected from each delegate to defray expenses of the convention. A balance of \$3.75 was ordered paid to the California Patron for extra copies, to be distributed by the Central Committee.

### State Central Committee.

It was voted that the State Central Committee consist of 31 members, with power to fill vacancies. The following were elected: Judge W. C. Blackwood, Haywards; A. T. Dewey, Oakland; E. Kelsey, North Temescal; L. B. Anway, Haywards; S. P. Sanders, San Jose; D. C. Feeley, San Jose; J. Chester, Alameda; A. A. Krull, Sacramento; A. M. Plummer, Brighton; J. B. Welty, Sacramento; Geo. Rich, Sacramento; Geo. W. Hack, Sacramento; Nelson Carr, Bennett Valley, Santa Rosa; L. F. Moulton, Colusa; C. Brown, Sutter Co.; Geo. Wilson, Florin, Sacramento Co.; D. W. Taylor, Sacramento; A. P. Merritt, Tulare; Henry Wilson, Red Bluff; Dr. J. Strentzel, Martinez; T. T. Hooper, Rio Vista; D. A. Learned, Stockton; O. Dennis, Haywards.

Motions were carried as follows: Nine members shall constitute a quorum of the Central Committee. This shall be called the "Farmers' Convention." The California Patron shall be the organ of the movement. The secretary is authorized to give the proceedings to all newspapers that may wish to publish them. The thanks of the convention are extended to the president and secretary for their faithful and efficient services.

### Central Committee Meetings.

The State Central Committee met at the office of the Patron, in S. F., Tuesday morning, Sept. 21st. A good representation was present.

The Central Committee organized as follows: W. C. Blackwood, Haywards, chairman; S. P. Sanders, San Jose, secretary; W. W. Smith, Vacaville, treasurer.

J. Chester declined from membership of the Central Committee, and his resignation was accepted.

A kindly letter from S. T. Coulters, declining to act on the committee, was received; also a letter from H. C. Wilson, accepting his appointment and giving his hearty indorsement to the movement. Christian Bagge, of Oakland, W. W. Smith, of Vacaville, and Geo. T.

The letters D., R. or P. after names of candidates signifies that they are Democratic, Republican or Prohibition nominees, respectively.

Elliott, of Hollister, all of whom were present, were added to the committee.

An executive committee of seven (four to constitute a quorum) were elected, as follows: Blackwood, Smith, Kelsey, Davis, Anway, Learned, Dewey. Latter declined and asked to be excused, for want of time to serve.

Several sessions were held on Tuesday and Wednesday.

The utmost good feeling existed during the meetings, which seemed to be enjoyed by all present, as is usual at all gatherings of earnest and well-meaning Grangers and farmers.

Further proceedings of interest will be mentioned hereafter.

### Going to the State Grange.

EDITORS PRESS:—Having received letters of inquiry from Patrons and friends in the southern sections of the State who intend visiting the State Grange at the coming session, concerning routes of travel, fares, hotels, etc., all of which has received our attention by letter, and for fear there may be others in doubt as to the best means of reaching our fair neighborhood, I thought it advisable to inform all through your columns.

Our rivers are navigable, but are only navigated by freight craft; hence, travel to Marysville is confined to the railroads, which, as you know, have reduced the fare for that occasion one-third, charging full fare coming and one-third homeward.

Visitors coming from Sacramento and the San Joaquin valley, to make close connections and quick time, will take the trains arriving in Sacramento at 2:30 P. M. Visitors from Santa Clara county and the South will take the local at San Jose for Niles, which connects there with the S. F. train via Livermore and Stockton to Sacramento, arriving there, as before stated, at 2:30. By this route, passengers leaving Monterey in the early morning (at 6 o'clock, I think) will reach Marysville the same day at 5 P. M. (This refers to the standard-gauge roads. I do not understand the time of the narrow-gauge.) Those from that section coming by way of S. F. will have to remain there over night and take the train next morning at 7:30. All changes are made in same station, with no trouble or detention. Baggage is checked to Marysville from all stations, thus relieving the passengers from much care.

A very large attendance is invited and expected. The United States and Golden Eagle hotels are under one management, and have fixed their charges at \$1.25 per day; the Western wants \$1.50 per day. Choice family rooms can be had for \$1.50 single and \$3 double per week. There are also several private boarding and lodging houses charging \$1 per day. I can think of no preference; all are good and convenient to the place of meeting. Everything is being done to insure comfort and convenience to our visitors on that occasion.

GEORGE OHLEYER.

### Alhambra Grange.

EDITORS PRESS:—Alhambra Grange has her regular bi-monthly meetings the whole year, excepting December and January. On December 4th we elect our standard-bearers, have a harvest feast and good social time. The first Saturday in January we delegate these same standard-bearers to their posts through the installation ceremony, giving a lunch with its sequel, a good free and easy time. By common consent, we do not meet again till the first Saturday in February, after which comes our usual routine of two meetings per month. 'Tis then the faithful few hold the fort, are always on hand to sweep and clean up, as well as to keep our byways clear for any wandering worldlings who may wish to cast their lot with us. Monthly socials give opportunity to the young people, and some of the old ones, too, to gratify their love of fun, frolic, music and dancing.

Initiations are not an every-day occurrence, yet we have them now and then, and this brings me to the point. On the first Saturday in October we have a class of seven to take the third and fourth degrees—two sisters and five brothers. We welcome them with a feast, and that they may be ro, ally met I am authorized to invite all Patrons to meet with us on that day. You that have broken bread with us know that our day begins at 10 o'clock in the forenoon and ends when the labors of said day are completed.

Alhambra's household now numbers 109. The 22 charter members of the year 1874 being lessened two by death, the remainder, with the volunteers since added, hold the fort.

Patrons, look for no further or special invitation, but meet with us in response to this call, and you will find our doors and hearts ready to receive you.

MRS. MARIA B. LANDER, Secretary.

Martinez, Sept. 20th.

SACRAMENTO GRANGE.—Bro. G. W. Hack, W. M., writes the Patron that Sacramento Grange had a very interesting session on the 11th. Bro. and Sister H. W. Johnson were chosen alternates to the State Grange. Motion designed to influence the National Grange in favor of cutting down degree work about one-half, was lost by a tie vote. Bro. Hack suggests that those who are dissatisfied with the

ritualistic work in conferring degrees would sooner accomplish their object by revising it themselves, offering it in an improved form to the Grange and asking the Grange to adopt it instead of the present degree work.

### State Grange.

If, after reading Bro. Ohleyer's important letter to-day, any Patrons hesitate about attending the State Grange, let them review Sister Lander's good article of last week and decide to go. We owe it to the Patrons of the north to give them, for the first time, a good turn-out.

Let all officers and committees who have reports to make, and individuals who have business to offer, be fully prepared to present the same at the opening of the session, that the same may be fairly considered, and all work well done without haste or waste.

GRANGE FAIR IN OREGON.—Butte Grange holds its annual fair on Oct. 6, 1886. All members of the Order as well as others are cordially invited to participate. There will be no entrance fees nor any premiums, but all are cordially invited to bring something to exhibit.

The Grange owns the grounds and a fine hall with dining-room attached, on the Taylor Ferry road, about ten miles from Portland, and the exhibit will be arranged in the main hall. In order to relieve the ladies of all care and enable them also to make a full day of recreation and enjoyment, arrangements have been made to furnish a good dinner to all who desire it, at the moderate price of 25 cents for each person. In the evening a ball will be given, for which good music has been engaged.—Willamette Farmer.

W. RENWICK and wife were elected alternate representatives to the State Grange by Temescal Grange last Saturday. The last meeting before the State Grange session occurs Saturday evening, October 1st.

### Stockton Notes.

[Written for the RURAL PRESS by MRS. W. D. A.]

Both the race-track and the pavilion are in the best possible order for a successful opening of the District Fair, September 21st. Space in the pavilion is taken and the dancing hall is likely to be needed. Two exhibits of paintings will come from the Mechanics' Fair, and Orley Miller, Stockton's talented artist, will make a fine showing.

Pomona Grange, No. 3, will rapidly fill their 36x60 feet of space with the most varied exhibits made at the State Fair. Among the industries represented were the City mills, which ships flour to China, Brazil and other lands, and holds the "Germea" trademark; the Crown mills, with a large trade; the paper mills, a successful enterprise; Stockton chicory factory; also, her planing mills by crates of boxes for dried fruit, the workmanship of which could not be excelled; and the indispensable buhach sold here, little boxes of which were furnished visitors by the enterprising Buhach Co.; 10 different kinds of corn, without counting Egyptian or broom-corn, among which was a sample from Kentucky of original "Indian maize," each kernel inclosed in a husk—lost through long cultivation; a large bale of hops from Clement's Station, where, as well as at Lockford, hops are largely raised; a fine cotton-plant with full bolls, unopened, and a little sample bale; also, excellent dried fruit from the Lodi Fruit-packing Co., and Challenge brooms, to delight housekeepers from the broom factories.

The weather is delightful. The 23d is to be "Floral day," when wreaths, bouquets and designs in flowers will regale visitors with grace and perfume. The gates of ingress have been shut by Sheriff Cunningham, who has held the office eight consecutive terms.

S. W. Sperry, of the City mills, a resident for over 30 years, and one of Stockton's most honored citizens, also a member of her Board of Trade and of the S. F. Produce Exchange, died suddenly Sept. 15th.

It is well that miners can be prosecuted for dumping debris into the streams, for the tidal channels of the San Joaquin, below Stockton, are full of mud and only four feet deep, where two years ago they were dredged nine feet, and that \$18,700 was appropriated to clear them and the San Joaquin and Mokelumne. The bids or proposals are out now for dredging.

The "Reform" party hold a mass meeting here on the 26th. It sets people to thinking on crying evils.

Stockton, Sept. 20, 1886.

THE RANCHO CHICO LEASED.—Arrangements have been completed whereby the entire farming land of the Rancho Chico, consisting of between 6000 and 7000 acres, is to be leased out to different parties. The land has all been spoken for, and in all but one or two cases the necessary papers have been made out. The leases are all for one year, and the rentals are all to be shares, but the shares are different on different pieces of the land. We consider this a wise move on the part of General Bidwell. The system of leases is the one employed by Stanford, Judge Pratt and other large land-owners in this section, and has been found to work well.—Chico Enterprise.



AGRICULTURAL NOTES.

CALIFORNIA.

Alameda.

PEPPER WIND-BREAKS.—Livermore Herald, Aug. 26: The best tree for a wind-break in the valley is the pepper. It makes a dense head, grows rapidly and flourishes without much care. Good culture improves its growth, of course, but it will get along very comfortably without it. Trees planted 18 feet apart will soon come together and make a dense wall of bright, light-green foliage, always pleasant to the eye. The pepper is not only a good wind-break, but also an excellent dust-catcher; unlike most trees which are used for this purpose, it does not become laden with dust. The leaves are smooth and glossy, and therefore repel the dust particles, which, stopped in their flight by the dense foliage of the tree, instead of clinging to it, simply drop to the ground. A row of these trees stretching across the valley, along each ranch-line, every half-mile, would add wonderfully to its beauty.

Butte.

SORGHUM SYRUP.—Chico Enterprise, Sept. 6: One of the latest experiments on the Rancho Chico is that of the raising of sugar cane and the manufacture of syrup. Last year a small crop of the cane was planted, but did not thrive. Another crop of 30 acres was then put out on the land just below the bee ranch, about five miles from town. This land is overflowed in the winter time, and the soil is light and sandy. Here the cane has grown well, and from the 30-acre patch it is expected that 5000 gallons of syrup will be obtained. The cane is a Northern variety, different from the Louisiana growth, and is known as the Early Amber. The work of making syrup was begun on Sept. 1st, and is now in progress. We were shown a sample of the product this morning. It is of an amber color, clear and smooth, and has a mild, soft flavor that is very pleasant. Gallon cans to hold the syrup are now being made at the cannery, in which the product will be put on the market as an experiment. It ought to give satisfaction, for it is a first-class article.

Contra Costa.

ALMONDS.—Antioch Ledger, Sept. 11: Mr. Amos Graves has an almond orchard on his place, three miles east of town, which has been bearing for three years past, and this year there is an extra fine crop of nuts, many of them being the size of a half-dollar, and the pods all free from the shell. The rearing of almonds has been considered a failure in this section, but Mr. Graves has demonstrated that, by careful attention and proper cultivation, almonds are a successful crop.

Fresno.

MOUNTAIN CORN.—Republican, Sept. 10: Mr. E. L. Ayres brought down from Pine Ridge, this week, a sack of sweet corn in the roasting ear, which is by all odds the finest corn for table use we have ever seen produced in California. The ears are large and sound and perfectly filled out with large kernels. The flavor is delicious. But very little good corn is raised in this valley, the worst pest being a great drawback, and such corn as the sample left at this office is a great luxury.

Inyo.

A PRUNE OF PROMISE.—The Independent says a prune tree in the orchard of S. A. Densmore, at Camp Independence, proves the adaptability of our soil and climate to fruit raising. This tree is of the Gros variety, was set out last spring, has made very rapid growth, and on its branches now bears 24 well-developed prunes. Mr. Densmore is an experienced orchardist, and not a trace of disease of any kind can be detected on his trees.

OREGON.

BOREAL FIGS.—Willamette Farmer, Aug. 20: In Mr. W. W. Martin's window, on State street, can be seen a ripe fig, also some green ones. This fruit was raised in Salem by Captain L. E. Pratt. He says the tree has had a severe tussle with the elements, but now seems to be fully acclimated. It is a genuine curiosity, and is well worth looking at.

NURSERY AT WOODBURN.—A visit to Settlemeir's farm and nursery is interesting to and one who appreciates forest growths, shrubbery, vines, nut-bearing and fruit-bearing trees. He has among his evergreens and shade trees some handsome varieties that are native to our northwest. Here are also peaches, plums and prunes, that show a growth simply enormous. Near the house we found men budding into peach stock. Beyond the house, down the track of the narrow gauge road, another great section of his nursery work is planted. He has, in all, 40 acres of land in the finest cultivation, devoted to trees and shrubbery—aggregating half a million trees and shrubs. We could hardly believe that a large field, now grown up to grafts 4 to 10 feet high, was level with the surface last spring, with rows of scions planted where now the young trees, thickly growing, hide the view. Good cultivation and rich soil account for the exuberant growth. He showed us 20 acres in corn, saying he had raised three crops of corn and had cultivated it well to prepare for planting out grafts and tree-seed.

FRUIT MARKETING.

The Eastern Fruit Market.

Necessity for Action on the Part of Growers.

EDITORS PRESS:—The year 1885 was one long to be remembered by the fruit-growers of California. Such a combination of unfavorable circumstances had never before been known. First came a drought; then a frost, seriously injuring the grape crop; then grasshoppers; next followed a glutted market, and lastly came very low prices. Thus by the close of the fruit season the growers were distressed and much discouraged. Each looked to his neighbor for a remedy, and all hoped for some permanent method of relief. At last it was suggested that a State convention of fruit-growers be held for the purpose of exchanging ideas and in order that some plan might be evolved that would make a repetition of the sad experience of 1885 less probable.

At this convention, which was held shortly after in San Francisco, many and various causes were ascribed for the poor results of 1885, and many and various plans were offered as remedies.

After much discussion and deliberation it was formally decided that relief depended on the growers forming a union, securing lower freight rates and marketing their own fruits in the East.

It was agreed that if all the California fruit shipped East was placed and sent through one channel, it could be evenly distributed throughout all the States of the East; that thus the fruit would be prevented from coming into competition with itself; and that the profits, which formerly had gone to shippers or middlemen, would be made by the grower himself.

This plan meeting with general favor, a union was accordingly formed, by-laws adopted, officers elected, an Eastern agent appointed, and the railroad company interviewed and reduced freight rates secured on the condition that 15 carloads must be shipped at a time.

Thus far all was well; but when the time arrived for shipping fruit the growers and the management of the union discovered that when they counted upon the old fruit buyers and shippers meekly retiring from the field and leaving the union to reign supreme, they had reckoned without their host.

It was soon found that the old shippers had not been napping, but had been diligently at work buying up large crops. They had organized among themselves and had so perfected their arrangements that they were enabled to dispatch several trainloads of fruit weeks in advance of the Fruit Union, which for a long time found itself unable to ship 15 carloads at once, so as to profit by the reduced freight rates.

Finally, the union began shipping trainloads, and soon, between the union and the private shippers, fruit began piling into the Eastern markets, regardless of quality, regardless of quantity, regardless of demand and regardless of all considerations that should influence intelligent business transactions.

This state of affairs, however, brought joy to the heart and dollars to the purse of the Chicago fruit-peddler and retailer. The petty fruit-huckster became king, and imperiously dictated the prices he was willing to pay, to the very men of whom in the past he had begged the privilege of buying a box of California fruit. From being snubbed and ill-treated by dictatorial fruit-shippers and commission merchants, he suddenly found himself petted and courted by these very men, who must sell their fruits at any price or have them rot on the premises. Such a harvest the street-corner vender had never even dreamt of. Here were piled up in store after store, extending out to the very edge of the sidewalks, thousands of crates of California's choicest fruit, which he could buy for a less price than was being paid by his fellow-hucksters in San Francisco or Sacramento.

Did he propose to share with his customers the good fortune that befell him through the folly of the California growers and shippers? Not if he knew himself! And so the Eastern consumer went on paying as much or nearly as much for his fruit as if the grower was getting a living price for his product, while the railroad companies and the retailers and petty hucksters were reaping a golden harvest at the expense of the poor shipper and still poorer grower. Soon the California growers and shippers began raising a storm about the ears of their Eastern agents, demanding an explanation for such ruinous returns. Every one, however, blamed every one else, and denied all responsibility for the disastrous results. The agents of the shippers laid the blame at the door of Porter Bros. Co., agents for the California Fruit Union, claiming that the latter had brought about this deplorable condition by willfully cutting prices with a view of driving the private shippers from the field.

On the other hand, Porter Brothers Co. as vigorously denied the charge and in turn claimed "it was the other fellows" who did all the damage by cutting prices for the express purpose of destroying the union.

The charges and counter-charges on this and other grounds are thick and numerous, but from the facts at hand it is very evident that willful cutting has been done all round. The Chicago commission men have had their fun, have enjoyed lots of exciting battles, have tried

PACIFIC COAST WEATHER FOR THE WEEK.

(Furnished for publication in this paper by NELSON GOROM, Sergeant Signal Service Corps, U. S. A.)

DATE.	Portland.				Red Bluff.				Sacramento.				S. Francisco.				Los Angeles.				San Diego.			
	Rain.	Temp.	Wind.	Weather.	Rain.	Temp.	Wind.	Weather.	Rain.	Temp.	Wind.	Weather.	Rain.	Temp.	Wind.	Weather.	Rain.	Temp.	Wind.	Weather.	Rain.	Temp.	Wind.	Weather.
Sept. 15-22.																								
Thursday.....	.00	66	NW	Cy.	.00	82	S	Hy.	.00	72	SW	Hy.	.00	63	W	Cl.	.00	74	W	Cl.	.00	70	NW	Cl.
Friday.....	.00	70	NW	Cl.	—	—	—	—	.00	78	S	Hy.	.00	64	W	Cl.	.00	73	W	Cl.	.00	71	W	Cl.
Saturday.....	.00	69	NW	Cl.	.00	90	0	Hy.	.00	81	NW	Hy.	.00	63	W	Cl.	.00	80	W	Cl.	.00	70	NW	Cl.
Sunday.....	.00	74	NW	Cl.	.00	91	N	Hy.	.00	81	NW	Cl.	.00	68	W	Cl.	.00	82	W	Cl.	.00	70	NW	Cl.
Monday.....	.00	75	S	Sy.	.00	90	0	Hy.	.00	84	NW	Hy.	.00	61	W	Cl.	.00	81	W	Cl.	.00	72	NW	Cl.
Tuesday.....	.00	63	S	Cy.	.00	91	0	Cl.	.00	80	NW	Hy.	.00	62	SW	Cl.	.00	74	W	Cl.	.00	70	NW	Cl.
Wednesday.....	.36	62	W	Fr.	.00	84	N	Cl.	.00	76	NW	Hy.	.00	70	W	Cl.	.00	78	SW	Cl.	.00	71	SW	Cl.
Total.....	.36				.00				.00				.00				.60				.00			

EXPLANATION.—Cl. for clear; Cy., cloudy; Fr., fair; Hy., foggy; — indicates too small to measure. Temperature Wind and weather at 12:00 m. (Pacific Standard time), with amount of rainfall in the preceding 24 hours.

to "knock out" each other; and the California growers and shippers have had the grim satisfaction of furnishing the ammunition free of cost, in addition to the feeling of war that existed among rival agents and shippers. Much loss has been caused through ignorance on the part of growers. Vast quantities of fruit were shipped that should never have been permitted to leave the State. Much arrived here in an utterly worthless condition and did much, not alone to depress prices of good fruit, but also to injure the fair reputation of California products.

Statements of returns were shown the writer to-day by the agent of the California Fruit Union, and which are being mailed while this letter is under pen, that will make those who receive them despair.

In many instances the returns for double crates of Muscat and Tokay grapes will not exceed 35 cents, which is less than the cost of crates and baskets; and in some cases the net returns for plums are five cents a box, out of which must come the cost of the box.

For the past few days the market has been rather bare and prices better, first-class grapes selling from \$2.50 to \$3.50 a double crate; and yet it was only this morning that over 400 crates of Vacaville grapes, which arrived in bad condition in a \$600-rate car by passenger train, were sold at 90 cents and \$1 per crate, leaving the grower a net return of from 10 to 15 cents per crate, out of which the cost of crates and baskets must be paid. By to-morrow these same grapes would have depreciated so much in quality that half the above price could not have been realized.

A Fruit Union train reached Chicago to-day, and another train, forwarded by the Sacramento shippers, will arrive here to-morrow. This means another glut, more war, more sacrifices, more losses to shippers and growers, and more fun to the Chicago commission men and more dollars in the pockets of peddlers and street hucksters.

Two facts appear to be self-evident: First, that as to being a protection to the grower and securing him living prices for his fruit, the Fruit Union thus far has not been able to realize the expectations of the growers. Second, the policy of dispatching fruit trains of 15-carload lots, one on the heels of the other, which upon arrival are to be disposed of by a few owners or individuals, is ruinous to the grower and a serious blow to the fruit interest of Northern California, from which it may take much time to recover. While the writer is not yet prepared to offer any remedy, it is very evident that present conditions can last only so long as growers and shippers are willing to pay for the privilege of giving their fruit away.

A more thorough and extended inquiry into the Eastern fruit question may enable your correspondent to offer in future letters some hints and suggestions that may be of interest.

For the present he can but say that concerted action on the part of growers and California shippers must be effected. Should both continue their present policy, both must finally be ruined.

H. WEINSTOCK.

Chicago, Sept. 13, 1886.

THE SAN LEANDRO PLOW FACTORY CHANGES OWNER.—An exchange informs us that Daniel Best, widely known as a manufacturer of grain-harvesters and grain cleaners, has lately purchased the San Leandro Plow Company's entire plant. This company was an incorporated joint-stock association, in which S. Huff, Robt. Farrelly, S. Meyers, S. G. Nye and other leading residents of San Leandro held interests. The plant which Mr. Best has bought embraces block 50, in San Leandro, together with the factory and other buildings located upon it. The factory is considered one of the best-equipped for work in the State. It has a splendid Corliss engine and boiler, shafting, saws, planers, a steam-driven trip-hammer, a foundry, emery wheels, grinding apparatus for making plows, and much other necessary tools and machinery. Mr. Best takes immediate possession, but the date of beginning operations is not announced. He goes to Oregon to close up a factory he has been running in that State. He is a "live" business man, and will undoubtedly prove an influential factor in the progress of the ex-county seat. His celebrated grain-cleaners are attached to many a thrashing machine in the State.

LARGE SHIPMENT OF GOATS.—C. P. Bailey, the Angora goat dealer, yesterday shipped three carloads of Angora goats, including 60 head of pure breed bucks, to Texas and New Mexico,

over the Southern Pacific railroad. The total value of the shipment is about \$5000. During the past three years Mr. Bailey has shipped \$16,090 worth of these animals to Texas. He is the heaviest dealer on the coast and has three ranges—one at Battle Mountain, Nev., one in Mariposa county and one in Monterey county. San Jose Mercury.

THE VINEYARD.

Viticultural Work at the University.

A large number of lots of grapes from growers in different parts of the State are now arriving at the viticultural laboratory of the University, and are being vinified in preparation to careful analyses and other tests to determine their special characteristics. Crates, with baskets inclosed, are sent out when application is made for them, to be returned with grapes for examination, and by this precaution the fruit arrives in first-class condition. Prof. Hilgard and his corps of assistants and students in viticulture are all busily engaged in this work, and the viticultural laboratory will be a busy place during the vintage season.

The laboratory has been much enlarged and improved with the money which recently became available under the joint appropriation for the University and the Viticultural Commission. There were not funds enough to complete the superstructure of the building, but there is room enough for this year's work, and the basement rooms and cellars are finished in excellent style. The superstructure can be completed as other money becomes available.

The writer was shown through the building on Tuesday, by Prof. Hilgard, and was gratified to see the excellent way in which the arrangements had been made. Entering by the north door, one comes first into the assistants' laboratory, in which Messrs. Joffa and Colby make their chemical determinations of wines and musts. This room is 20x18 feet, and has the necessary materials for wine analysis, etc. Adjoining is the balance-room, a small apartment, in which the weighings which are all-important in chemical work are done in seclusion. Next is the students' laboratory, 20x28 feet, with fittings sufficient to accommodate 15 students, with opportunities for practical analytical work. This room will be ultimately furnished with a "hood," under which the still, Pasteurizing apparatus, etc., will be set up. Down one flight of stairs at the north side and opening upon the ground level on the south side, is the basement, 45 feet square, which is divided into four rooms, opening into a narrow hallway reaching across the building. One of the rooms opening upon the south side is for the manufacturing room and has a crusher and stemming sieves, two presses and other necessary appliances. The other south room is for storage. The two rooms on the north side of the basement are for fermentations. These rooms are closed and protected all around, and are well adapted for the maintenance of a uniform temperature. On the south side, below the basement and wholly underground, is the cellar proper. It is divided into two apartments, one of which has heating arrangements for securing temperature best for after-fermentations, and the other is for the ordinary maturing of wines. It has been found by careful records of the thermometers, of which there is one in each room, that the underground and basement rooms keep a gratifyingly uniform temperature of about 60°. The south side of the building is shaded by large laurel trees, and thus protected from the direct rays of the sun. Under these trees, also, is a large platform, upon which, during favorable weather, the grapes will be received and crushed. Near the laboratory Strawberry creek runs along and furnishes good conduct to the drainage from the building and its adjuncts. All the rooms are thus well provided with drainage. The cellar work, in brick and cement, seems to have been well done, and the superstructure, when complete, will have quite a respectable appearance, though making no pretensions to architectural effects.

Prof. Hilgard's class in viticulture, which will begin next week, is made up of men young and old, men of business and of the learned professions, who seek knowledge to enable them to understand better the vineyard enterprises they have in hand, and young men who seek to qualify themselves for wine-making. All interested in the grape industry are invited to visit the University and see the work in progress.





## Song of Loyalty.

Courage! List!—the battle rages:  
 Foe and foe the brave engages!  
 Courage!—yonder, peace incloses  
 Bowers charmed with fruits and roses!

By the sun that shines above us—  
 By the Unseen Powers that love us—  
 Let us vow, till night is falling,  
 Tribute meet to duties calling!

On and on—nor heed the bating!  
 On and on—the day is waiting!  
 Feet will urge thee forward never:  
 Heart will lead thee on forever!

We have done with Grecian singing,  
 We have done with Rome, and bringing  
 Springtime arms, are daily serving  
 Springtime lands with hearts unswerving!

O'er the pain there is the healing,  
 On the night the morn is stealing:  
 Though we suffer now, the morrow  
 Shuts its gates to every sorrow!

In the loyalty of grieving—  
 To and fro the shuttle weaving—  
 All the future, dim and tragic,  
 Finds its birth in human magic!

Courage! List!—the battle calls us:  
 What, for life or death, appalls us?  
 Courage!—yonder, 'neath the willow,  
 Comes, at last, the restful pillow!

—Horace L. Traubel.

## Murmurs.

Some murmur when their sky is clear  
 And wholly bright to view,  
 If one small speck of dark appear  
 In their great heaven of blue.  
 And some with thankful love are filled  
 If but one streak of light,  
 One ray of God's good mercy, gild  
 The darkness of their night.

In palaces are hearts that ask,  
 In discontent and pride,  
 Why life is such a dreary task,  
 And all good things denied;  
 And hearts in poorest huts admire  
 How love has in their aid  
 (Love that not ever seems to tire)  
 Such rich provision made.

—R. C. Trench.

## Harvesters' Stories.

[Written for the RURAL PRESS by Mrs. J. HILTON.]

Another season of harvest is past, bringing not only work but relaxation to the farmer and his family. The boisterous laughter of the harvesters and their jolly talk makes an agreeable change from the quiet, monotonous life of a farmer. The good-natured political debates (and, by the way, those who are against prohibition say, "Oh, it don't amount to anything and never will," show those of us who do believe in it that it is amounting to something, for it is in the minds and mouths of all, and keeps cropping out suddenly in all kinds of conversation; it is a *live* issue and will not be put down), the comical, serious and pathetic incidents gathered from many sources, and the good-natured chaff of some one of the band, really make an oasis in the desert of our lives.

One who had lived where a jolly parson used often to visit, recounted some of the odd experiences related by the said parson. One was about when he lived in Louisiana. He was invited to preach at a church in a little village. He got there in time to hear the sermon given by the resident preacher. The service was all through and the people were beginning to file out, when the minister shouted out, with upraised hands, "Oh, there! I maist forgot! There will be service here this evening by a little old Presbyterian preacher. You can come if ye want to, but I won't."

At another town he was called upon to marry a couple. After the ceremony the groom took him to one side and asked how much he expected for the job.

"Oh, just whatever you feel able to give," was the reply.

"Would a dollar do?"

"Oh, yea."

So the dollar was handed over and the merry-making went on. During the afternoon the bridegroom came to him, took him aside, and whispered: "Say, lend me that dollar, will you? They are most out of whisky."

Another told about being at a Methodist prayer-meeting, and after several had told their experience, an old fellow got up who looked as though he had not washed himself or combed his hair for a month. He stood a moment until all eyes were upon him, and clasping his hands together he said: "Bretheren and sis-

tern: I feel awful," and then sat down. A man on the opposite side of the house arose, and looking directly at the first speaker, said: "Brothers and sisters, he *looks* awful."

A hush pervaded the house for a moment, and then, as a ripple of laughter began to break from the young folks, an elder commenced singing "Hark from the Tombs a Doleful Sound."

Then the subject of snoring was started, and the funny man of the crowd told how he and his partner cured a tramp who came along and wanted work. He not only snored but screamed at the top of his voice during the night. The first they knew about it was after supper. They saw him fixing himself a bed out among the brush and asked him why he did not come into the house; so he told them of his infirmity. They told him they could cure him of that, and he told them they might do what they liked with him if they could cure him. So fixing a bed for him between theirs, they each took a piece of bale rope and tied it to each of the fellow's big toes and each thumb. Then the two men took hold of the cords and went to bed. As it was rather a lark for them, they did not get to sleep, but the tramp slept finally. Along toward midnight they had about made up their minds that the fellow had put up a job on them, and were about to give it up and turn over and go to sleep when the fellow gave a grand snore, and then screamed with such force that they both jumped out of bed, stretching the fellow's arms and legs to such an extent that he soon awoke, laughing and calling to them to quit pulling. They wanted to know what under the sun made him screech in that horrible manner, and he said that it always seemed to him in his sleep that some big man was sitting upon his chest, and that screaming was the only thing that would drive him away. They broke him in two or three more nights, but the expectancy of hearing him screech kept them awake a good many more.

Another said he was traveling through a piece of woodland one time, and heard a noise like a child crying. As he had been told that panthers imitated the human cry, he at first moved quickly away from the sound, but hearing the cry again he felt sure it must be a child; so stepping cautiously toward the place where the crying was, he saw a little girl on her knees with her little hands clasped. She was looking upward and crying; between her sobs he could hear her say: "Please, Dod, send some one." Going quickly to her and picking her up, he hugged her to his bosom to quiet her sobs, only saying, "sh-sh, sh-sh." She soon stopped, and looking wonderingly at him, astonished, no doubt, because he did not speak, she said: "Is you one of Dod's angels?"

He had controlled his own feelings by that time, and told her that maybe he was acting for one of them just then. He carried her to her home, which was about half a mile away, much to the surprise of her mother, who thought she was playing in the garden near.

Speaking of panthers reminded another of a story that an old lady told of her experience in the mountain above the village of Santa Ynez. She has a claim on the mountain-side, and when she was alone would go up the mountain and gather acorns for her pigs. About half a mile from the house she left the road and climbed up the bank under a large tree and was filling her apron with acorns. Hearing a noise in the road beneath her, she looked and there was a California lion rubbing itself along the bank. The old lady is very fleshy, and she knew it was no use for her to run, even if she had been in the road, but being on the brushy hillside she gave up the idea of trying to get away. She remembered, too, how often she had packed a great pistol along with her on previous walks, but that as she had never seen anything to use it on she had decided that morning to leave it at home and not bother with it. The animal still kept rubbing itself, first one side and then the other, and she stood and looked at it. She made up her mind that it was not very hungry, and maybe she could scare it away. So taking up the dead branch of a tree near her, she threw it at the beast. It struck it near the head, and with a screech and a bound into the air it stepped on to the other side of the road and commenced rubbing again. She then threw another stick with all her might; but the animal would only bound up and shriek. She had been partly sheltered by the tree and brush, but after throwing five or six sticks without any result, she stepped into plain view with the last stick she could use in her hand. It stopped rubbing then, and faced her. In her excitement she had let the beast do all the shrieking, but now, with the most unearthly scream she could utter, she threw the remaining stick. The shriek and the last stick did the work; for, with a tremendous bound down the mountain, it disappeared from view.

"I felt so weak," said the old lady, "that I trembled in every limb; but thinking it best to get out of there, I scrambled down to the road and went home as fast as I could."

She did not tell her son John when he got home; but about a week afterward he told her that one of their neighbors had killed a lion that morning, that had been stealing pigs. She told him then of her encounter, and all the consolation she got was:

"Well, I told you not to wander about so much alone, for in a mountainous country such animals sometimes will appear near settlements."

Thankful for her deliverance, she decided not to tempt fate again.

## More About Reading.

EDITORS PRESS:—I am glad, for several reasons, that Mr. Berwick criticised my remarks on novel-reading in your issue of August 14th.

First, because I consider him a very worthy and able antagonist; secondly, because it gives me an opportunity to enlarge on what I have already said, and try and make myself clearer on the subject; and thirdly, because different opinions tend to throw light on every topic; for, as a friend once said to me when we were discussing another question, "there is room for honest difference."

"The main characters on history's pages are not to be commended as models," says Mr. Berwick. Who, then, are the main personages? What constitutes true greatness? Some one tells us, and, I think, rightly, that

"That man is great who, conquering first himself,  
 Uplifts his brother to the same high station;  
 And noble, though his lot be lowly cast,  
 Whose heart can make him strong against temptation;  
 And good, who sees the wrong, the woe, the crime,  
 And seeks to move it with a love divine."

A Caesar, an Alexander and a Napoleon have made themselves conspicuous indeed in the annals of the world, and in their characters there is much to be found that is worthy of emulation. Think of Bonaparte, the Corsican plebeian, who, by the power and majesty of his will, and by his undaunted effort, worked his way from the ranks of the people up to the highest position in the land! It makes one thrill to think of him. But place any one of these heroes beside men who figure on the page of history as moral and intellectual giants, and the former appear almost insignificant in comparison.

No, the greatest men are not those whose greatness is measured by the cities they have devastated and desolated and the millions they have caused to be slain. Such as these are prominent figures, but not the main ones in the history of the world.

And who are some of the main ones? Mr. Berwick tells us that "a novel may and should contain a lesson to the reader fully as valuable as any real biography, autobiography or history."

I have never yet on any novelist's page found the portraiture of an ideal character that could so thrill and inspire me as I have seen by the life and death of Socrates, who, as Fenelon says, "has been considered the most virtuous and enlightened of pagan philosophers;" by the life and character of Marcus Aurelius, the Roman Emperor who reigned in the second century of the Christian Era, and that of his adopted father, Antoninus Pius; by Epictetus, the Phrygian slave, for whom was written the epitaph, "I was Epictetus, a slave, and maimed in body, and a beggar for poverty, and dear to the Immortals;" of a Paul, and coming with a great leap down the centuries, of Fichte, the great German philosopher, to whom has been written some of the noblest tributes ever paid to man; of Niebuhr, the historian; of Wilhelm Von Humboldt; of Milton; of Carlyle, whom Emerson called "the manliest man of his time"—I don't care if he was irascible: dyspepsia is enough to make any one so; of Emerson himself; of Thoreau, of Washington and Lincoln. I have specified but a few as they occurred to me. As my pen put them down, many others came into my mind; but enough has been mentioned for my object.

After I had sent my former little article to the RURAL, the thought came to me that in contemplating the lives of men of genius it is too often the case that their hearts are not so great and lofty as their minds. I prefer not to illustrate this lamentable fact. How true it is that "a great man should never do aught that a lesser one could cavil at." But even this has for us a lesson, and a great one, though a sad one. I like what Joaquin Miller recently wrote of John Keats: "Standing in the little room where John Keats died, 'snuffed out by an article,' I resolved that if ever I had authority to forbid it, no unkind word should be uttered of such as he."

According to Mr. Berwick, facts "are not elevating." What is fact? Is it not truth? And if truth be not elevating, what is it? But I know what my critic meant by this, and will acknowledge I sympathize somewhat with him. But there is another kind of reading besides that of either novel-reading or reading to acquire facts and knowledge. It is the reading that broadens our intellectual scope; that helps us "to read here a line and there a line" of the mystery and duties of life; that makes us keener sighted; that ennobles and raises us above mean and petty things.

Of course, as the French say, *chacun a son gout*. I would never think of going to a novel for relaxation and rest. The fact is I have not as much leisure to read as I would like, so when I can, I read something that satisfies and tends to give me wide and clear insight; though I, also, am partial to some novels, and have my favorite characters in them: Maggie Tulliver is one.

"Philosophy practiced is the goal of learning." If facts and study do not make us better, we are indeed little but mere encyclopedias of words and things; and, as one has said, could there be a greater reproach?

Of course it is "important to cultivate sentiment." It is the sweetest thing in the world,

and throws a glamor over the commonest things. I think it can well be styled an off-spring of Poetry. Poetry! Ah, Mr. Berwick, I am at one with you there; it is the fountain-head of beauty, goodness and feeling. But the best poetry is only *fact* embellished. Take away the truth from it and its elevating power is gone. Which would you have, a Moore or a Wordsworth? Though the former has many good axioms, still sentiment preponderates. Give me the latter, if he is a trifle cold. He waves his wand, and lo! one seems to breathe in a world whose air is crystal pure, inspiring noble and lofty thoughts. I would rather have written the following, from the pen of the poet of the Sierras, than volumes of pretty sentiment. It is the second verse of a poem entitled, "The World is a Better World To-day:"

"Aye, the world is a braver world to-day!"  
 For many a hero will bear with wrong—  
 Will laugh at a wrong and will turn away;  
 Will whistle it down the wind with a song—  
 Will slay the wrong with his splendid scorn!  
 The bravest hero that ever was born!

I would like to write more, but don't want to run the gauntlet of the editor's waste-basket, so will close.  
 F. A.  
 San Francisco.

## The Evolution of Mrs. Thomas.

[Written for the RURAL PRESS by M. H. F.]

The whistles blew vigorously for noon in the little California city where Mrs. Thomas lived. Noon to her meant, chiefly, dinner-time. In just ten minutes there would be an irruption into her dining-room of six hungry boys and girls with their father, who, if not equally hungry, was sure to be in as great a hurry for his mid-day meal. Mrs. Thomas therefore made haste to take up her dinner. She was a slight, active woman, with capable, energetic movements, and with a pleasant, matronly face, lit by a pair of fine eyes of that peculiar hazel color which leaves one in doubt as to whether they are gray or brown, and which usually are the windows of a clear and strong spirit. Lines of care and toil marked her forehead, for the half dozen expected young people were all her own, and one doesn't have such possessions without paying the cost, especially where there has not been a full purse to make some of the burden lighter.

The dining-room was simply furnished, and its clean, painted floor uncarpeted; but the table was nicely spread, and as the food was brought in from the adjoining kitchen it looked inviting indeed. Roast lamb with potatoes and turnips, white and brown bread, cabbage salad, and a great dish of fruit for dessert. It was scarcely on the table when in streamed the young folks, ranging downward in ages from 18 to 8—noisy, happy, overflowing with young life.

"Hello, mamma!" shouted little Dick, the youngest and most uproarious. "Is dinner ready? I'm starved to death."

"Don't say 'hello' to mamma," said 16-year-old Mary; "it isn't polite."

"Run out and wash, boys, before you set down," said the mother—a command which she had issued at least ten thousand times before, and as the younger boys reluctantly filed out, the oldest of them, a young grammarian of 12, fired back a parting shot: "It isn't set down, it's *sit*." There was evidently a little western insubordination in the house, or at least a lack of deference, for a moment afterward when the mother said to the eldest boy, "Albert, you'd better carve the meat; pa ain't in sight yet," she was again set right by a young critic—"Pa isn't in sight, you mean." Then, as the good daughter Mary saw a little flush run over her mother's patient face, she came to the rescue. "Who cares whether ma says in't or ain't? She cooks the best dinners in this town. Look at this lovely bread!"

"Fact," said Albert, sententiously; "pass it this way, will you? Good bread's better than grammar any day."

The father came in—a quiet, gray-eyed man with an absorbed, reflective manner. His presence was not the slightest check upon the gay talk of the children, although they made place for him with affectionate eagerness. "You are late, papa," said Mary. "Is everything right at the office?"

"Well, not exactly," he answered. "Some of the men are making a great ado about our giving a job to some Chinamen."

"The selfish, mean things!" cried Mary.

"The wise, far-seeing, hard-working men," retorted Albert.

"I couldn't get along at all with our work," said the mother, "if the Chinese laundry has to go. I believe in living and letting live."

"You haven't read history," said Albert, "nor political economy. You might think as men do if you had;" and the young lord of creation helped himself again to the delicately browned meat and perfectly cooked vegetables.

Mr. Thomas seemed too keenly appreciative of the dinner and too far off in thought to notice his wife's discomfort. But he came back to present company and conversation with some animation when Mary said appealingly, "Papa, I'm going to bring my arithmetic home to-night, and get you to show me about some things in percentage."

"All right, Molly, I'll do it," he said, cheerfully, for if there was anything Mr. Thom-



liked it was "figuring." He had a natural taste for it, and his long experience as book-keeper for a lumber firm had kept him in practice.

When evening came the Thomas household settled down to work in very pleasant fashion. It was December, and the rain was pattering down outside in a soft and steady way, making the cheerful firelight and lamplight within seem all the more delightful. The three little boys, Frank and James and Dick, had a new *RURAL PRESS*, and put their three eager young heads together to look at the Young Folks' Column as it lay spread out on the table. Albert and Mary were working with pencils and notebooks, appealing now and then to their father, whose opinions and explanations they received with great confidence. Albert was in the intricacies of bookkeeping, and they talked about "balancing," and "debtor side" and "credit side," "single entry" and "double entry," with a knowledge which seemed to Mrs. Thomas simply wonderful. Mary propounded her knotty arithmetic questions to her father now and then, while Amy, a 14-year-old girl, was busily diagramming sentences from her little lessons in language. Poor Mrs. Thomas, diligently darning stockings, felt strangely lonely and shut out.

Amy held up her note-book in triumph. "I've got through at last," she said. "Look at them, ma; see how we have to box up the words and hitch them together in this fashion."

Mrs. Thomas surveyed the work in mild astonishment, and Amy, not at all averse to a little display, said: "See, here's the subject with its adjective modifiers, and here's the predicate with its adverbial modifiers, and here is a clause branching off by itself, with its attribute complement, and here at the end of all is the object complement."

"Indeed!" was all that Mrs. Thomas could venture in reply. In her girlhood she had liked grammar and been quite a famous parser, but this new diagram jargon was all Greek to her, and she gave it up as she would a hard conundrum.

The boys Frank and James now clamored for Amy to join them in a game of authors.

"Well, who'll be the fourth one?" she said. "Dick can't play; he is too little, and it's his bedtime, too," she added, as she saw his injured look.

"I should think ma might," said Frank in a reflective tone, "even if she hasn't read the books."

"No," said James; "she'd make as big mistakes as Dick. Let's wait for Mary."

Mrs. Thomas set her work-basket hastily aside. "Come, Dick," she said, "I'll go upstairs with you," and when Dick was tucked up in bed, she stooped over him to kiss him good-night.

"Why, ma," he said, "your cheek is wet; you ain't crying, are you, ma?"

"Never mind, Dick," she answered, "go to sleep." Then she went into her own room for a few moments and "had it out" in a burst of bitter tears. She thought of her youth with its scanty opportunities, so well appreciated and used, of her love of books and intellectual things, which had only been put aside and smothered by the pressing necessities of her married life. How she had gradually suffered herself to lapse into ignorance, scarcely taking time to read the weekly religious paper, and that only because on Sunday the mending basket couldn't be brought out, and so there was an hour or two of time which that blessed newspaper filled. And now her children were getting far beyond her in book knowledge, and in their heedless young fashion they had to-day shown in so many ways their perception of this fact. Was there no help for it? Must she just stay in the kitchen and drudge away her life and let the children drift away from her because she could not be a companion for them? Mrs. Thomas was a clear-headed little woman, not at all given to the blues or to useless tears. She had a way of arriving at conclusions. So she said to herself: "I believe there is no need of this; I am 40 years old, to be sure, but I have good eyes and a good head! I'll see what I can do. These children shall respect their mother for something beside her cookery."

The lines on her face looked very resolute as she brushed away the tears and picked up her little well-worn Bible to get a few words of solace before she went downstairs to spend the last hour of the evening in an entirely new way. She opened very naturally at her favorite sermon on the mount and read with new appreciation: "Be not anxious for your life what ye shall eat or what ye shall drink, nor yet for your body what ye shall put on. Is not the life more than meat and the body more than raiment?"

She bowed her head down over the book a little while, and then she went downstairs with an air of cheerful resolution. She went straight toward her work basket, gathered up and arranged its contents, and put the basket away in its place.

"Going to bed, mamma?" said Mary.

"No, my dear; I'm going to read awhile like the rest of you."

There was a general looking up, and then an outburst of question and congratulation. Albert was on the point of making an ironical remark, but Mary checked him with an eager "That's too nice to believe. Here is the best place, mamma. Albert, bring mamma's chair right here. Now what are you going to read, mamma? Let me get the book, or is it a magazine or paper?"

"I guess the *Advocate* will do for to-night," answered the mother, smiling. "I don't think I'll attack anything very deep just yet."

Mary looked puzzled, and even Mr. Thomas seemed aware of something peculiar in the atmosphere as Mary brought her mother the good old *Christian Advocate*.

Nothing more was said, however, and the family went back to their previous occupations. Not one of them happened to see the mother's sudden start and change of color as she came upon and began to read an article headed with the mysterious letters, C. L. S. C.

## YOUNG FOLKS' COLUMN.

### A Visit to the Fair.

[Written for the *RURAL PRESS* by REIS SAMSON.]

MY DEAR BOYS AND GIRLS:—At present the papers are so busy writing about the terrible earthquakes in Charleston that I am afraid no one will think of telling you about the wonderful fair which is now being held in the city, and I am sure that all you little children who live too far away in the country to pay it a visit must be anxious to hear something about it. Well, I went the other night, and I am going to write you a short description of everything I saw. Of course, you all know why the fair is held, but for fear some of the younger readers do not, I will tell you. It is to encourage home industry; ask your papas to explain what that means.

When I entered the Mechanics' pavilion, where they are holding the fair, it seemed as though I had wandered into fairy land. The whole building was one mass of brilliant colors, the air was heavy with the perfume of flowers. At the farther end of the hall, from the midst of a group of graceful palms, a fountain was throwing its spray almost up to the roof, and all the while a band was playing the most inspiring music.

There were several long tables in the center of the pavilion, on which were placed marvelous floral designs. There were harps, anchors, crosses, ships, in fact almost everything you can imagine. There was even a muskmelon from which the end had been cut and a bunch of flowers put in it, but to tell you the truth, I don't think it was very pretty; it looked too stiff. Then there was the fruit and vegetable exhibit from Sonoma, which took up a large part of the lower floor. There must have been every variety of grapes that grow on the earth; and as for the pumpkins, if not the identical one from which Cinderella had her carriage made, they must be very near relations. There were radishes and turnips so large that they could be used for cannon balls, and even though they are not round, a blow from one could easily kill a man. A lady from Glen Ellen sent a lot of curiosities, and they were all on exhibition.

There was a promissory note which was found in Napoleon's pocket after his death, at St. Helena, which read something like this: "I promise to pay Napoleon Bonaparte the sum of five pounds." It seemed so funny to think of any one giving the great Napoleon a promissory note for such a small sum. There was a large book on "Birds" published some time during the seventeenth century, crazy quilts pieced by an old lady over 80 years old, and all sorts of things from every part of the world. I hardly know whether to tell you anything about the incubators and the dear little yellow chickens, and on second thoughts I don't think I will, because undoubtedly you have seen dozens of them.

The next thing I saw was "The Blindmen's Broom Factory," and there was a blind person there making the brooms just as neatly and quickly as one who sees. In another place young girls were making cigars. It was quite interesting to watch them sorting the tobacco and rolling it into the desired shape. Some one from a brush factory was making dusters of all kinds—big ones, middle-sized ones and little ones. Then came the exhibit of the California Cotton Mills. There we saw towels in abundance, and salt bags and flour bags, cotton rope of all kinds and sizes, from the dainty piece of pink twine to the thick, twisted rope, as large as—well, I don't know what. The next thing was a lot of iron safes, with such wonderful locks that it takes three men to open one.

A little boy from Gilroy sent a frame, in which he had arranged most artistically over 1000 tobacco tags—don't you other little boys envy him, though? There was a revolving window, so arranged that by pressing a button the whole window would turn inside out; this was to facilitate their washing. One manufacturer exhibited soap in the shape of dogs, monkeys, horses, etc., besides presenting each passer-by with a small round cake of soap. Next to this was a booth where they were making popcorn balls, and somewhere else where they were selling hot waffles. Then there were lots of uninteresting things, such as water filters, flat-irons, somebody's everlasting axle-grease and things I never heard of before. There were about 50 carriages on exhibition, pretty dog-carts, comfortable rockaways, stylish buggies, and even a hearse upholstered in white satin. After this I looked at the plows. There was the "Coming Plow," "The Horse's Friend," "The Ideal Plow," and dozens of others, whose names the smallest of you know better than I do. A wholesale druggist had on

exhibition glass jars filled with pills of every description; perhaps he calculated that he would make everybody sick-looking at them, and they would all come to him for medicine to get well again. By the way, somebody did offer me a glass of medicine, a sure cure for ague, but I declined it. There was a printing press getting its papers ready and showing off just as hard as it could. Two beautiful straw arbors covered with hops and wheat, containing gigantic barrels, meant beer; and next to them a lady was giving out temperance tracts. The way an ingenious manufacturer advertises his baking powder was by having some one bake biscuits and give them around.

I can tell you nothing about the machinery, because when I went into that department there was such a roaring and buzzing and hissing I hastened to leave it. Would you believe it, I actually saw a man lying on a bench sound asleep in spite of all the noise. After this I went upstairs to the art gallery, where there was such an array of paintings that, not being an artist, I have only retained the idea of colored quantity. There was a statue which was designed and modeled by a lady in San Mateo. A fur place had a cunning little house made of all the different varieties of fur. Somewhere else there were three handsomely furnished rooms—bedroom, sitting-room and drawing-room. Then there were pretty wicker carriages lined with satin and waiting to give your baby sisters a ride. I couldn't begin to tell you how many pianos and organs there were, but it did look as if there were enough for everybody at the fair. There was a gigantic jumping-jack made of natural flowers, and lots of puppets that danced whenever a certain organ played. A young lady was selling tubs and buckets made of California laurel wood, besides all sorts of curiosities. I must finish my letter now or else it will be too long to publish, but before closing I promise you that whenever I see or hear anything interesting I will write you all about it; so good-bye.

Alameda, Cal.

## GOOD HEALTH.

THE ACTION OF THE HEART.—As with each stroke the heart projects something like six ounces of blood into the conduits of the system, and as it does so some 70 times every minute and 4200 times in an hour this implies that it does the same thing 100,800 times in 24 hours, 30,000,000 times in a year and more than 2,500,000,000 times in a lifetime of 70 years. The mechanical force that is exerted at each stroke amounts to a pressure of 13 pounds upon the entire charge of blood that has to be pressed onward through the branching network of vessels. According to the lowest estimate that has been made, this gives an exertion of force that would be adequate, in another form of application, to lift 120 tons one foot high every 24 hours. Yet the piece of living mechanism that is called upon to do this, and do it without a pause for three score years and ten, without being itself worn out by the effort, is a small bundle of flesh that rarely weighs more than 11 ounces. It is in the nature of the case, also, it must be remembered, that this little vital machine cannot be at any time stopped for repairs. If it gets out of order, it must be set right as it runs. To stop the beating of the heart for more than the briefest interval would be to change life into death. The narrative of what medical science has done to penetrate into the secrets of this delicate force-pump, so jealously guarded from the intrusion of the eye that it cannot even be looked into until its action has ceased, is, nevertheless, a long history of wonders.—*Edinburgh Review*.

A PHYSICIAN'S PREDICTION.—A recently published volume, the work of Dr. Austin Flint, of New York, is said to contain a remarkable prediction respecting the progress likely to be made in medical practice in the next 50 years. A press notice of the book says that the author expresses great confidence that the principle of the telephone will, by and by, be applied to intrathoracic respiratory and heart sounds, so that they will be transmitted to the ear more distinctly than they now are by the stethoscope. As consequences of this advance Dr. Flint points out that not only will these sounds be transmitted from the patient to the physician, no matter how distant the one may be from the other, but also that "the sounds from the chest of a patient may be phonographically registered, transported ever so far, and made available after an indefinite period."

BLINDNESS DUE TO DECAYED TEETH.—Dr. Widmark, a Swedish surgeon, having as a patient a young girl in whom he was unable to detect the slightest pathological changes in the right eye, but who was yet completely blind on that side, observing considerable defects in the teeth, sent her to M. Skogsborg, a dental surgeon, who found that all the upper and lower molars were completely decayed, and that in many of them the roots were inflamed. He extracted the remains of the molars on the right side, and in four days' time the sight of the right eye began to return, and on the eleventh day after the extraction of the teeth it had become quite normal. The diseased fangs on the other side were subsequently removed, lest they should cause a return of the ophthalmic affection.

## DOMESTIC ECONOMY.

BLACKBERRY SHORTCAKE.—Sift half a pound of flour with two teaspoonfuls of baking powder, a heaping teaspoonful of sugar and the same quantity of salt. Mix with this a quarter of a pound of butter, which should be as firm as possible, adding, little by little, half a pint of cold boiled milk. The mixing should be done with a knife, rapidly. Place the paste on a floured pastry board, turning it about until it is covered with the flour. Roll it out to the thickness of half an inch, and cut it in round pieces the size of a breakfast plate. This may be done by inverting a plate on the paste and cutting around it. Lay the pieces on a greased pan and bake. When done, cut around the edge and pull them apart. Lay the blackberries on each half piece, sprinkling them well with sugar. The berries on the top layer should be placed upright. Serve with cream.

A VERY NICE BREAD PUDDING.—Put the inside of a small loaf of bakers' bread into a deep pan, with two ounces of butter; pour over it one pint of boiling milk; let it stand until the bread is perfectly saturated; then mash it up with a wooden spoon until smooth and fine, without a single lump. Whisk six eggs till very stiff and white as snow and then stir them gradually into the bread batter; add to this one quart of rich milk. Beat all very thoroughly together and sweeten it to suit the taste. Pour all into a well-buttered pudding dish; season with a little cinnamon. Bake in a quick oven. When done and cold, have ready some very fine, ripe peaches; pare them, slice and sugar. Just before sending to the table, place as much of the peaches on top as the pudding can conveniently hold, and sift over as much white sugar as is needed. Eat with thick cream sauce.

BUTTERMILK BISCUIT.—One quart of flour, one teaspoonful of soda sifted three times with the flour and a teaspoonful of salt, one pint of really sour buttermilk, one tablespoonful of melted butter. Sift flour, soda and salt into a bowl, stir butter and milk together and pour into a hole in the flour. Mix quickly and with as little handling as possible. Be careful on this point, also, not to get the dough too stiff. Have your oven ready and hot. As soon as the biscuits are cut out put them in and bake. They are excellent if mixed—as the successful painter did his colors—"with brains." A heavy hand and heavy wits can result in nothing but sodden solidity.

LENTIL SOUP.—Take one pound of lentils and wash them in many waters, until thoroughly clean and free from weeds. Soak all night, then add as much more water as will make 2½ quarts. When this boils, add carrot, turnip, parsnip, two onions and small pinch of carbonate of soda. Boil two hours, then strain, washing all thoroughly except the skins of the lentils; season, and serve. Lentil soup requires no meat, but a small piece of butter mixed with flour is an improvement, and serves to bind the soup together instead of separating into thick and thin.

BEEF STEW.—Cut underdone roast beef or steak into inch-long pieces. Have ready in a saucepan a cupful of skimmed gravy or broth, a quarter onion, minced very fine, a teaspoonful of minced parsley, a pinch of mace and a tablespoonful chopped cucumber pickle. Let it come to a boil, season well, thicken with a tablespoonful of browned flour, put in the meat and set in boiling water, closely covered, at the side of the range, for 20 minutes. If the meat be tough, chop it instead of cutting it up, then proceed as directed. Serve hot.

LEMON JELLY CAKE.—One cup of sugar, mixed with butter the size of an egg, one cup of milk, one egg, well beaten, and flour enough to make rather stiff, sifted with a heaping teaspoonful of baking powder, and bake in three jelly-cake tins. For the jelly, take the juice and grated rind of one lemon, one small cup of sugar, three teaspoonfuls of cornstarch, mixed smoothly with a little water, and one cup of hot water. Let all boil together until thick, and spread on the cakes. This quantity makes two layers.

CORN OYSTERS.—One cupful of flour, half a cupful of melted butter, three tablespoonfuls of milk, two teaspoonfuls of salt, one fourth of a teaspoonful of pepper, one pint of grated corn. Pour the corn on the flour and beat well; then add the other ingredients and beat rapidly for three minutes. Have fat in the frying-pan to the depth of about two inches. When smoking hot, put in the batter by the spoonful. Hold the spoon close to the fat and the shape of the oyster will be good. Fry five minutes.

RAW TOMATOES.—Peel with a sharp blade, slice and season on the table with sugar, salt, pepper, oil and vinegar; sprinkle bits of ice between the layers when you dish it, draining off the water before seasoning. The colder raw tomatoes are, the more delicious they will prove.

APPLE PUDDING.—Pulp of two or three large baked apples, white of one egg, one cup powdered sugar. Beat the ingredients half an hour, and serve with boiled custard poured over it. This is very nice.





A. T. DEWEY.

W. B. EWER.

Published by DEWEY &amp; CO.

Office, 252 Market St., N. E. cor. Front St., S. F.  
Take the Elevator, No. 12 Front St.ADDRESS ALL literary and business correspondence and  
Drafts for this paper in the name of the firm.

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A. T. DEWEY.

W. B. EWER.

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SAN FRANCISCO:

Saturday, Sept. 25, 1886.

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## The Week.

Our paper this week is also given largely to fairs and rumors of fairs, and yet we have to leave many features of the exhibitions for future treatment. The State Fair, which closed last Saturday night, was on the whole a good exhibition. We have given an outline of most of its departments. The literary features are still untouched, and of the good addresses given by Hon. T. H. Laine and Gen. Chipman we shall endeavor to select salient points hereafter. Next week we hope to have the corrected premium list. The Mechanics' Fair is now well along on its last week, and we give this week some further account of the county displays. Some others, like the very choice display brought down from Contra Costa, we must leave for another time.

The season is drawing along. The vintage season is now well under way and will occupy the vintners for the next few weeks. So, too, the raisin harvest, and the anxiety will be that the rains may delay their coming until

this year's large crop can be secured. Politics are warming up the people in city and country, and it promises to be a campaign of the usual fire—and mud.

## Improved Merino Sheep.

The condition in which the wool industry now stands seems to warrant the producers in renewing efforts for the improvement of their product. It could be well shown that even in times of depression it will pay to strive for the best product and the greatest amount of it from an animal, and that the comparatively small outlay required for pure-bred sires is the best investment a wool-grower can make, even in a dull time. But, though this is so, it is very hard to convince many growers that it is wise to spend money for an improved product while prices are low and the market is dull. Fortunately, we have now an easier task, for the wool market is in quite a satisfactory condition. The quick sales and fairly good prices of the last year or more have changed the aspect of the wool industry, and have given growers new heart and confidence. Not only is the present condition much improved, but the outlook is promising. The tariff-tinkers, who have been striving for the last few years to still further reduce the import duties on foreign wools, have made no headway; on the other hand, the wool interest has continually gained strength by united effort to make the legislators and the people generally understand its importance and the general loss which would be occasioned by its downfall. In the wool-growing States the matter of suitable protection to wool has risen above party and is recognized as something higher than a political question. In this State both political conventions pronounced clearly in favor of the re-enactment of the tariff of 1867, as follows:

We demand in behalf of the great wool-growing interest of our State a restoration of the wool tariff of 1867, and denounce the recent attempt of the Democratic majority in the national House of Representatives to pass the Morrison bill, reducing tariff duties and placing wool on the free list.—*Republican Platform, Los Angeles Convention.*

Resolved, That the present tariff on wool prepared by a Republican commission appointed by a Republican President is an unjust discrimination against a great industry, and we denounce the same and demand the restoration of the tariff of 1867.—*Democratic Platform, San Francisco Convention.*

There is a little political spice in both utterances, but the demand is the same in each case.

These thoughts came to mind as we were looking over the improved Merino sheep at the State Fair last week. The contrast between the improved Spanish Merino sheep exhibited by Mr. Frank Bullard, of Woodland, and the common sheep of the State, is so marked, and the improvement which results from using the potent blood of these thoroughbred sires upon the common ewes so evident, that they would convince any one, it would seem, of the advantage of putting forth some effort for the improvement of their flocks. It is undoubtedly true that California has improved Merinos as fine as any in the world, if not finer than any other. It has been the experience of many breeders that the best improved Merinos which can be purchased at the East exhibit still further improvement when skillfully handled in California. It is admitted, too, that the Eastern improved Merinos are better than any of the foundation stock in Spain. Thus, with California improving on Eastern standards, and Eastern standards being so much higher than Spanish that no one now thinks of going abroad for stock, it is clear that California can show against the world for eminence in fine woolled sheep. Flock owners should take the hint from this achievement of California Merino breeders and gain the advantage of the introduction of such blood into their flocks. Where is the economy of feeding and protecting an animal which shears from one and a half to two pounds of wool, when, with no more cost, you can support one which shears from four to seven pounds of better wool? It is a good time now to think of these things and arrange to bring into the flocks next spring a class of males which will from the first contact start the flock upon a rapid improvement in yield and quality. These ideas are not new. We have expressed them time and again during the last few years, and there has been much improvement gained. But times are now propitious for generous enterprise in improvement, and we hope the disposition toward such improvement will be more general than ever before.

## Tree-Planting.

The custom of appointing a tree-planting day now prevails in eight States and should find favor in every State and Territory. There is no State in the Union that needs trees more than California. We are glad to see the question again agitated. It cannot be too often and earnestly insisted upon. Were the farmers on the treeless plains of this State, in addition to their orchards and vineyards, to plant a few acres of forest trees, they would not only in the near future receive a rich reward in the shape of timber, but would largely solve the irrigation question.

History will vindicate the statement that one of the causes of the impoverishment of a country and the extinction of civilization has been the destruction of forests. The cutting down of trees means exhaustion of springs, changing the climate and producing arid desert wastes and excessive alternations of heat and cold. With the disappearance of trees, men vanish. This is the reason why Syria, Greece, Asia Minor and parts of Africa are so largely abandoned. The result of cutting mountain forests is that the surface water, produced by snow and ice, instead of being absorbed and retained by the vegetable coating, rushes down the valleys in tremendous torrents, and instead of penetrating and fertilizing the soil becomes the agent of devastation. We have one familiar illustration. The Ohio river overflows with almost every rainfall. The clearings on the slopes of the Alleghanies are said by those who have made a study of the problem to be the cause of this immense volume of water. In some sections of New York, where the forest trees have been cut away, it is said that wheat now often fails, from winter killing, although the soil is of excellent quality.

The plains west of the Missouri are now a promising theater of the tree-planting experiment. It is claimed that in some localities where farms have been made, villages built and trees planted, the dry, parched soil of 20 years ago is clothed with a rich verdure, and river-beds that were half the year dry are now constantly covered with running water. It is well known that the city of Denver was built on one of these ancient river-beds, where it was supposed water would never again flow; but there is now a permanently running stream, so large that it has been found necessary to bridge it.

If such is the value of trees and their effect upon climate, the subject of forest culture demands the attention of all cultivators of the soil. And nowhere is this claim more imperative than upon the farmers of California. The uninterrupted rays of the sun falling upon these plains, covered as they are in the late summer only by a dried vegetation, heat the atmosphere to such a degree that it is able to contain an unusual amount of uncondensed moisture. The consequence is, the moisture in the atmosphere is carried by the prevailing winds over the Sierra Nevada range until it reaches the Rocky mountains, where, being condensed, it falls in abundance of rain. The very nakedness of the earth's surface becomes the cause of perpetuating this condition from year to year. Nature has no power to arrest this evil. It must be done by artificial agency if it is ever done, and Nature kindly suggests the remedy. No well-wooded country ever suffers from a long continued dry season. And who can doubt that if the plains and deserts of California were liberally covered with clumps of trees there would not be a greater condensation of moisture, and rain-showers would keep up a growth of vegetation later in the season? It may be as we have suggested, that forest culture on these dry and parched lands would tend to solve the vexed irrigation question to some extent. At all events, it is time our farmers were urged to preserve a portion of their forests and plant forest trees where they have none.

**BROOM CORN.**—We alluded briefly last week to the exhibit of broom corn made by B. N. Bugbey, of Sacramento, from his ranch in Kirkville, Sutter county. The brush of the corn shown by Mr. Bugbey was three feet in length, and its quality was well shown by a number of brooms and dust brushes made from it. It was as fine broom corn as we ever saw.

THE second crop of figs in Santa Barbara county promises to be plentiful.

## Death of S. W. Sperry.

The death of S. W. Sperry, the well-known head of the corporation of Sperry & Co.'s flour mills, at Stockton, has taken the public by surprise. Though he has for a year or more been afflicted with heart disease and spent much time the past season at several health resorts, still his death was unexpected to his family and friends. But death is always a surprise. It is as common as birth, but we never get used to its visit. Though it come in youth, in the noon of manhood, in old age, or after weeks of languishing illness, still we are never quite ready to give it a welcome.

Simon Willard Sperry was a native of New Hampshire and was about 64 years old at the time of his death. He came to California in 1856 and may be put in the pantheon of pioneers. Soon after his arrival he, in company with his cousin, Austin Sperry (now deceased), engaged in the flouring business with a small mill, at the corner of Commercial and Maine streets, Stockton. The capacity of the mill gradually increased till it reached 600 barrels of flour per day. Austin Sperry died in 1881, and the business was continued by S. W. Sperry until April, 1882, when the mill was destroyed by fire. It was immediately rebuilt on a more extended and improved plan. Steel rollers were introduced. This mill has the capacity of producing 1000 barrels of flour per day.

The deceased leaves a wife and two daughters and three sons and a brother, James Sperry, of Calaveras county. He was, in many respects, more than an average man of business. He was never given to venture or speculation, or smitten by the inordinate desire to make money fast and become rich in a few months. His fortune is the legitimate growth of time—built up slowly but surely by prudent foresight and economy. Few men have been more noted for business integrity and unostentatious charity. He was public-spirited, and did much toward developing Stockton and advancing its commercial interests. In him the laboring man found a sincere and sympathetic friend. In the language of the Stockton Independent: "No citizen could stand higher in the estimation of any community than the subject of this brief notice stood in this community, where he moved in the front rank of business circles for nearly a third of a century."

## Contra Costa Fair.

The Twenty-sixth Annual Fair of the Contra Costa Agricultural, Horticultural and Mechanical Society, which was held near Pacheco, from the 6th to 10th instant, proved one of the most successful that has taken place in the county for years. The *Gazette* congratulates the officers and members on having demonstrated that a good exhibition can be made without the accessories of gambling and whisky, and in having placed the fair on a basis that will prove enduring, attractive and in many indirect ways remunerative to every individual farmer and to the county in general.

The display of horses was large and fine. The fewness of the cattle shown was partly compensated by the presence of several Polled Angus and Devons, all splendid animals from the Cook Stock Farm in Green Valley. Mr. A. M. Hill, of Martinez, exhibited three Jerseys; Mr. J. R. Minaker, of Pacheco, a young Holstein bull; Mr. A. L. Foote, of Concord, a graded bull; and Mr. L. H. Grewell, of Pacheco, a half Durham and half Devon cow. South-down bucks and ewes were shown by Mr. H. M. Gregory, of Ygnacio valley, and Mr. Charles Wood, of Danville. The swine exhibit was limited but good. Mr. Seth Cook's two handsome Cleveland Bays were a marked feature of the daily parade.

In the pavilion, the display of grapes was marvelous for its variety, size and perfection, showing that Contra Costa as a viticultural district is unsurpassed.

The exhibit of fruit, although somewhat limited in quantity, was excellent in quality. The showing of vegetables, melons, etc., was admirable for size and general merit—none the less so when it is considered that irrigation is but little practiced in this county. A considerable portion of the fruit and vegetable display was afterward transferred to the Mechanics' Fair in S. F.

We publish in another column the condensed list of awards, and regret that we cannot give space to a more detailed account of the horticultural and floral exhibits.

Entertaining and practical addresses were delivered during the week by Hon. C. Wood, Hon. D. N. Sherburne, Gen. Theo. Wagner and others, to which we may make further reference hereafter.



### The Castle at the State Fair.

The most elaborate exhibit in the State Fair pavilion this year was the castle constructed wholly of dry goods, excepting, of course, the floors and frame. This exhibit was the cynosure of all eyes during the fair and has, no doubt, been talked about from end to end of the State. We are glad to be able to give our readers a good engraving of the castle, as seen from its north side, and showing the two entrances, each guarded by a sentinel in armor. The engraving will aid those who saw the castle to give their friends intelligible descriptions of it.

The castle was constructed by Weinstock & Lubin, who are famous for the novelty and ingenuity shown in their exhibitions. At this year's fair the firm have surpassed all their previous attempts, having succeeded in depicting with wonderful skill and effect the chief tower of the famous castle of Heidelberg, one of the grandest ruins of the feudal times. This curious and interesting structure, with its portals, courts and battlements, strictly patterned after the original architecture, occupied a commanding position in the center of the art gallery, and, viewed from the main floor, the aspect of the frowning towers, covered with ivy, formed such a perfect illusion that the spectator could not conceive that the building was covered merely with domestic textiles. On a closer approach it was seen that this effect of heavy masonry was skillfully secured by means of ladies' cloth of dark gray, the mortise work being shown by white braid. To enhance the illusion, the portals were guarded by men at arms in full armor, and in the interior were attendants in quaint antique costumes, who gave every information to visitors.

On entering the main portals, one passed from the main corridor through a circular archway into the anteroom, the walls of which were covered with bright cretonne of lovely designs, while the ceiling was ornamented with napkins of varied colors skillfully formed into shapes of stars, fans and rosettes. The floors were of polished oak, partly covered with Turkish rugs of exquisite design. The furniture was massive and old fashioned, and the light came gleaming through heavy portieres and casements of stained glass that lightened the ideal in a marvelous manner. One of the chief features was the huge fireplace, back in an arcade, which was profusely decorated with napkins in various designs and colors, the mantel especially being a model of the designer's art. Around the fireplace were suits of armor and weapons that seemingly dated from the days of the Crusaders, and on the walls were plaques of bronze, representing scenes of the days of yore. The furnishing would be incomplete without the massive sideboard, on which are the wassail bowl and other vessels through which the lordly Barons dispensed their lavish hospitality. From this room a spiral stairway led to the sleeping apartments, in which the architect deftly availed himself of the circular formation in constructing niches that contain stands, etc. The interior was also richly furnished, while the lace curtains, the flowers, pictures and various pretty devices show the tasteful hand of the fair chatelaine. On the fourth floor was the armory, in which were antique weapons and coats of mail, and thence a stairway led to the top of the tower, where, at stated intervals, came the blast of the bugle from the sentinels on guard.

A description of this curious edifice would be incomplete without a brief account of how this strange illusion was carried out. The structure occupied an area of 26x36 feet, and the extreme height of the castle was 45 feet. The battlements were made with woolen cloths, muslins, quilts, toweling and shirtings in bolts laid in panels that imparted a solid appearance. The outer walls were constructed with crinoline on bolts of flannel, bound with black tape, that also secured a massive effect. A huge chimney ran up from the base to the utmost tower. It was composed of red flannel, pointed with white tape, giving to it a semblance of brick-work, while the copings were imitated with ladies' gray cloth. A faint idea of the magnitude of the work may be gained when it is stated that in the construction of the building 3,000,000 pins and almost as many tacks were used in fastening the various textiles together. The building was designed by W. H. Hamilton, a well-known architect of Sacramento, and the structure was completed under the super-

intendence of S. B. Suits, of Philadelphia, who came from the East expressly for that purpose.

The building was thronged with ladies and children from morning to night. A beautiful view of the pavilion was gained from the courtyard walks, on which were quaint seats and medallion pots of fragrant flowers, and at each quarter of this unique building were beautiful satin banners bearing the name of the firm who conceived and carried out these unique designs—Weinstock & Lubin.

### Poultry at the State Fair.

The poultry exhibits at the State Fair were not so large as usual this year, but there was some very fine stock shown. The following is a sketch of the exhibitors and the selection they presented:

E. I. Robinson, Sacramento, had four coops white-faced Black Spanish, one coop of Buff Cochins.

M. W. Parker, Biggs, had two pens of Light Brahmas and one pen of Buff Cochins.

Jasper J. Jones, Martinez, had two coops of White Leghorns, one of Brown Leghorns, one of Crevecoeurs, one of Houdans, one of Buff Cochins, one of Wyandottes, one of Partridge



NORTH VIEW OF THE FEUDAL CASTLE AT THE STATE FAIR.

Cochins, one of Light Brahmas, one of Langshans and two of Plymouth Rocks.

S. Tryon, Sacramento, had four coops of White Leghorns.

Geo. B. Bayley, Oakland, had one coop of Partridge Cochins, one of Dark Brahmas, one of Golden-spangled Polands, one of Houdans, one of Game Bantams, one of Golden Seabright Bantams, one of White guinea hens and one of homing Antwerp pigeons.

T. Waite, Brighton, had one coop of Wyandottes, two coops of Plymouth Rocks, two of Light Brahmas, two of Hamburgs, of Partridge Cochins, two of Dark Brahmas, two of Brown Leghorns, two of White Leghorns, two of White-crested Black Polands, two of Bronze turkeys, two of Toulouse geese and two of Pekin ducks.

We expect to give the premium awards next week.

CINCHONAS IN CALIFORNIA.—The Stockton Independent asks about the success of cinchona trees in California. Some interesting statements will be given, no doubt, in the forthcoming report of the College of Agriculture. The trees in the Garden of Economic Plants, in Berkeley, are growing well, but they are protected in winter. Young trees were sent out to various parts of the State where there was thought to be little or no frost, and probably some reports from the growers will be received in time for this year's report.

### Agricultural Implements and Machines at the State Fair.

The display of agricultural implements and machines at the State Fair this year did not include as many exhibitors as have come forward on some occasions, but the displays were well made and there was no lack of valuable and interesting material.

The largest display in the department devoted to machinery in motion was by G. G. Wickson & Co., of San Francisco, and their large square of space was well filled. There were Stoddard churns of several sizes in motion, also the Ross feed-cutter, with elevator attachment, the St. Albans Horse-power, Separator and Cleaner, adapted to the use of farmers who wish to do their own thrashing and cleaning or to custom thrashing in the hilly portions of the State. There was also the "Scientific Feed Mill," busily engaged in grinding barley. Other items were the De Lavel cream separator, the American churns, the "Scientific Ranch Blacksmith" outfit, and an almost endless assortment of dairy tools and appliances, including pails, strainers and pans, dairy scales, calf-feeders, thermometers, cream gauges, etc. The exhibit was the most complete display of dairy goods we have ever seen on this coast, and was

mense stream of water. They were awarded the premium for irrigating apparatus and for the largest display of machinery from one shop.

Stanton, Thompson & Co., Sacramento, showed a horse-power pump claimed to be of 2000 and 3000 gallons capacity per hour, with easy work for the horse. It is the invention of R. M. Beebe, of Gridley. The same firm also showed White, Cooley & Cutts' (Marysville) feed-cutters.

Daniel Best's hand separators for cleaning seed grains were shown in operation, and presented strong claims of excellence.

C. T. Settle, of San Jose, representing the Farmers' Union, of San Jose, showed the Standard wide-cut mower. Its chief claim is a spring that lifts the cutter-bar and eases it over irregularities of the ground, lifting either end of the bar. There are other claims of merit made for it. The Farmers' Union has been on the lookout for some time for a satisfactory reaper which they could handle direct from the manufacturer, and from trial of the Standard this year gained so much confidence in it that they took the general agency. It is represented as running very lightly, being without side-draft, etc. We expect to have an engraving and description of the machine in due time.

J. Klees & Co., Sacramento, showed the California reformed grain separator, a well-known machine, which has often been mentioned in the RURAL.

Another interesting exhibit was a sack elevator, made and shown by J. H. Wisheart, of Chico, who has received a patent for it. He claims that with this simple machine four men can pile more grain in a warehouse than 10 men can carry up. Baled hay, cotton, boxes, barrels or any packages can be elevated to any desired height with little or no exertion. It is quite automatic, its action being adjustable, so as to land its load at any point on the upward incline, as desired.

Lambert & Deming, whose factory is in the rear of the Grangers' store, on Tenth street, Sacramento, showed their machine manufacturing the wire and picket fence, which is now becoming so popular in this State. They have secured the right to manufacture and sell the fence in Sacramento, Placer and El Dorado counties.

### Implement Hall.

Walking from the apartment devoted to machinery in motion, one comes into the large annex lately constructed for the display of agricultural implements. Here were found the largest general exhibits of farm appliances.

On the left of the entrance was the display of Baker & Hamilton, covering at least 50 feet square of floor with a grand assortment of agricultural goods, beautifully finished and tastefully arranged. Both the floor and wall were occupied, and we never saw handsomer effects produced with hardware than the lettering done with mower-knives, whose bevel edges produced a most exquisite shading effect. Baker & Hamilton, of course, have nearly everything used upon a farm, from the mammoth separators to the simplest hand-tools. Hall's bean thrasher attracted much attention. The Benicia mower, which is deserving of so much credit as a home-made machine, was also shown, as well as a fine lot of Bain wagons.

On the left of the entrance was a floor space of similar size occupied by A. & A. Heilbron, of Sacramento. Among the leading articles shown are the McCormick reaper and binder, Cassidy gang and sulky plows, Peoria steel plows, improved Hoosier gang drill, Victor mowing machines, Cadwell farm wagon; also a covered spring wagon, a pleasure cart, besides a large collection of minor agricultural implements. The display was very creditable.

Near by was the Eclipse cultivator, a combined chisel cultivator, weed cutter and plow for orchard and vineyard purposes. Its claims are durability, light draft, ease of adjustment and operation, freedom from clogging, etc. It is the patent of G. W. Forbes, and is manufactured by Wm. Forbes & Son, Guberville, Santa Clara county. It was well shown at the fair by Mr. Bowdish, of Los Gatos.

Another large exhibitor was H. H. Linnell, of Sacramento. He exhibited a host of things. One was the "Havana Press Seed Drill," to sow and cover the seed at one passage over the ground. He had also the well-known Acme cultivator, the J. I. C. steel plows, the Lansing spring-tooth, broadcast seeder, etc. The Stockton (Houser) combined harvester, for which Mr.

awarded a special silver medal.

P. D. Poole, of Alameda, exhibited a lath and wire-fence machine in operation. By this device one weaves his lath and wire right where the fence is to stand, and the structure is strong and true to the line. Mr. Poole has also a road-grader or road machine which seemed to be admirably contrived for doing good work. The Sacramento Supervisors have purchased three for use on the Sacramento county roads.

Jacob Price showed his Excelsior seed-sower, of which we have already had descriptions in the RURAL, and which is winning an excellent name for speed and capacity, showing a width of 100 feet and covering the ground evenly.

W. F. Jeans, of Woodland, Yolo county, showed his new sack-holder, which has been thoroughly tried during the last summer and given good satisfaction. By this machine the sack is suspended. The bottom never rests on the ground or floor—thus the sack is stretched to its full length, allowing it to be filled with every pound of grain it will hold without using a stick. It is especially adapted to filling old sacks, as it grips the sack all around the top, putting an equal strain on the sack, allowing it to be well filled without tearing. It is claimed that from eight to ten pounds more can be put in a sack than with any other sack-holder. It can be used on a frame in the warehouse or can be attached to a separator or combined harvester.

The S. F. Tool Co. had in operation one of their steam irrigating pumps, throwing an im-



Linnell is agent, formed part of this collection. Mr. Linnell makes a specialty of windmills, pumps and irrigating outfits. The cyclone and Althouse stand at the head of his list of mills. Among other prominent exhibits are the Giant mower, hollow-axle wagons, steel harness, spring whiffletree, etc. The Houser combined harvester shown had harvested 500 acres of grain before coming to the fair. Mr. Linnell has long been in the implement trade, having occupied responsible positions with old-established firms. As he sets up for himself in the same line, his many friends wish him well.

Matteson & Williamson, of Stockton, the old-established firm of manufacturers, showed the Matteson & Patterson Combined Harvester, "Harvest Queen," which they confidently bring forward as the regent in its class of machines. It is certainly a very comely machine, and will, we trust, receive the attention due it by those examining combined harvesters. Mr. Matteson showed us a new design of what must be called an "agricultural revolver," for it seems to hit in every direction. It is a single plow, a gang plow, a reversible or sidehill plow; a ditcher, a hiller, a potato-digger, and a number of other things by very simple adjustments. Mr. Matteson promises to give us a written account of the uses to which his wonderful invention can be put. The firm also show their famous gang plows, which are known all over the Pacific Coast and beyond.

John McCarthy was exhibiting for the manufacturer, E. E. Krause's Montezuma cultivator—a most efficient machine, and adapted to work successfully in most unkind soils. It is adjustable to sidehill or level land by the independent elevation or depression of the wheels at each end. It is adjustable, also, to depth of cut; has shovels which will scour bright in adobe, and is made in different sizes—from 8 to 14 shovels, as desired. He had also a sidehill gang plow, adjustable just as the cultivator is, and can also be adjusted to take much or little land. It has a fingered mold-board, which works well in adobe.

There was on exhibition a fine specimen of Young's Combined Harvester, which is now made at the Benicia Agricultural Works. It is claimed for Mr. Young that he built and patented the first combined harvester which was successfully operated in this State, and the pattern which is now manufactured is claimed to have superior advantages.

Stanton, Thompson & Co., in addition to their exhibit in Machinery hall, which we have mentioned, had a fine general exhibit in the implement department.

Prominent in the center of the floor was the S. Pennock & Sons Co. road machine, which we illustrated in the RURAL some months ago. The manufacturers are now represented by W. Zartman & Co., of Petaluma, as agents, who are ready to supply the Pennock machines in California. There are three styles offered, as follows: Improved Pennock, with Giant levers, \$210; Victor Reversible, \$275; Daisy (two-wheeled), with steel bar, \$125. The Pennock machines have achieved a fine reputation, and will no doubt be popular in California, where there is so great need of effective road machinery.

John Bean, Los Gatos, showed a spray pump for orchards, of his own invention. It is operated by air pressure from a charged cylinder and gives any density of spray desired.

#### Carriages and Wagons.

We doubt if there was ever a better display made of carriages and wagons than at this year's State Fair. We have not space at command to do the exhibitors full justice.

Studebaker Bros. are entitled to leading mention. Their display was made with their usual good taste and was comprehensive, from their standard farm wagon, which is so popular and widely used, up to a \$2000 outfit for a millionaire. Almost everything in the shape of running gear was included in their display. They also showed one of their vehicles before it went to the paint shop, so the public could see clearly the material and style of workmanship, and that they use paint as a preservative of good work and not to conceal poor work. Our readers know our opinion of Studebakers' vehicles, from the frequent allusion we have occasion to make to them. The display was in charge of the local agent, Mr. Lander.

Another leading exhibitor was J. F. Hill, proprietor of the Pacific Wheel and Carriage Works, operating so long and successfully at 1012 and

1014 Second street, with business offices at 301 and 1323 J street, Sacramento. Mr. Hill had three exhibits in the main hall and one in the machinery department. In the latter there were some finely-built fruit wagons, and on the main floor of the pavilion there was every style of vehicle which could be suggested.

A. Meister, Sacramento, showed some very handsome buggies, carriages and other vehicles, 15 in number. They are of excellent style and workmanship.

J. F. Davis & Son, Sacramento, made a fine large display of buggies in variety, double and single phaetons, etc.

W. L. Walker, of Brooks, Yolo county, had on exhibition in the pavilion what he called "the easiest riding cart in the world." It was manipulated by Mr. Brooks, and is known as the Champion road and pleasure cart. It is handsomely made.

A. Meister's (Sacramento) display of fine vehicles, carriages, buggies, etc., on the main floor, were especially deserving of notice.

Neilsen Bros., Sacramento, on the main floor, made a very fine exhibit of road vehicles, and attracted much attention.

#### Contra Costa Fair Premium List.

Following are the awards at the recent Contra Costa County Fair for products of agricultural and allied industries:

##### Horses.

Thoroughbred—B. Clark, best stallion, 4 years old; best filly.  
Roadsters—S. Hodges, best suckling colt; A. M. Hill, best stallion, 4 years old; best suckling colt; A. L. Foote, best single carriage horse; S. Soto, 2d best single carriage horse; D. M. Ayres, best stallion, 4 years old; Thos. Nottingham, best mare, 4 years old; C. S. Lohse, best span matched carriage horses; A. L. Foote, best 2-year-old mare.  
Draft horses—H. S. Shuey, best 2-year-old stallion; 2d best 2-year-old mare; Philip Wells, best 3-year-old stallion; S. P. Martin, best 2-year-old colt; best one-year-old mare.  
Sweepstakes—Seth Cook, 2d best 3-year-old stallion; best 3-year-old stallion; Philip Wells, 2d best 4-year-old brood mare; D. P. Griffin, best 2-year-old colt; A. Boss, 2d best 4-year-old mare; best span work horses; B. Webb, best 4-year-old mare; W. K. Daley, best 2-year-old colt; B. Webb, best suckling colt; C. S. Whitcomb, best family of horses; N. Jones, 2d best 4-year-old stallion.

##### Cattle.

Devons—Seth Cook, all awards.  
Angus—Seth Cook, all awards.  
Galloways—Seth Cook, best bull, best robe.  
Jerseys—A. M. Hill, all awards.  
Graded and Cross Breeds—A. L. Foote, best 3-year-old bull; L. H. Grewell, best 3-year-old cow; J. R. Minaker, best 1-year-old bull.

##### Sheep.

H. M. Gregory, best buck; best ewe; C. Wood, 2d best Southdown buck; 2d best Southdown ewe.

##### Swine.

B. Hodges, 2d best Berkshire boar; best Berkshire sow; Philip Wells, best Berkshire boar; A. L. Foote, 2d best Berkshire sow.

##### Poultry.

D. B. Dudley, best pair ducks; W. Billings, best pair fowls.

##### Dairy Products.

Theo. Wagner, best butter; Miss Nellie Simpson, 2d best do.

##### Grain, Flour, Vegetables, etc.

T. Simpson, best sack potatoes; P. Wells, 2d best do.; D. P. Griffin, best sack flour; S. B. Robinson, best sack pumpkins; Thos. Simpson, 2d best do.; D. B. Dudley, best sack corn; S. B. Robinson, 2d best do.; M. W. Hall, best sack mangel wurtzel; S. B. Robinson, 2d best do.; D. B. Dudley, best sack squashes; Thos. Simpson, 2d best do.; E. W. Williams, best sack sugar beets; best machine-thrashed wheat; H. Richardson, 2d best do.

##### Fruit, Grapes, Nuts, etc.

John Gambs, best collection table grapes; P. Wells, best exhibit watermelons; Theo. Wagner, largest and best collection fruits; H. Raap, 2d best do.; Theo. Wagner, best collection pears; best 6 varieties peaches; best 6 quinces; Thos. Simpson, best exhibit muskmelons; R. O. Baldwin, best single variety apples; best collection pears; H. Raap, best collection peaches; best collection plums; best collection table grapes; A. M. Hill, best collection wine grapes; M. W. Hall, best collection almonds.

##### House Plants.

\* Miss Ellen Frazer, 2d best collection house plants; John Gambs, best exhibit geraniums; best pair vase bouquets; Miss L. Whitman, 2d best exhibit geraniums; Theo. Wagner, best collection house plants.

##### Wine, Canned Goods, etc.

John Gambs, best exhibit white wine; best exhibit red wine; A. M. Hill, best exhibit native wine; Theo. Wagner, best exhibit canned peaches; F. Loucks, 2d best do.; Theo. Wagner, best exhibit cucumber pickles; best collection pickles; best exhibit honey in comb; F. Langencamp, 2d best do.; Theo. Wagner, best exhibit smoked bacon; F. Langencamp, best exhibit strained honey; best exhibit raisins.

##### Bread, Cakes, etc.

Mrs. H. Whitman, best cookies; Mrs. B. F. Beebe, 2d best do.; best marbled cake; best jelly cake; Miss Minaker, best wheat bread; Mrs. Minaker, 2d best do.; Mrs. Billings, best lemon pie.

#### Thirteenth District Fair Awards.

The following are awards of premiums in agricultural and allied departments at the recent fair at Marysville:

##### Cattle.

Marysville Live-stock Co., Lycrodia: Best Holstein cow, Tot 2d; best calf same breed, Yuba; 2d, Udma; Durham cow, Mossie Duke, 1 year old; Hawthorn, best Polled Angus; Forest Rose, 2d cow; others, same class: Pollox, Leander, Laird of Tyric. Sewell Harris, 2d, 2-year-old Durham bull, Romeo. Best 3-year-old Durham cow and calf, Nellie, and 2d Marchemet.

J. M. C. Jasper, best Shorthorn Durham bull. A. C. Kells, 2d, Holstein bull; best bull calf. Justus Greely, Jersey cow, Oakland Queen; Jersey heifer, Marysville Queen; 2d, 3-year-old Jersey cow.

##### Horses.

J. Ramsey, Monarch, best thoroughbred stallion 3 years; Maid, 2d, mare 3 years; John, best stallion, crossed thoroughbred; Alcantara, best roadster stallion.

C. W. Bennett, Donland Dinnie; 2d, stallion, draft horse.

V. Nelson, best span carriage horses, Billy and Frank.

Jas. Littlejohn, Chris, best single carriage horse. F. Grant, 2d, 2-year-old horse, roadster; Zinfandel, best suckling colt.

J. Seward, Luneville: Best stallion, draft. J. Hutchins, Josie, best suckling mare colt.

J. M. C. Jasper, best suckling horse colt, Henry. J. Hollister, Robin, suckling colt.

S. Grant, Nellie, best mare for all work; Lizzie, best mare, crossed thoroughbred; Bill, best 2-year-old stallion, draft; Dollie, 2d, yearling, not thoroughbred.

W. Quint, Luke, best yearling colt, not thoroughbred; Maggie, 2d, mare, draft. Knight of Normandy and 5 colts, best graded. Marysville Live-stock Co., stallion, Duke of Gloster, received honorable mention.

Ira H. Wood, Morgan, best stallion, of all work. C. Matthews, Young Nell, 2d, mare, draft, 3 years.

C. P. Berry, span of mules and a single one, Mertle, best 2-year-old mare, crossed thoroughbred.

J. Kimball, John, 2d, suckling colt. J. Hollister, Magnolia, best draft mare.

James Bryden, 2d, stallion, Porter, for all work. L. Summer, carriage team, Rock and Riley.

G. W. Woodward, J. H. best 2-year-old roadster. F. E. Griffiths, best 2-year-old mare roadster.

W. Doty, Alpheus, Jr., 2d, suckling colt, roadster; Adelaide, best crossed thoroughbred mare; May, 2d, mare for all work.

J. B. McDonald, Donald W., 2d, 1-year-old horse, thoroughbred; Phantom, 2d, best; Cordelia Planet, 11 years, best mare; Boncilene, best colt; Brigadier, 2d, stallion, roadster; Bombard, 4 years old, roadster; Topsy, 3-year-old, same class.

##### Swine.

C. Matthews: Best brood sow, best boar.

##### Poultry.

R. C. Kells, best display of fowls by one person and 1st on Langshans and white Leghorns; H. J. Godfrey, 1st on Plymouth Rock fowls and chicks, Wyandotte fowls and chicks, Rouen ducks, brown Leghorns; W. M. Jeffers, trio black-breasted red game, trio brown red game; H. J. Perry, trio black-breasted red game; Mrs. M. Farrell, pair gray Chinese geese, pair bronze turkeys, pair Hamburgs, trio ducks; R. C. Kells, trio Langshans, trio white Leghorns; J. B. M. Smith, trio Japanese Bantams, trio silver-spangled Hamburgs, trio American Dominique, trio Plymouth Rocks; Mrs. W. A. Wedderburn, 2d white-faced black Spanish; H. J. Godfrey, trio Plymouth Rocks, trio Plymouth Rock chicks, trio Wyandottes, trio Wyandotte chicks, trio Rouen ducks; Mrs. O. L. Tucker, trio white Pekin ducks, trio speckled Pekin ducks, pair white Leghorns.

##### Agricultural Products, Fruit, Etc.

M. and M. A. Marcuse, yellow and Egyptian corn; Mrs. E. C. Orth, 2d on hops on vine; M. R. Garcia, popcorn on stalks; G. Thompson, 2d on assortment of five varieties table grapes; Mrs. R. Keck, 1st on following varieties of squash: Golden Summer, Hubbard, Marrowfat, White Winter, Winter Crookneck, Cream, Marblehead, also best general exhibit of vegetables, melons, etc.; B. F. Frisbie, 1st on Club wheat, 1st on Proper; Farmers' Union, best exhibit wheat; A. C. Gray, best exhibit of grapes of all kinds, 2d on raisin grapes, quinces; Mrs. A. C. Gray, on preserved grapes and pears, 2d on pickled plums, special on jellies; Jacobs & Co., 1st on sweet potatoes; G. W. Hutchins, 1st on following: Sack of barley, Hardy wheat, Australian wheat, dried peaches, dried apricots; Mrs. K. Wisel, three varieties jelly; J. H. Roberts, 1st on Pride of Butte wheat; Mrs. W. M. Tupen, 14 glasses assorted preserves; H. J. Godfrey, mammoth sunflowers, 2d on three varieties of squash; C. and G. Gottwells, 1st on White Chili wheat, 1st on Genesee wheat; C. G. Roth, 1st on cheeses; Mrs. L. Elwell, jarred plums, blackberries and apricots; A. J. Cumberson, watermelons; T. B. Hull, 1st on White Hardy wheat, special on corn, exhibit of five varieties of grapes, 1st on seedless Sultanina; Mrs. Mary Karr, 1st on oranges, 1st on lemons; Mrs. Frank Parks, 1st on pomegranates; Wm. Stafford, four varieties grapes; George Wilson, Egyptian corn; Simon Brown, 2d on White Chili wheat; 2d on barley. R. C. Kells, 2d on soft-shell almonds; 1st on three varieties raisins; 1st on dried apricots; 1st on dried peaches; 2d on wine grapes; 2d on seedless grapes; 1st on six varieties raisin grapes; 2d on general exhibit grapes; 2d on pomegranates; 1st on plums; 1st on pears; 1st on sweet peas; 1st on pumpkins. Mrs. P. W. Bartle, domestic cake and bread. Mrs. R. Keck, 1st on watermelons; 2d on radishes; 2d on pumpkins; 1st on Turba squash; 1st on scollop squash; special on horse radish; 2d on beets; 1st on turnips; 1st on tomatoes; 1st on White Egyptian corn; 1st on two varieties of popcorn and eight stalks; 2d on pears. Mrs. Jas. McConaughy, 1st on seven kinds pickled dishes; 1st on 12 kinds jellies; 1st on 13 kinds preserves. Miss Eva Burt, 1st for collection cut flowers. Mrs. Frank Pache, 2d for collection cut flowers. Mrs. W. N. Rogers, seven kinds catsups. Mrs. N. Stevens, 2d on dried figs; 2d on dried figs, perled. Frank Sherwood, pomegranates. E. M. Devoe, blood beets, string beans,

cucumbers, summer squash; 1st on cabbage; 1st on peppers for pickling; 2d on tomatoes; 1st on red onions. Mrs. T. J. Sherwood, 2d on 10 kinds jellies; 2d on 10 kinds preserves; 1st on 16 kinds fruits in glass; special on citrons and on flowering plants. Seymour Marcuse, 2d on pomegranates. Miss Ella Marcuse, cotton plant. Ralph North, date plant. Mrs. Ella Matthews, 1st on roll butter; 1st on crock butter. Mrs. J. H. Evans, 2d on lemons; special on Madeira walnuts. Mrs. Geo. Ohleyer, 1st on pots of flowers in bloom; 2d on flowering plants; special on cut flowers; 2d on dried plums; 2d on dried peaches. John Burns, cheese, under one year. Mrs. J. McConaughy, three bouquet floral stands. D. P. Durst, 1st on bale of hops. Mrs. R. Keck, exhibit of fruit contained 4 varieties pears, 3 peaches, 5 apples, 4 figs, 1 quince, 1 plum, also English walnuts. J. P. Onstott, 1st on bunch of Tokay grapes; 1st on table grapes, six varieties; 1st on wine grapes; 1st on general variety apples; fig display. Marysville Woolen Mills, four fleeces wool. Miss Josie Effen, wheat bread, domestic cake; 1st on domestic gold cake. Buckeye Mill Co., 1st on wheat flour; 1st on cornmeal; special on Graham flour. Miss Mamie Hammond, 1st on display wheat bread. Mrs. Henry Flint, 2d on biscuits, domestic. Mrs. James McConaughy, 2d on cake. Mrs. Ella Matthews, 2d on display wheat bread; 1st on plate biscuits. Miss Anna Tucker, 1st on domestic cake. Joe Phillips, 2d on six varieties apples; 1st on three varieties apples; 1st on three varieties pears; 1st on four varieties peaches; special on peaches, plums; 1st on nectarines. T. B. Hull, general display nuts and sunflowers. Jacobs & Co., three kinds pears; general exhibit fruits, including peaches, prunes, apples, plums, pears and quinces.

##### Machinery, Etc.

S. H. Bradley, Eastern harrow, honorable mention; 1st on road cart; 1st on spring wagon. Hughes & Pexley, two-horse family carriage. Chas. Raish, honorable mention for a safety yoke and attachments. Hampton Hardware Co., 2d on washing machine; 2d on gopher trap; honorable mention for Deal gang plow. Seymour Marcuse, 1st on silk cocoons, moths and eggs.

#### Sonoma County Notes.

EDITORS PRESS:—After many days your correspondent finds time to drop you a few "notes." The hay and grain crops are all harvested. There is more good hay in Sonoma county this season than has been matured in any one season for many a year. Thousands of tons of good hay are yet out of doors, awaiting the arrival of the hay press and its force of men. Should the rains commence early this fall there will be much hay unhoused, and therefore spoiled.

The potato crop, and you know Sonoma county is famous for fine potatoes, will not be more than an ordinary yield, but the quality will be excellent. In fact, we rejoice as much in the quality of our productions as some people in California do in the quantity of theirs.

Hops are mostly picked, dried, and, in some sections of the county, baled. The yield has been about 35 per cent below the calculations made. We hope the price may advance accordingly, so that the hop grower may have enough money in his pocket-book to make business hop before long.

Wine-making has commenced. The grape crop will be fairly good in yield and quality. The fabulous prices reported being paid elsewhere for grapes are not verified by the prices actually paid here. The writer knows of his own knowledge that the Zinfandel grape, the best wine grape for all purposes grown in Sonoma county, is selling at Santa Rosa for \$15 and \$16 per ton. There may have been a few tons of choice white grapes sold for \$20, or possibly for \$25, but that price, if paid, is not any indication of the real price paid for ordinary crops. Sonoma county grapes rank as high, and our wine ranks higher, than any wine-making portion of the State. Yet our wine-makers declare that they cannot afford to pay the high prices which are reported as ruling in other portions of the State.

Sonoma County Pomona Grange has added another laurel to her already large crown of jewels. The exhibit made by the Granges at the Grand Army Encampment, Santa Rosa and Petaluma Fairs, and now on exhibition at the Mechanics' Fair in San Francisco, has done much to advertise the true worth of the county, as well as to do honor to that worthy fraternity—the Patrons of Husbandry. Messrs. G. N. Whitaker, John Adams, E. A. Rogers and L. J. Hawkins, the committee who have had the management of this exhibit, deserve unbounded praise for the energy, ability and devotion they have shown. They have proven themselves citizens of whom any county ought to be proud, and any fraternity more than proud. They are each one and all Grangers in the true sense. All honor them for service and devotion in a good cause, where faith, hope, charity and fidelity are taught and practiced as cardinal virtues.

Santa Rosa has a new bank; much of the stock is held by farmers.

"The melancholy days have come, the saddest of the year," and dried and falling leaves are everywhere.

Sheep-shearing is about done for the fall. The yield is not large.

There is some talk of a railroad from Santa Rosa to Benicia.

The political pot is boiling over; somebody may get scalded.

Dusty roads; foggy weather; busy people; numerous tramps; and no further news from OCCASIONAL.

Santa Rosa, Sept. 20, 1886.



SAN FRANCISCO:  
Junction Market, Pine and  
Davis Streets.

# BAKER & HAMILTON.

SACRAMENTO:  
Nos. 9, 11, 13, and 15  
J Street.

MANUFACTORY: Benicia Agricultural Works, Benicia, Cal.

EASTERN OFFICE: 88 Wall Street, New York.

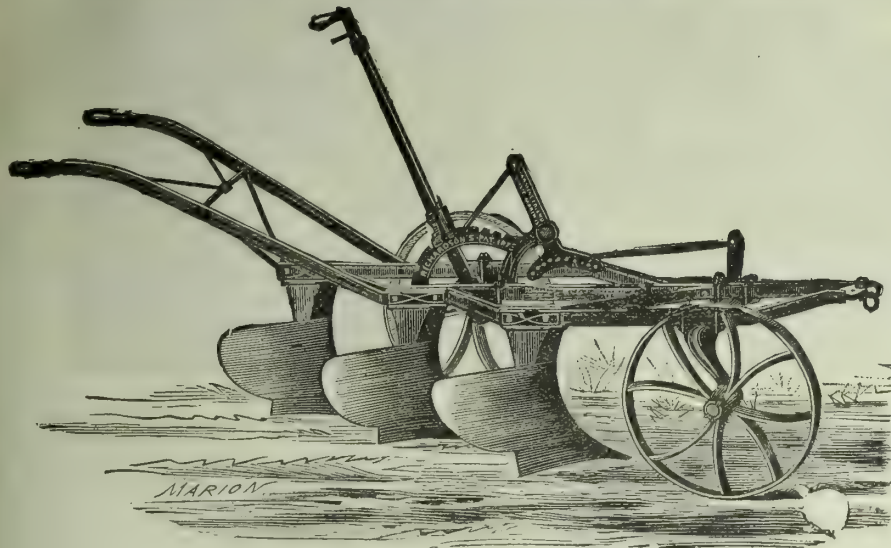
IMPORTERS, MANUFACTURERS, AND DEALERS IN

## Hardware and Agricultural Implements.

### FARMERS' FRIEND GANG PLOW. KILGORE SIDE-HILL PLOW.

For Orchards and Vineyards, Large and Small Ranches.

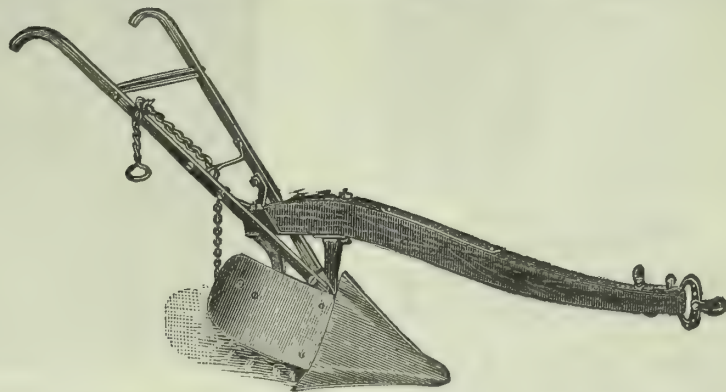
Manufactured by Benicia Agricultural Works.



THREE-PLOW GANG WITH STEEL SHARES, PRICE, \$55 00.

The above is a cut of our three-plov gang, and consists of three 10-inch plows securely fastened to a wrought iron frame, and easily adjusted by a lever to plow from 3 to 9 inches deep. We desire to call the attention of Agriculturists to a few of its advantages over other plows.

1. **Its Superior Work.**—The soil being thoroughly cut up and the furrows turned completely over, effectually covering all trash and weeds.
2. **Its Success as a Side-hill Plow.**—The team being fastened direct to the plow frame, enables the plow to follow the team same as in single plows and without use of a pole.
3. **Its Great Strength and Durability.**—The plow bottoms are of the best of hardened plow steel with either or chilled iron shares, as desired.
4. **Its Economy** in the saving of time and horse-flesh. Our three-plov gang, cutting 30 inches, is used with two average farm horses. No other plow, gang or single, yet invented will do as effective work and with as little horse-flesh as the "Farmers' Friend."
5. **Its Special Adaptation to Orchards and Vineyards,** where it will work without injuring the trees or vines. By a simple attachment, we can either remove the furrow from or throw it against the trees. We can also adjust the plows so as to allow the plow nearest the tree to turn a depth of only one and one-half inches, while the other two plows will break respectively from 2 1/2 to 6 inches. The "Farmers' Friend" gangs will skin sod 2 to 4 inches deep; plow corn, wheat or oat stubble from 2 to 9 inches deep, and in working summer fallow, are very effective in killing weeds and preparing the ground for seed.



No. 1. ONE-HORSE PLOW, WEIGHT 64 POUNDS.....	PRICE, \$17 00
No. 2. TWO-HORSE PLOW, WEIGHT 90 POUNDS WITH WHEEL.....	20 00
EXTRA SHARE FOR No. 1.....	8 00
EXTRA SHARE FOR No. 2.....	8 50

PATENTED JULY 22, 1884.

It has Received the First Premium wherever Exhibited, viz:

MECHANICS' INSTITUTE, SANTA CLARA CO. FAIR and ALAMEDA CO. FAIR.

Guaranteed to be the Strongest Side-hill Plow in Proportion to its Weight.

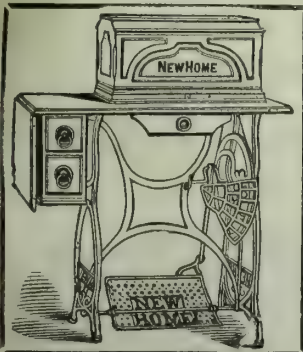
ABSOLUTELY THE EASIEST PLOW TO MANAGE.

This Plow has the best mold-board fastening ever devised for side-hill plows. It consists of a square linked chain attached to the rear-end of the mold-board, and is fastened by simply dropping one of the links in a clutch that is on the plow handle. It cannot be broken, neither can it get out of order. It does not matter how much adobe or rocks, sticks, roots, etc., may get on the plow bottom, the fastening will always work. The style of the plow is the best that can be made. The beam is nearly straight, hence the greatest degree of strength. The handles are plain and easily replaced if broken. They are long and set so as to give the operator perfect control of the plow. There are two standards, both being made solid with the landside.

The handles are secured to the front standard, one on either side, forming a brace to the standards, preventing breaking from side strains. The landside is solid, the wearing surfaces are of ample size, and chilled to prevent rapid wear.

Note carefully the following points:

The Kilgore Plow will run steadier without a wheel than any other side-hill plow with a wheel. It is the strongest steel side-hill plow made, the easiest handled, the lightest draft, the most simple, easiest repaired, made of the best material, and will out-last any other steel side hill in the market.



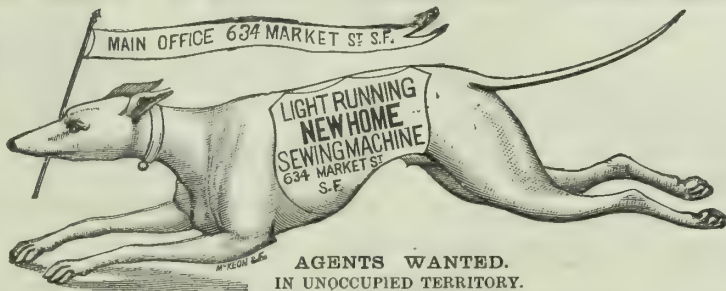
EASIEST

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SIMPLEST.

Territory Con-  
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AGENTS WANTED.  
IN UNOCCUPIED TERRITORY.

Best Stand,  
Best Feed,  
Best Shuttle,  
Best Attachments,  
Best Woodwork,  
Best Wearing.



### ARE YOU USING Wellington's Improved Egg Food For Poultry?

IF NOT, WHY NOT?

NOTE.—Eggs have now doubled in price and will continue to advance to 50 or 60 cents per dozen, and from this time on every one should feed this Egg Food in order to have plenty of Eggs to sell at those profitable prices.

### Excelsior Improved Hot Water Incubator.

NOTE.—This is the only Incubator in the world which is run literally without any expense whatever, saving the full price of the machine every year used—in oil alone. We use no LAMP, no oil, no heating apparatus with the machine, and guarantee it to run strictly to any degree.

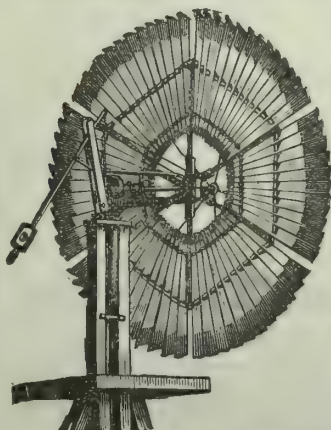
**EGG TESTER.** The long-needed Tester just patented. Testing six eggs at a time, as quick as one at a time by the usual process, and six times as effectually.

**SEEDS.** Alfalfa, Grass, Clover, Vegetable, Flower, Fruit, and Seeds of every variety.

B. F. WELLINGTON,  
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### Situation Wanted.

A married man, recently from the East, wishes a situation as coachman or to do general work. Understands management of horses thoroughly. Best of references given. Address, JOHN CRANDALL, Davisville, Cal.



Improved ALTHOUSE Wind-Mill.  
A Perfect Self-Regulator.

We guarantee our Improved Mill to run in the lightest winds and not to blow down in the most severe gale. Its chief points of merit are: Its ability to take care of itself in the most severe gale—being so arranged that no increase of wind increases its speed. The quality of material used in its construction and the workmanship being the best.



Star Deep Well Standard.

The above cut shows one of our numerous styles of Wind-mill Force Pump Standards. It is the easiest working Pump Standard in use, and is complete in every particular.



Gould's House Force Pump.

This Pump is adapted to every conceivable use so far as is practical to use a Pump of this class. Send for Prices.

SEND FOR SPECIAL PUMP CATALOGUE.

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509 & 511 Market St.,

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### CLEMATIS. TO THE TRADE.

Correspondence invited with dealers requiring Clematis, giving varieties and number of each wanted. We are making extensive preparations to supply any possible demand, with home-grown stock. Address

W. A. T. STRATTON,  
Petaluma, Cal.

### A Good Opportunity for a Machinist.

A variety of good Tools, Patterns, etc., with business for sale cheap by a party retiring from business. A splendid opportunity for an enterprising mechanic.

Address A. B. C., care of this paper.

### SHOPPING BY MAIL!

Music as easily purchased at a distance of a thousand miles from a music store as at the side of its counter!

Ditson & Co. call attention to their wonderful system of sending music and music books, by mail, to any part of the continent.

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Do not neglect this convenient way of filling your house with the best of Songs, of Piano, Organ or any kind of Instrumental pieces.

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449 & 451 Washington St., Boston, Mass.

### THOMAS POWELL, General Commission and PURCHASING AGENT.

Office with Hawley Bros. Hardware Co.,  
301 Market St., San Francisco

Will fill orders for Farm Machinery and Extras, and choice varieties of Seed Wheat and Barley. Wheat and Barley sold on sample.



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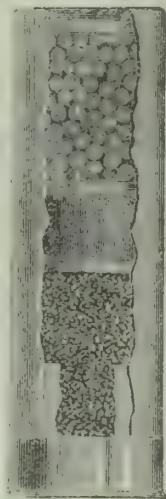
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"STANDARD"

SHOT-GUN

CARTRIDGES.

Sold by all Dealers  
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## HALL'S SARSAPARILLA

Cures all Diseases originating from a disordered state of the BLOOD or LIVER. Rheumatism, Neuralgia, Boils, Blotches, Pimples, Scrofula, Tumors, Salt Rheum and Mercurial Pains readily yield to its purifying properties. It leaves the Blood pure, the Liver and Kidneys healthy and the Complexion bright and clear.

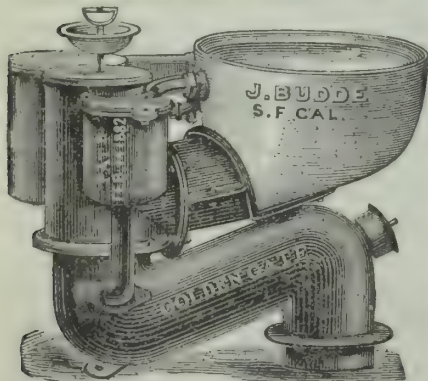
J. R. GATES & CO. PROPRIETORS,  
417 Sansome St. San Francisco

Dixon's Pencils.  
Dixon's Stove Polish.  
Dixon's Axle Grease.  
Dixon's Black Lead.  
Dixon's Graphite.  
Dixon's Belt Grease.

SOLD BY DEALERS.

J. G. ALLEN,  
Agent for the Pacific Coast,  
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San Francisco, Cal.

THE GOLDEN GATE PLUG CLOSET.



The only secure-locking device to keep sewer gas entirely away from dwelling houses.

JOSEPH BUDDE, Manufacturer, 48 Fremont Street,  
Always on hand. Write for information

G. N. WHITAKER, Santa Rosa, breeder of Shropshire Down Sheep; 10 fine bucks for sale.

## Rural Health Retreat (Crystal Springs,) St. Helena, Cal.



Among the many delightful places for rest, recreation and restoration of mind and frame in California, is the "Crystal Springs Rural Health Retreat," shown in above engraving on this page. The Retreat is situated on the slope of Howell mountain, 1200 feet above tide level, 500 above and overlooking Napa valley, and two and a half miles from St. Helena, in Napa county. Among the natural advantages are stated: "Pure water, dry atmosphere, balmy sunshine, even temperature, mild breezes and the absence of high winds. Across the valley lies the Sonoma mountain range, breaking the sea breeze and shielding the Retreat from the chilling atmosphere of the coast, and presenting a safeguard against catarrh and lung diseases. The grandeur of its mountain ranges, with shrubby canyons lying in beauty at their feet, the famous Mt. St. Helena rearing its lofty head to the clouds, the grassy plain lying beneath, reflecting the sunbeams like a grand mirror before the Retreat, all perfumed with a variety of wild flowers, lend an enchantment to the scene. There are no stagnant pools or marshes within range; rainfall is plentiful, rendering irrigation unnecessary, and malaria is a stranger at the Retreat, and in all this beautiful valley. In fact, the purity of the air on this hillside and in the upper valley is a

specific for malaria, and all diseases affecting the head, throat and lungs, producing a healthy circulation through the mucous passages generally."

The Rural Health Retreat is twofold in its character. In the first place it undertakes to do direct work in the cure of diseases by hygienic and rational practice, by thoroughly competent physicians resident in the Retreat. While a radical table is furnished for invalids, and proper diet prescribed for each individual case, no one is confined to a starvation diet, and better and more ample variety is furnished at meals than is usually found upon invalid tables elsewhere. The managers have the services of two thoroughly competent physicians from Eastern cities of many years' experience in practice. They are assisted by two lady attendants having a two-years' course at one of the largest hygienic and surgical sanitariums in the world, with five years' subsequent practice.

The Retreat is also a summer and winter resort to all who desire to spend a few weeks or months in recreation, and receive the benefit from rest and breathing this mountain air, whose healthfulness and purity is unsurpassed. For such, a liberal table is especially provided. While the chief object of this institution is to afford a sanitarium for those in need of hygienic and surgical treatment, ample means are afforded for recreation, and entertainment is

provided for all board-ers and pleasure-seekers who love decency and good order. Winding and picturesque roads, walls of blasted rock terracing the side-hills about the main building, cottages and driveways, a fine campus, spacious woods, shady groves, arched seats, swings, swinging rings, swinging chairs, will be furnished; dumb-bell and Indian club exercises given to such as may desire them. Calisthenic exercises will also be led by a competent leader. To accommodate their increasing patronage the proprietors have been enlarging and building quite extensively, and in many ways improving their facilities for making the Retreat yet more comfortable for their guests.

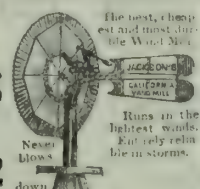
It is certainly one of the best sanitariums, all things considered, in the United States. We feel an especial interest in the Rural Health Retreat, because one of the proprietors of this paper, with his family, has greatly enjoyed a recreation season there. They assure us that they are exceedingly well pleased with the Retreat for its natural and added beauties and comforts, and for the pure moral tone, the kindness and cordiality which prevail in the management. The accessibility of the Retreat should also contribute to its desirability, both to the invalid and the pleasure-seeker. We advise health and pleasure-seekers to send for printed reports and further information.

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Write to me. I am Agent for this Press.  
BYRON JACKSON.  
Manufacturer of  
HAY STACKERS, RAKES, HUSHERS, WINDMILLS, PUMPS, HARROWS, ETC.  
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Send for Circular and Prices of the various styles of Mills I make.

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### American Exchange Hotel, SANSOME STREET,

Opposite Wells, Fargo & Co.'s Express, one door from Bank of California, SAN FRANCISCO.

This Hotel is in the very center of the business portion of the city. The travelling public will find this to be the most convenient as well as the most comfortable and respectable Family Hotel in the city.

Board and Room, \$1.00, \$1.25 and \$1.50 PER DAY, ACCORDING TO ROOM

Hot and Cold Baths Free. None but most obliging white labor employed. Free Coach to and from the Hotel.

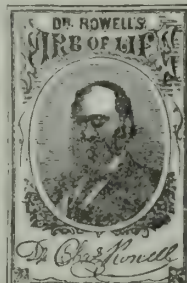
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—FOR—  
Rheumatism, Neuralgia, Pneumonia, Paralysis, Asthma, Sciatica, Gout, Lumbago, and Deafness.

Everybody should have it.

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### 379 FRUIT TREES

Vines, Plants, etc.

Apple, Pear, Peach, Cherry, Plum,

Quince, Strawberry, Raspberry,

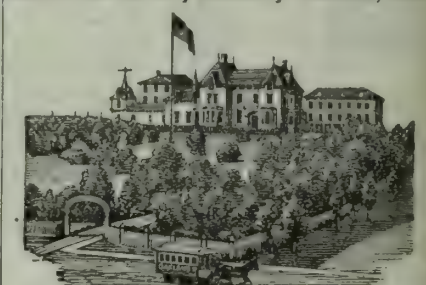
Blackberry, Currants, Grapes,

Gooseberries, &c. Send for Catalogue

J. S. COLLINS, Moorstown, N. J.

### Educational.

California Military Academy, Oakland, Cal.



Special Feature - Commercial Department. Next Term begins July 19, 1886. Send for circular.

COL. W. H. O'BRIEN, Principal.

### SACRAMENTO

The Business Training School of the Pacific Coast. Graduates assisted in obtaining employment. Send for College Journal. Address E. C. Atkinson, Sacramento, Cal.

INTEREST MADE EASY, the shortest and most practical method, by mail, 50 cents.

### HEALD'S BUSINESS COLLEGE, 24 Post St. S. F.

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### San Leandro Nursery.

FINE ASSORTMENT OF THE LEADING VARIETIES

—OF—

FRUIT AND ORNAMENTAL TREES.

The Hardy White Tuscan, Hardy Yellow Tuscan, Clingstone Peaches.

LARGEST PEACHES IN CALIFORNIA. Splendid flavor; good shippers; excellent for canning.

Cypress, Gum and Pepper Trees in boxes. Flowers and Shrubs.

All trees grown on new, rich soil, without irrigation, and are positively free from insect pests.

G. TOSETTI,

San Leandro, Alameda Co., Cal.



## Sonoma County at the Mechanics' Fair.

The admirable exhibit of the Sonoma County Pomona Grange, at the Mechanics' pavilion, has been mentioned by us repeatedly, but not hitherto described in the RURAL PRESS.

The center of the display is a terraced pyramid, 12 feet square at the base, on the lower steps of which are arranged hundreds of clear glass jars, holding samples of soils, grain, pulse, seeds, nuts, preserved fruits, etc.; while on the upper shelves stand bottles of native wines and brandies. The structure is crowned with tufts of pampas plumes, dyed in divers colors. A broad shelf skirting the base of the pyramid is set with plates of choice and beautiful fruits in vast variety.

Inclosing all this, but parted from it by a narrow passageway, is a hollow square of tables, covering a space of 35x30 feet, and closely freighted with plates of grapes in multitudinous diversity, 200 varieties, Mr. Drummond avers, being shown from the Glen Ellen vineyards. In order to gain room for all these plates, the tables on the shorter sides of the rectangle had to be made two stories high. A number of bearing vines, planted in large pots and hung with grapes in crowding clusters, are placed at intervals—a striking sight—and here and there bouquets are set.

Over either gateway to the inclosure are graceful arches, lightly reared of slender sheaves of grains and grasses.

Outside the square are still other tables, both before and behind it. Some of the latter sustain cases of curios from foreign lands—very interesting, although not agricultural exhibits.

Fifteen or twenty kinds of native wood are shown in the rough, besides the huge cross-section of redwood that stood in front of the Lick house during Encampment week. Very handsome are the "bird's-eye" redwood boards sawed from the root of the tree by Meeker Bros., of Occidental. These are about 15 inches wide by 5 or 6 feet high, and are shown both plain and varnished.

The minerals of the county are not unrepresented. There are specimens of various deposits from the Geysers, including a red "Indian paint," of cinnabar and quicksilver, of coal and peat, of tinted lime and the rock it is made from.

The front table is loaded with boxes of dried fruit, canned goods in tin and glass, cheeses and vegetables in variety, among which the enormous squashes are pre-eminent.

Along the middle of this table stand in fair array many sheaves of grain and forage plants. It is claimed that the collection includes over 80 varieties of native grasses.

Champion fleeces of Spanish merino wool from E. W. Woolsey & Son, of Fulton, hang on high against a pillar.

The canned goods in the patent "Petaluma jar" show to great advantage; and a 10-story tower of these transparent cylinders, in which each story shows but one variety of fruit (as black cherries, Bartlett pears, or Golden Drop plums), is peculiarly handsome. One quart jar was filled with 3½ peeled peaches.

The display of sun-dried and evaporated fruit is highly creditable, embracing plums and prunes, both with and without the pits, of several varieties, apples, pears, peaches, apricots, cherries, raspberries, Lawton blackberries and cherry currants, all beautifully prepared.

The appended list of contributors and articles contributed will aid those who have not enjoyed a sight of this wonderful exhibit in forming a better idea of its varied scope; while those who have seen it may like to have such a record and reminder.

Pat McChristie, Sonoma County Pioneers: Bear flag of 1846.

Sonoma county exhibit of grains and grasses in sheaf, comprising barley, oats, wheat, rye, corn, sugar-cane and 82 varieties of grasses.

Otis Allen, of Sebastopol, shows bale of hops, also hops on the vine, sheaves of oats and 15 varieties of native grasses.

J. K. Luttrell, of Glen Ellen: Corn on the stalk, timothy, rye and alfalfa in the sheaf.

Mrs. N. E. Boyce, of Glen Ellen: Fine exhibit of Sonoma county wild-flowers dried.

J. H. Drummond & H. E. Boyce, of Glen Ellen: Extensive collection of rare and handsome East Indian curios, very attractive.

J. H. Drummond, Dunfillan vineyard, Glen Ellen: Gutedel, Charbono, Blanche Noir and Zinfandel wine.

J. Cnopius, Sebastopol: White Mission, Zinfandel and claret wine.

J. L. Watson, Glen Ellen: Zinfandel and Gutedel wine.

George Hood, Knight's Valley: Grape brandy, Zinfandel and Riesling wine.

Kate F. Warfield, Ten Oaks, Glen Ellen: Zinfandel and Riesling wine.

M. K. Cady, Agua Caliente Vineyard: Zinfandel, Hock and sweet Muscatel wine; also, apple and grape brandy.

I. De Turk, Santa Rosa: Six varieties wines, viz.: Angelica, Riesling, Sherry, Zinfandel, Port and sweet Muscat; also, grape brandy.

Lay, Clark & Co., Fountain Grove Farm: Golden Chasselas, Zinfandel and Riesling wine.

George F. Hooper, Sonoma: Red Mission, Zinfandel, Malvoise and blend of vintage of 1881.

Mrs. Hood, Los Guilicos: Zinfandel, Berger and Riesling wine; also, grape brandy of vintages of 1880, '84 and '86, oranges, lemons.

Martin Feusier & Co., Sebastopol: red Zinfandel wine.

P. and J. G. Gobi, Healdsburg: Mission and Zinfandel wine.

McPherson Hill, Sonoma: Cherry cordial.

Mrs. Young, Sonoma: Peaches, pears, plums.

W. A. Thompson, Bennett Valley: Chasselas, Zinfandel and claret wine.

G. and P. Simi: Angelica wine.

Eli T. Shepard, Sonoma Valley: Mataro, Zinfandel and Mission wine.

T. Chevet, Glen Ellen: Riesling, Sherry, Zinfandel and Mataro wine.

B. Hoen, Windsor Winery: Zinfandel, Mission and Berger wine, and grape brandy.

Gifford & Scoggins, Santa Rosa: Soda water, sarsaparilla, ginger ale, etc.

Litton Springs: Natural seltzer water, Geyser soda water.

Geyser Springs: Various minerals and mineral waters.

A. H. Ingram, Sonoma Co. Lime Works: Twelve shades of lime.

S. T. Fulkerson, Rincon Valley: Nine varieties grapes, viz.: Golden Chasselas, Sweetwater, Zinfandel, Berger, Black Prince, Fehr Zagors, Muscat Black St. Peter, Barbarossa.

L. A. Murdock, Santa Rosa Valley: Twelve varieties grapes, viz.: Cornuchon, Zinfandel, Tokays, Red Traminer, Barbarossa, Rose Peru, Hamburg, Malvoise, White Nice, Berger, Grey Riesling, Black Morocco.

Jake Harris, Santa Rosa Valley: Twelve varieties grapes, viz.: Muscat, Catawba, Muscatel, Rose Peru, Black Prince, Golden Chasselas, Tokay, Sweetwater, Fehr Zagors, Barbaroux, Mission, Grey Riesling.

Mrs. A. Moore, Glen Clare Farm, Santa Rosa Valley: Three varieties grapes, viz.: Berger, Zinfandel, Golden Chasselas.

Mrs. Ruth Barnes, Santa Rosa Valley: Grapes, almonds, quinces, garden seeds, sea-shells, pebbles, dried grasses, cut flowers, etc.

W. D. Sink, Cloverdale: Three varieties grapes, viz.: Mission, Tokay, Rose Peru.

Morris Bros., Sonoma: Six varieties grapes, viz.: Tokay, Hamburg, Berger, Malvoise, Rose Peru, Malaga.

Richard Fulkerson: Grapes, apples, pears and pomegranates. He claims to have the largest pear on exhibition in the pavilion.

Mrs. D. Litchfield, Sebastopol: Gooseberries, cherries, blackberries and currants in glass.

Mrs. A. Gamble, Santa Rosa: Beans, sunflowers, blackberries, gooseberries, plums, radish, holly-hock seed, carrots, lettuce seed.

Charles Range, Santa Rosa: Silver maple seed.

Joaquin Corilla, Santa Rosa: Tobacco.

T. Kersedge, Glen Ellen: Wheat, barley.

J. C. Forbes: Plums, citron.

E. Light, Santa Rosa: Canteloupe, watermelon, corn.

N. G. Finley, Santa Rosa: Carrots, gunbo.

Prof. Finley, Santa Rosa: Photographs.

Mrs. Janson, Sebastopol: Seeds, Dutch flowery beans.

Mr. Stiger, Sonoma: Rye, tomatoes, cucumbers, pumpkins, squash, grapes.

Decker & Jewett, Glen Ellen: Wheat, oats, barley and rye.

Mr. Derbin, Glen Ellen: Beets, carrots, squashes.

C. W. Lewis, Santa Rosa: Barley.

E. High: Barley.

A. M. Jennings, Santa Rosa: Wheat, corn, squash, prunes and plums.

O. Calderwood, Santa Rosa: California nutmegs.

E. A. Rogers, Santa Rosa: Beets, carrots, sweet corn, sorghum, four kinds squash, pumpkins.

Mrs. E. A. Rogers: Canned peaches, pears, quince, currants and cherries; currant, quince and apple jellies; spiced currants.

John Adams, Santa Rosa: Six varieties tomatoes, string beans, buckeye, canned cherries, Egyptian corn, native cloverseed; wheat, barley, oats; garden and field beans; specimen soil; potatoes; apples, pears and peaches.

Willie Rogers, Santa Rosa: Peanuts on vine; French prune.

Geo. Rogers: Petrified wood; sugarcane.

Geo. Davis, Santa Rosa: Plums and prunes.

J. Dont, Santa Rosa: Field corn.

I. H. Nealy, Dry Creek: Barley.

J. W. Ridgeway, Santa Rosa: Wheat, beans, corn.

C. C. Chapman, Santa Rosa: Wheat, corn, pears, apples.

Mr. Fletcher, Green Valley: Rye and corn.

John Wiley, Green Valley: Peaches and corn.

A. L. Clark, Mark West: Wheat.

John Grant, Healdsburg: Wheat, hops.

Ioman Kyle, Mark West: Wheat.

Santa Rosa Cannery: Canned peaches, plums, pears, tomatoes, blackberries.

Santa Rosa Woolen Mills: Sample of cloth.

Santa Rosa Tannery: Five samples dressed leather.

Woolsey & Son, Fulton: Wool, three squashes.

L. Chinn, Rinconi: Sweet potatoes, squash, plums, prunes.

P. Mullally, Freestone: Eight varieties potatoes, oats, wheat, wild and tame timothy in sheaf.

James Shaw, Glen Ellen: Six varieties gourd, cucumber, citrons, pomegranates, pumpkins, oranges.

J. R. Jewell, Petaluma: Cheese.

H. W. Williams, Santa Rosa: Four varieties apples, sun-dried prunes.

W. Wood, Mark West: Wheat, oats, corn.

J. Strong, Bennett Valley: Wheat, apples, peaches, pears, plums, grapes.

Luther Burbank, Santa Rosa: Oregon ash-seed, *photina arbutifolia*.

W. W. Galden, Santa Rosa: Wheat, oats, barley, corn, cheat.

Henry Adams, Santa Rosa: French prunes, millet, native peas, sorrel or pepper seed.

J. Peterson, Santa Rosa: Hops.

C. Wightman, Sebastopol: Peaches, pears, plums, apples, canned goods, jelly, prunes.

E. A. Peny, Santa Rosa: Seven varieties pears.

C. H. Smyth, Santa Rosa: Nineteen varieties pears.

L. Litchfield, Sebastopol: Peaches, pears, apples, quinces, plums, prunes.

John Merrett, Petaluma: Eight varieties apples.

Mrs. Cropley, Santa Rosa: Yankee pumpkin.

Meeker Bros.: Two samples curly redwood, ferns.

Great Western Quicksilver mine: Quicksilver and cinnabar.

I. J. Heald, Guerneville: Fern, tan-bark, samples of wood.

Chair Factory, Forestville: Sample of chair, ball bat.

John Taylor, Santa Rosa: Stone coal.

Mrs. R. Coulter: Five kinds jellies, canned peach-plums.

Mrs. E. E. Whitaker, Bennett Valley: Forty-six jars canned fruits, jams, pickles, etc.; 20 glasses jellies.

Mrs. D. Litchfield, Sebastopol: Jellies, jams, canned fruit, sea-mosses.

Mrs. M. Litchfield, Sebastopol: Canned plums, plum jelly.

Mrs. E. A. Rogers: Canned peaches, currant jelly.

Mrs. Mattie Ward, Santa Rosa: Plums, straw-berries, Siberian crab, apples in glass.

John Bailor, Santa Rosa: Saur kraut.

J. P. Whitaker, Santa Rosa: Dried cherries and prunes, canned plums.

C. Woodward, Santa Rosa: Candy.

Mrs. Lowell, Santa Rosa: Gooseberries and carrots.

Mrs. A. J. Mills, Santa Rosa: Petite prunes.

G. N. Whitaker, Santa Rosa: California walnut, English walnut, Shropshire wool.

J. B. Whitaker: Black oats, green beans, carrot.

Walter L. Whitaker: Red rice popcorn.

G. N. Whitaker: White imperial sugar beet, 14 kinds pears, 52 varieties apples, plums, prunes, wheat, corn, barley, oats, grasses of many kinds.

Richard Crane: Toscana oats.

J. M. Hudspeth: Raspberries.

L. Peterson: White oak.

C. D. Carpenter, Blucher Valley: Black rust-proof oats.

G. T. Miller, Dry Creek: Bay wheat.

Mrs. Edla Adams: Beans.

A. L. Wainer, Russian River: Corn, apples, plums, and peaches.

Isaac Parker, Sebastopol: Hubbard squash.

Jonathan Roberts, Santa Rosa: Beets, black-berries, pumpkins.

Henry Rainey, Santa Rosa: Pears, apples, prunes.

L. J. Hawkins, Santa Rosa: Paper-shell and Langue-doe almonds.

Mrs. Pepper, Petaluma: Oranges and lemons.

N. Carriger, Sonoma: Oranges, lemons, peaches.

Geo. F. Hooper, Sonoma: Wine, olive oil, olives, walnuts, honey, cherry-bounce.

W. Mock, Santa Rosa: Squashes and carrots.

## Vacaville Notes.

EDITORS PRESS:—The weather has been very warm, with north wind for a week past. The air is so full of smoke from fires in the mountains that one cannot see half a mile.

The Pioneers' celebration, in Vacaville, was a grand success. Between 3000 and 4000 people were present. A fine dinner was given, and there was plenty for all to eat. There was no fighting and no drunkenness. The town was tastefully decorated, and there was a fine display of fruit at the Blum's store. Mr. Cernon had two figures fixed up—one to represent a miner of '49, and the other a tramp of '86. They were good imitations of the men they were made to represent, and were much admired. The exercises consisted of marching by the band, the Pioneers and Odd Fellows, after which there were speaking and singing.

J. M. Pleasant, of Pleasant Valley, is putting up about 2000 boxes of Petit prunes, for which he receives seven and a half cents per pound, dried and boxed. He will also put up about 500 boxes of raisins. Brink Brothers are picking the last of this year's crop of peaches, which are Salways. They have sold them to E. T. Earl to ship East. The first crop of grapes in the upper part of Vaca and Pleasant valleys is pretty well picked. H. Bassford has just sold four tons of Muscat and eight tons of Tokay grapes to Allegretti, of Berkeley, at four cents per pound. Mr. Allegretti intends to preserve them by his process, by which he says he can keep them six months as fresh as when he gets them. The grapes are put into a room just as they are packed at the vineyard, and kept there for six days; just what the process consists in no one but himself knows.

He has cherries and other fruits which he has kept since the first of the season. He says that next year he will send East 1000 carloads. Should his process prove to be what he thinks, it will work a great change in the shipping of green fruit East.

I hear much inquiry how to kill morning glory. Two years ago the Brink Brothers had a patch of it in a young orchard, on sandy made land, near the bank of the creek. They dug it up from two to three feet deep, taking care to collect all pieces of roots and carry them off. Around the main root that was left in the ground a little hole was made, a handful of salt put on, and the ditch filled up. Since then no morning glory has appeared. Several here have tried to kill it by stacking straw on it, but it will come up, only give it time. G.

Vacaville, Cal., Sept. 12, 1886.

## Agricultural Drain Tile.

Gladding, McBean & Co., of Lincoln, Placer Co., are manufacturing an agricultural drain tile that can be used where there is light pressure at comparatively low cost. At the factory this pipe can be bought at less than five cents a foot, six inches in diameter. It is made of stoneware body thoroughly vitrified. It is thin, and will bear transportation any distance. Mr. Gladden has just returned from a visit East. He took occasion to examine a large number of tile factories, and gathered the information that best results are gained by under-drainage. Throughout the great Mississippi valley there is a large demand for a cheap tile pipe. Anticipating a similar demand in California, he has made preparations to manufacture a class of tile-pipe that is suited for under-drainage at a heavy reduction from the class now used. We learned from several fruit-growers that their orchards and vines had suf-

fered irreparable damage by the soil being saturated for a long time with water during the rainy season, and lands that had been irrigated had suffered from overmoisture and percolation from adjacent water ditches. There is no doubt that drainage must be generally taken up in this State, especially for orchard and vineyard lands.

## Acme Evaporators.

Messrs. Batchelor & Wylie, of S. F., exhibited a large and small-sized Acme Evaporator in the machinery department. During the last week of the fair the large-sized machine was put into practical operation, and the capabilities and efficiency of steam in evaporating fruit was fully demonstrated. Fruit-growers became much interested in the tests given. Figs were dried in five hours, and grapes were made into raisins in from 6 to 8 hours, depending on steam furnished by the engine in this department. Mr. Batchelor, who was in charge of this exhibit, demonstrated the merits of this evaporator by the use of a regulator, with which he could maintain any degree of heat required. Among the features claimed for this evaporator are: Absolute safety from fire; a steady heat, that can be increased or diminished at will; quality of fruit that brings the highest price; durability of machine, decreased cost and greatest capacity, with the least labor and fuel. In addition to their evaporator they exhibited the "Flying Ditchman" sulky plow, spring-tooth harrow, roll drill and clod smasher combined, Gale spring-tooth seeder and Hollingsworth self-dump rake. Farmers and fruit-growers seemed much interested in this exhibit, and bestowed flattering comments on the work of the Acme evaporator.

## Rural Health Retreat.

We take pleasure in again calling the attention of our readers to this popular resort and sanitarium. The original building ing has recently been thoroughly refitted, and the extensive additions are now complete. The rooms are well furnished, ample and sunny, the gymnasium abundantly supplied with the most approved modern appliances for calisthenic exercises, and the bath-rooms are commodious, convenient and under competent management. The elegant and cozy cottages are admirably adapted to family use. Two thoroughly studded and well-experienced physicians, with two lady assistants, have charge of the medical and surgical departments. This retreat is kept open the year round, and its pure water, salubrious mountain air, fine walks and campus and picturesque surroundings will ever make it a pleasant and inviting home, not only for invalids but for all who are in need of a few weeks' rest and recreation and surcease from toil.

The autumn season is one rare beauty and enjoyment to the visitor and sojourner in the foothills of Napa valley. Its fine fruits, genial atmosphere and changing foliage add to its usual charms. There is no better season to induce the health and pleasure seeker to tarry at this desirable resort.

## Miller's Lightning Hay Press.

During the fair Miller's Lightning Hay Press was exhibited at the park and put in practical operation to make a test of its qualities. In the pavilion a miniature press was operated each evening by Mrs. Miller and daughter. This small press is a fine model of the large press, and makes a small bale about five inches long and otherwise in proportion to a large bale. It proved one of the great attractions of the fair, as the visitors sought the bales as trophies. The history and workings of this press has been given in the RURAL, and with improvements that have been made it is considered by those who have used it this year one of the most efficient hay presses in the world. Mr. Miller, while at the fair, received several orders.

## The Prize Windmill.

The Cyclone Windmill, which is advertised on another page, has been exhibited in the machinery department of the Mechanics' Fair, and has been awarded the silver medal for excellence of design, and lightness and simplicity of construction. This windmill, as its name implies, is constructed with a special view to safety in very high winds; the mill being designed with the center of pressure offset from the center of the spindle, so that when the wind exceeds a certain pressure, it will be forced to revolve on the spindle until the edge of the wheel is presented to the wind, where it will remain until the force of the wind is reduced, when it will be automatically brought around to face the wind by the action of a weight.

When necessary to stop pumping, the weight may be taken off the chain, which passes through the hollow spindle, when the wheel will automatically turn out of the wind and be secured in that position by a catch; the wheel will also turn out of the wind when the water reaches a certain height in the tank.

In construction the mill is light and strong, and the iron-work has been designed with a view to durability. The crank-shaft is one and three-fourths inches in diameter and runs in babbitted boxes, which will not cut the bearings when run at the highest speed.

## Cheap Money for Farmers.

Farmers in this State will be glad to learn that they can borrow on mortgage any amount, from \$5000 to \$50,000, from S. D. Hovey, 330 Pine St., San Francisco, at 6 to 7 per cent and taxes. \*\*



## Breeders' Directory.

Six lines or less in this Directory at 50c per line per month.

### POULTRY.

O. J. ALBEE, Santa Clara. Thoroughbred poultry.  
E. C. CLAPP, South Pasadena, Cal. Light Brahmas and Plymouth Rocks. No fowls for sale. Eggs from first-class k, after Nov. 1st.

E. H. FREEMAN, Santa Clara, Cal., importer and breeder of Wyandottes, Langshans, L. Brahmas, P. Cochins, B. and W. Leghorns, Bl. Br. R. G. Bantams.

AXFORD INCUBATOR—Best in the world; never beaten in competition; from \$37.50 to \$85.00. Pekin and Rouen Ducks; best in the State; \$7.50 per trio, or \$2.00 each per doz. Eggs, \$3.00 per doz. For particulars address L. P. Clark, Mayfield, Cal.

CALIFORNIA POULTRY FARM, Stockton, Cal. Send 2-cent stamp for Illustrated Catalogue.

W. O. DAMON, Napa, Wyandottes, W. and B. Leghorns, P. Rocks, L. Brahmas, Pekin Ducks.

MRS. M. E. NEWHALL, San Jose. White and Brown Leghorns, Langshans, Plymouth Rocks, Light Brahmas, Pekin Ducks and Bronze Turkeys.

GEO. B. BAYLEY, 1817 Castro St., Oakland, Importer and Breeder of all the best known and most profitable Land and Water Fowls. Publisher of the Pacific Coast Poultryers' Hand Book and Guide. Price 40 cents. Send 2-cent stamp for Illustrated Circular.

JAS. T. BROWN, 18 Georgia St., Los Angeles, Cal. Breeder of Thoroughbred Poultry of the leading varieties. Send for circular and price list.

T. D. MORRIS, Sonoma, Cal. Tuolouse and Embden Geese, Bronze and W. Holland Turkeys, and all leading varieties of Thoroughbred Poultry.

CHOICE LAND AND WATER FOWLS for sale at all times of the most popular and profitable varieties. Please inclose stamp for new circular and price list to R. G. Head, Napa, Cal.

D. H. EVERETT, 1616 Larkin St., S. F., importer and breeder of Thoroughbred Langshans and Wyandottes.

J. N. LUND, Box 116, Oakland, Cal. Wyandottes, Langshans, L. Brahmas, P. Rocks, B. Leghorns, B. B. R. Game Bantams, T. Guineas, Hom'g Antwerp Pigeons.

D. D. BRIGGS, Los Gatos, Cal. Fancy Poultry breeder

### HORSES AND CATTLE.

ONTARE RANCH, three miles west of Santa Barbara, Santa Barbara county, California. Coach Horses, Draft Horses, Trotting Bred Horses and pure Holstein-Friesian Cattle. Young cattle and matched teams always on hand. Francis T. Underhill, Proprietor. C. F. Swan, Manager.

COTATE RANCH BREEDING FARM, Page's Station, S. F. & N. P. R. R. P. O., Penn's Grove, Sonoma Co., Cal. Wilfred Page, Manager. Breeders of Short Horn Cattle, English Draft Horses, Spanish Merino Sheep and Berkshire Swine.

P. S. CHILES, Davisville, Yolo Co., importer and breeder of registered Shorthorns of the best families.

STINSON & MANSE, Dayton, Nevada. Registered Shorthorns of choice breeding strains.

T. P. A. WILLIAMS, Columbia, Boone Co., Mo., breeder and importer of Thoroughbred Herefords.

LEONARD BROS., Mt. Leonard, Mo., importers and breeders of Galloway, Aberdeen-Angus and Short-horn cattle.

M. D. HOPKINS, Petaluma, importer of Thoroughbred Shorthorns and Red Poll cattle for milking strains.

HYDE & MOORE, Visalia, importers and breeders of Shorthorn cattle. Young stock for sale.

J. A. BREWER, Centerville, Alameda County, Cal. Shorthorns and Grades. Young stock for sale.

R. J. MERKELEY, Sacramento, breeder of Norman, Percheron Horses and thoroughbred Shorthorn Cattle.

Estate of M. E. BRADLEY, San Jose, Cal., breeder of recorded thoroughbred Shorthorn Cattle and Berkshire Hogs. A choice lot of young stock for sale.

E. W. STEELE, San Luis Obispo, Cal., breeder of Thoroughbred Holstein and Jersey Cattle.

J. R. ROSE, Lakeville, Sonoma Co., Cal., breeder of Thoroughbred Devons, Roadsters and Draft Horses.

SETH COOK, Danville, "Cook Farm," Contra Costa Co., breeder of Aberdeen Angus, Galloways and Devons (Registered). Young stock for sale.

H. S. SARGENT, Stockton. Thoroughbred Jersey Cattle, and Poland-China Hogs from imported stock.

PETER SAXE & SON, Lick House, San Francisco, Cal. Importers and Breeders, for past 14 years, of every variety of Cattle, Horses, Sheep and Hogs.

WILLIAM NILES, Los Angeles, Cal. Thoroughbred Poultry, Cattle and Hogs. Write for circular.

THE BEST HERD OF JERSEYS, all A. J. C. C. registered, is owned by Henry Pierce, San Francisco.

### SHEEP AND GOATS.

T. H. HARLAN, Williams, Colusa Co., breeder pure blooded Angora goats, & Merinos; young stock for sale.

R. H. CRANE, Petaluma, Cal., breeder and importer. South Down of Long John Wentworth herd for sale.

E. W. WOOLSEY & SON, Fulton, Sonoma Co., imp'rs & b'ders Thoroughbred Merino, & Jersey Cattle.

EASTON MILLS, Lakeville, Sonoma Co., thoroughbred Spanish Merino Sheep. Choice rams for sale.

J. B. HOYT, Bird's Landing, Cal., importer and breeder of Shropshire Sheep; also breeds cross-bred Merino and Shropshire Sheep. Rams for sale.

L. U. SHIPPEE, Stockton, Cal., importer and breeder of Spanish Merino Sheep, Durham Cattle, Red Duroc and Berkshire Swine. High graded Rams for sale.

JULIUS WEYAND, breeder of pure-blooded Angora Goats, Little Stony, Colusa Co., Cal.

KIRKPATRICK & WHITAKER, Knight's Ferry, Cal., breeders of Merino Sheep. Rams for sale.

### BEEES.

J. D. ENAS, Napa Cal., breeds pure Italian Queens. The best honey and wax extractor; manufactures comb foundation, sections & hive material; send for circulars.

### SWINE.

P. H. MURPHY, Brighton, Perkins P. O., breeder of Shorthorn Durhams, and Poland-China Hogs.

WILLIAM NILES, Los Angeles, Cal. Thoroughbred Poland-China and Berkshire Pigs. Circulars free.

JOHN RIDER, Sacramento, Cal. Breeder of Thoroughbred Berkshire Swine. My stock of Hogs are all recorded in the American Berkshire Record.

TYLER BEACH, San Jose, Cal., breeder of thoroughbred Berkshires.

L. L. DICKINSON, Lone Oak Farm, Sonoma, Tuolumne Co., Cal., breeder of thoroughbred Essex Hogs. Pigs now ready for sale. Prices reasonable.

### HORSES AND CATTLE.

Thoroughbred JERSEY CATTLE For Sale.



BULLS—Earl Mameluke, A. J. C. C. No.; Demont, Millard, A. J. C. C. No.; Waterman, P. C. J. C. C. No. Cows, Heifers and Calves, all registered, or will be, in P. C. J. C. Club H. R., at reasonable prices. Write for what you want. No catalogues. Address  
H. S. SARGENT, Stockton, Cal.

### FOR SALE.

HOLSTEIN-FRIESIAN CATTLE

FROM THE HERD OF

HON. LELAND STANFORD,

On his Ranch at Vina, Tehama County, Cal.

For prices and catalogue address

MR. ARIEL LATHROP,

Room 69, C. P. R. R. Building,

Cor. 4th and Townsend Sts.,

San Francisco, Cal.

FRENCH DRAFT STALLIONS,

Kentucky Jacks and Jennets,

Work Horses and Mules

FOR SALE.

Some of the Stallions were imported from Europe, others from Illinois, and some young ones were bred in California from imported stock. The prices will be less than animals of equal value can be purchased elsewhere.

Call at or address Patterson's Ranch, Hueneme, Ventura County, or Patterson's Ranch, Grayson, Stanislaus County, or for further information call on or address JAMES M. PATTERSON, No. 8 Davis St., San Francisco.

JOHN D. PATTERSON.

JACKS, MULES, JENNEYS, AND HORSES.

Two grown Jacks, five Yearlings, and 18 brood Jennies for sale at a bargain. Address (Residence, Antelope Valley)

J. D. ROSENBERGER,

Maxwell, Colusa Co., Cal.

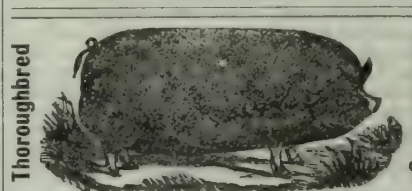
BADEN FARM HERD  
Of Short Horn Cattle and Dairy Cows.

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### SWINE.

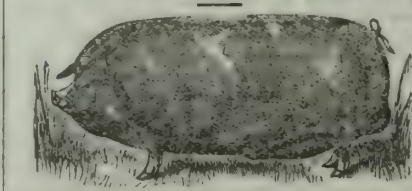


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From our Thoroughbred Berkshire Boar and Sow, which we imported from England in 1880. Pigs from Imported Boar and Sow, \$25 each; from Imported Boar and Thoroughbred Sow, \$10 to \$20. Our Imported Pigs are as nice Pigs as there are in the State. Address

L. J. TRUMAN, San Francisco, Cal.

JONESA POLAND CHINA FARM.



ELIAS GALLUP, Hanford Tulare, Co., Cal.

Breeder of pure-bred Poland China Pigs of the Black Beauty, Black Rose, Blenheim, and other noted families. Imported boars King of Bonny View and Gold Dust at head of the herd. Stock recorded in A. P. O. R. Pigs sold at reasonable rates. Correspondence solicited. Address as above.

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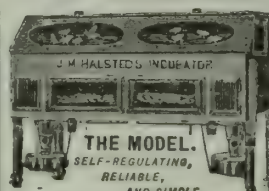
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Awarded the Gold Medal at the State Fair, Sacramento, and at the Mechanics' Institute Fair of 1885 as the best machine made. It will hatch any kind of Eggs better than a Hen.

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LITTLE'S CHEMICAL SHEEP DIP.

Price Reduced to \$1.25 PER GALLON.



Twenty gallons of fluid mixed with cold water will make 1,200 gallons of Dip.

It is superior to all Dips and Dressings for Scabs in Sheep; is certain in effect; is easily mixed, and is applied in a cold state. Unlike sulphur or tobacco, or other poisonous Dips, it increases the growth of the wool, stimulates the fleece, and greatly adds to the yield. It destroys all vermin. It is efficacious for almost every disease (internal and external) sheep are subject to.

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Recommended by Professors Hilgard, Cooke, etc.

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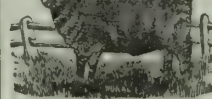
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Free from Poison.



Cures thoroughly the SCAB OF THE SHEEP. The BEST remedy known. Costs less than 1 cent per head for dipping. Reliable testimonials at our office. For particulars apply to

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Calvert's Carbolic SHEEP WASH \$2 per Gallon.

After dipping the Sheep, is useful for preserving wet hides, destroying the vine pest, and for wheat dressings and disinfecting purposes, etc. T. W. JACKSON, B. F., Sole Agent for Pacific Coast.

THOROUGHbred SPANISH MERINO SHEEP.



Have taken the First Premiums at the State Fair for the last three years.

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OF CALIFORNIA.

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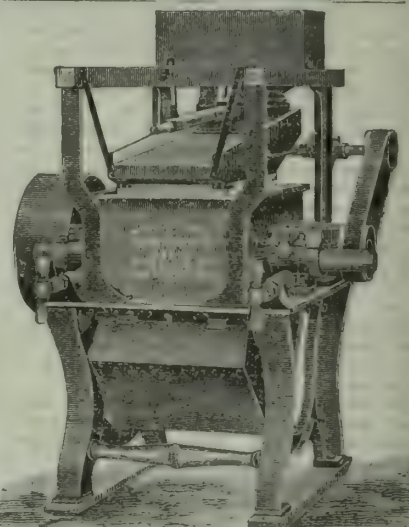
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This is the Greatest Novelty ever offered, and a boon to Farmers.

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Collar \$3.50  
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PRICE \$17.50 ONLY Sent C.O.D. by Express.

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Heifers in Calf in such grand bulls as Netherland Star, Clifden Prince (Holstein) and Ashantee's Sultan (Jersey) for sale at reasonable prices. Also POLAND-CHINA and BERKSHIRE PIGS.

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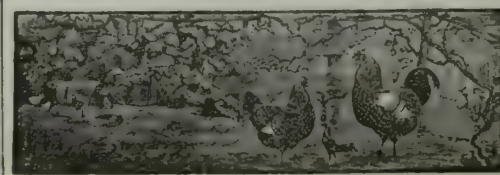
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Clean sweep on Plymouth Rock (Chicks at Great California Poultry Show at San Francisco, Jan. 11th to 16th, 1886. The Best is the Cheapest. Illustrated Catalogue sent free on application; worth \$1 to any breeder of poultry. Send me your name on a Postal Card; 5000 copies of fine Illustrated Catalogue for free distribution.





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Of good land in Fresno, near the County Seat. Some of this land is already irrigated, and all can be easily irrigated. It is adapted not only to grain, but also to Alfalfa, Fruit and Vines.

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Of the above land for sale at the low price of \$20 per acre. Apply to

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BARGAINS IN ORCHARDS AND VINEYARDS, STOCK and Grain Ranches in every County in the State. Send Stamp for Catalogue. We can find quick sale for your farm, large or small, if it is cheap and you will send us full description. If you want to buy, tell us what you want, and we can suit you.

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**5680 Acres** of rolling adobe hills, situated in Tehama County. Well watered by numerous springs, etc. Several thousand acres suitable for cultivation. Good two-story House, Barn and other out-buildings. Seven miles of fine wire fence.

**FIRST-CLASS CATTLE OR SHEEP RANGE.** The Cheapest tract of land in Tehama County. Price, \$6.00 per acre. Fair time and interest. Also, a tract of 20,000 acres adjoining, can be bought at a great bargain. Title, U. S. Patent. For terms, etc., apply to

J. E. CROOKS, Benicia, Cal.

N. B.—Upon timely notice, intending purchasers will be taken from Cottonwood to the land and returned free.

## A NEW COLONY

On the new extension of Southern Pacific Railroad, on the lands belonging to T. T. BUELL, Esq., near Los Alamos, Santa Barbara county, Cal. Parties desiring to visit the property now, can go via San Luis Obispo and take the cars from thence to Los Alamos, thence by stage to the Colony. **20,000 acres** of the best lands in California, subdivided into 20, 40 and 80-acre farms; \$20 to \$30 per acre. **INTERNATIONAL IMMIGRANT UNION**, 401 California St., San Francisco.

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SAN LUIS OBISPO, CAL.

Incorporated March 27, 1886.

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Recently purchased by the West Coast Land Company, are now offered for sale in subdivisions.

This immense body of land, including 12,000 acres unsold of the Huer Huero ranch, belonging to C. H. Phillips, comprises 64,000 acres of rich, virgin soil. It lies in a compact body, in the center of San Luis Obispo county, and is within from 9 to 20 miles of the sea coast. It is covered with white and live oak timber, is one of the most picturesque bodies of land in the State, and requires

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It has an abundance of living water, and where not sufficient for domestic use, good water can be had at a depth of from 10 to 40 feet. It has an average annual rainfall of 21 inches, exceeding by six inches that of Santa Clara county, one of the most prosperous counties in the State.

The extension of the Southern Pacific Railway from Soledad southward traverses these lands for 15 miles throughout their entire length, placing the property within eight hours of San Francisco.

These lands are offered at from \$10 to \$30 an acre, and are all susceptible of the highest cultivation. In salubrity of climate, productiveness of soil and location as to market, they are equal to lands in Los Angeles and other counties, which readily bring from \$100 to \$200 and upward; and as to price and terms offer the best inducements to those seeking homes on any part of the Pacific Coast.

The field work of the subdivision of the famous

## PASO ROBLES RANCH

Has been completed. The maps and catalogues are now being prepared, and will be sent free on application. This ranch, containing 20,400 acres, has been subdivided into 230 lots. It is 12 miles from the sea coast, and is 20 miles north and west from San Luis Obispo city.

This ranch was one of the earliest granted by the Mexican Government and having been held by the same party for 30 years, has never before been offered for sale. It consists exclusively of land of the choicest character, and is second to none in the State for the production of wheat, wine, fruits, raisins and olives.

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One-third cash; balance in 4 equal payments at 2, 3, 4 and 5 years; interest, 6 per cent per annum. The mortgage tax paid by the mortgagee makes the interest about 4 per cent net to the purchaser. A deposit of \$25 will be required in all cases to cover expenses of sale.

C. H. PHILLIPS, Manager,  
West Coast Land Co., San Luis Obispo, Cal.

Send for Catalogue and Map.

# GRANGERS' BUSINESS ASSOCIATION, SHIPPING AND COMMISSION HOUSE.

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Money advanced on Grain in Store at lowest possible rates of interest.  
Full Cargoes of Wheat furnished Shippers at short notice.

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**ELECTRO-MAGNETIC BELT.** A Galvanic Battery, entirely different from all other appliances. It gives an Electric Current with or without acids. Diseases or Weaknesses of male or female speedily and permanently cured. Electric Suspensory for men furnished free of charge. Descriptive circulars, with price list, testimonials, etc., forwarded to any address.

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will be paid for any Grain Fan of same size that can clean and bag as much Grain or Seed in one day as our Patent MONARCH Grain and Seed Separator and Bagger or our Improved Warehouse Mill which we offer cheap. Price List mailed free.

NEWARK MACHINE CO.  
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Are you using Wellington's Improved Egg Food for Poultry? If not, why not? Every Grocer, Druggist and Merchant Sells this Egg Food.



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\$100 Reward to any one who will produce one of equal merit at the same expense.

### It is the Cheapest,

By more than one-half, of any other in the market.

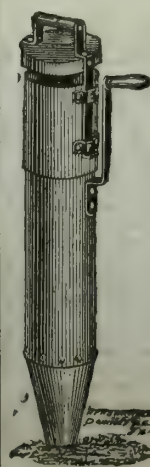
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# FRESNO COUNTY. BRIGGS' SELMA TRACT.

This most desirable tract, comprising 1280 acres of first-class gray ash and sandy loam land (situated one and one-half miles from the fast-growing town of Selma, the second in the county, and two miles from Fowler, both being S. P. R. towns), has been subdivided and will be sold in 20, 40, 60 or 80-acre farms. The distributing ditches are now being constructed, and convenient roads are laid off. The main canal is 60 feet in the bottom.

## THE WATER RIGHTS

Consist of stock in the canals and entitle the owner to one-eighth of 2 feet 6 inches of water, being 2½ times the usual amount supplied to colonies. The owner of the water stock has a pro rata vote in the management of the canal, and the expense per year is about \$3.50 on a 20-acre lot.

A school-house is to be erected on the land this year, and it has two within two miles of it at present. Fresno, Selma, Fowler and Kingsburg are good local markets for produce. Opportunities to labor with or without terms are abundant, and land can be rented for wheat-growing in the neighborhood. The health of this region is perfection, and, in common with the plains generally, is an excellent sanitarium for persons affected with pulmonary and rheumatic complaints.

The best raisins in the world, wines unsurpassed, the finest grapes, the best peaches, apricots, plums, prunes, nectarines, figs and olives, and in fact all the choicest fruits and vegetables of the world are grown in this favored region. Raisin vines three to six years old yield per acre from four to seven tons, and increase to eleven. Wine grapes three to six years old yield from four to eleven tons per acre. Alfalfa is cut from four to six times a year, and yields from one to two tons per acre at each cutting.

Two good cows and 100 hens furnish more than half the living for a family, and can be kept, with a team, on three acres of alfalfa, the growth of which is incredible in this favorable combination of soil and climate.

A comfortable house for a small family can be built for \$150.

The low price, taking into consideration water and transport facilities, should especially recommend this to seekers of homesteads.

Price, \$25 to \$37.50 per acre, on very easy terms to actual settlers.

For further particulars call on or address

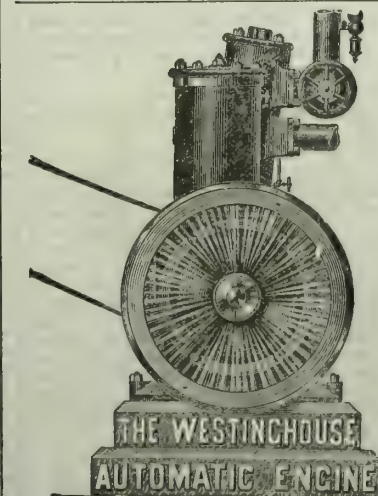
O. J. WOODWARD, FRESNO, CAL.

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## The Scientific Kit of Tools for Farmers, Planters, Stockmen and Machinists.

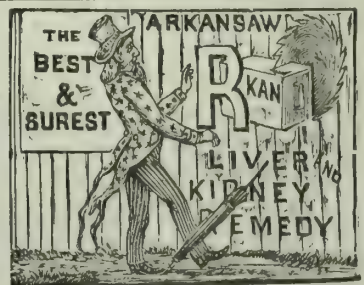


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1,300 Engines now in use.  
40,000 Horse Power now running.  
Sales 2,000 H. P. per month.

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PARKE & LACY,  
Sole Agents for Pacific Coast & Territories  
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UNCLE Sam has found it at last! A sure remedy for Torpid Liver, Sick Headache, Habitual Constipation, Chills and Fever, and all affections of the Kidneys and Liver. This is a New Compound, and one trial will convince you that it is the Cheapest and Best Remedy in the Market for Diseases of Kidneys, Liver and Stomach. If you want a pure vegetable compound, that is positively guaranteed to contain no mercury, go to your Druggist, and get a Bottle of the Arkansaw Liver and Kidney Remedy. Price, \$1.00 per Bottle.

For Sale by all Druggists.

## RUPTURE

RADICALLY CURED BY Dr. Pierce's Great Discovery. Thousands of patients cured at their homes. No experiment! It does the work. DR. PIERCE & SON, 204 Sacramento St., San Francisco, Cal.

NEW Sample Book of beautiful cards, 14 Games, 12 tricks in magic, 430 Album verses. All for a 2c. stamp. STAR CARD CO., Station 16, Ohio.



## S. F. MARKET REPORT

NOTE.—Our quotations are for Wednesday, not Saturday, the date the paper bears.

## Weekly Market Review.

## DOMESTIC PRODUCE, ETC.

SAN FRANCISCO, Sept. 22, 1886.

The past week has shown marked activity in barley and oats, with a deadlock toward the close in wheat. The general market in other lines of produce has been fairly active, with some sharp advances in some and declines in others which are noted under appropriate headings elsewhere. The English wheat market has for several days been reported by semi-public cables depressed, with a decline of 6d per quarter for cargoes given on Monday last, but private cables do not give any decline but on the contrary report that 35s per quarter for cargoes for prompt shipment is still obtainable. The latest semi-public cables received to-day are as follows:

LONDON, Sept. 22.—Cargoes on passage and for shipment—Steadily held; few bids in market. Mark Lane—Small attendance. California wheat off coast—34s. Cargoes just shipped—34s 6d. Cargoes nearly due—34s. English country markets—Quiet, and perhaps rather low. French country markets—Inactive. Wheat and flour in Paris—Quiet. Quantity wheat and flour on passage to Continent—780,000 qrs. Quantity wheat and flour on passage to U. K.—1,925,000 qrs. Liverpool spot market—Firmly held. California wheat—6s 7½d @ 6s 10½d.

## Foreign Review.

LONDON, Sept. 20.—The *Mark Lane Express* in its review of the British grain trade for the past week says: Bright weather during the past week has been of immense service to late crops. Trade is without feature. Small deliveries have kept prices unaltered. Sales of English wheat during the past week were 42,620 quarters at 31s 3d, against 70,244 quarters at 30s 10d during the corresponding period of last year. Flour was dull and prices favored buyers. The market was depressed by large arrivals of low-priced foreign. Barley is arriving slowly. Sellers are asking an advance of 5s per quarter. Foreign wheats are depressed. Corn is somewhat cheaper, but the scarcity of American flat mixed has helped sustain values on spot. Three wheat cargoes were sold and six were withdrawn; there were no arrivals off coast. The market is bare. Trade forward is weaker. At today's market wheat was steady; market slow; continued fine weather prevents activity. Flour was very quiet. Prices of foreign corn were in buyers' favor. American mixed was very scarce. Oats were in large supply, and trade was dragging.

## London Wool Market.

LONDON, Sept. 18.—Following is a detailed statement of the wool sales to-day; Victoria—2200 bales, scoured, 10d @ 1s 10½d; do locks and pieces, 8d @ 1s 4d; greasy, 8d @ 1s 3½d; do locks and pieces, 6½ @ 9½d. New South Wales—2300 bales, scoured, 11½d @ 1s 10½d; do locks and pieces, 11d @ 1s 8d; greasy, 7d @ 1s; do locks and pieces, 7 @ 9½d. South Australia—500 bales, scoured, 15 @ 1s 9d; do locks and pieces, 11d @ 1s 11½d; greasy, 7½ @ 11d; do locks and pieces, 4 @ 7d. Queensland—500 bales, scoured, 11d @ 1s 5½d; do locks and pieces, 9d @ 1s 6½d; greasy, 8½ @ 10d. Tasmanian—200 bales, scoured, 1s 2d @ 1s 8d; greasy, 9d @ 1s 2d; do locks and pieces, 6 @ 8d. New Zealand—4200 bales, scoured, 9½d @ 1s 1½d; do locks and pieces, 9d @ 1s 7d; greasy, 7½d @ 1s 1½d; do locks and pieces, 4½d @ 9½d. Cape of Good Hope and Natal—2800 bales, scoured, 10½d @ 1s 7d; greasy, 7 @ 10½d; fleece, 11d @ 1s 1½d; snow-white, 1s @ 1s 10d. There was spirited bidding at the wool sales to-day, and prices were maintained. The present series will close on October 2d.

## Eastern Wool Markets.

NEW YORK, Sept. 19.—Reports in a majority of cases tend to create an impression of steadily gaining strength in the general market. Much of the confidence is based on cheerful accounts received from abroad since the London sales commenced, and the belief that many mills are scantily supplied with stock. In prices it is difficult to locate any general decided change, though some business has taken place in fleeces at a slightly higher figure and Australians show somewhat better in a few cases. Among the sales were 100 bales of spring California at 22 @ 23 cents; 80 bales spring California at 21 @ 23 cents; 5000 pounds Montana at 30 cents. In the Philadelphia market there has been no excitement and no quotable advance in prices, but holders have stood out for asking rates with more confidence, and buyers finding themselves unable to cover their wants in any better terms have submitted reluctantly to the views of sellers. Among the sales were 55,000 pounds scoured California at 60 cents; 2000 pounds scoured California at 61 cents; 1000 pounds Eastern Oregon fine at 24 cents; 50,000 pounds Territory improved at 23 cents, and 135,000 pounds California grease at 19½ cents.

PHILADELPHIA, Sept. 21.—Wool is firm and in good demand for most grades. New York, Michigan, Indiana and Western, medium, 36½ @ 37½c per lb; coarse, 36½ @ 37½c; medium washed combing and delaine, 39 @ 40c.

BOSTON, Sept. 21.—Wool is active and firm. Ohio XX, 35½ @ 36c per lb; Ohio X, 33½c; fine unwashed wool, 19 @ 25c; medium do, 25 @ 30c; Michigan X, 32 @ 33½c.

## New York Hop Market.

NEW YORK, Sept. 18.—Dealers who have a fair stock manifest no anxiety to sell any line of goods that possess merit at the price now bid, and aside from occasional small sales of medium grade to brewers, there is little if any business, except in more or less faulty stock that may be let go at almost any figure. The new crop of Pacific remains stationary at 30 @ 31 cents on the coast, and is not offered with any urgency now that reports of a smaller yield than was expected in some quarters are confirmed. The best State hops, crop 1885, are quoted at 26 @ 27c;

good and prime, 22 @ 24c; inferior to common, 15 @ 18c; Pacific Coast, 15 @ 22c.

## New York Wheat Market.

NEW YORK, Sept. 18.—Wheat—Owing to free selling and unfavorable reports from foreign markets, prices have declined steadily since Monday's opening. There has been only a moderate demand for export and milling. The market ended heavy, with losses of three-eighths of a cent for all months except January, which is down one quarter of a cent. September 83, October 85½, November 86½, December 88½, January 90, May 95½ cents.

## California Fruit at the East.

(Telegram to the Fruit Union.)

CHICAGO, Sept. 21.—The rain this morning interfered a good deal with trade, but there has been quite a brisk trade of late. Fruit arriving in good order rules steady, but there is considerable soft stock arriving, especially grapes, which must be sold low. Crawford peaches, 2 to 2.25; plums, 20 lbs, 90c to \$1; Bartlett's, 40 lbs green \$3 to 3.50; Beurre Hardy, 2 to 2.25; Burre Clairgeau, 2 to 2.25; Winter Nels, 2.50 to 2.75; Glout Moreau, 2.25 to 2.50; Duchess, 2; White Doyenne, 2 to 2.25; Muscats when good, 40 lbs, 2.75 to 3; Tokay when good, 40 lbs, 2.50 to 3; grapes in poor order, 75c to \$1.75.

## California Products at the East.

NEW YORK, Sept. 18.—Raisins—The new crop of California raisins is offering here for October shipment at 7½ cents for off-stalk Valencia's, at 8 cents for Sultana, \$1.70 per box for two-crown loose Muscatel, \$1.80 for three-crown and \$2 for London layers.

Seeds—Sales reported of 450 bags California yellow mustard, September shipment, on private terms; 100 bags to arrive, now due, at 4½c; 525 bags spot, 6c.

Canned Goods—Peaches are exceedingly dull, and the absence of any important demand exerts an easier feeling, though prices are not quotably lower. Vegetables are generally quiet, though corn is in fair demand, with prospects of a light pick in all sections, and consequently a firm market. California canned peaches, 2.25; pears, 2.25 @ 2.50; plums, 2; grapes, 2; apricots, 2.10 @ 2.25; Columbia River salmon, \$1.55 @ 1.60.

## Honey—Extracted, 5c.

## Local Markets.

BAGS—There is nothing new to report, for the season's demand is virtually over. Standard Calcutta wheat bags are quoted at 6 @ 6½ cts.

BARLEY—The market has ruled exceedingly strong, notwithstanding heavy receipts each day. Choice bright feed is wanted, and for which good figures are obtainable. The bulk of receipts are off color, but even this defect does not prevent it from going into consumption. Call sales to-day were, at morning session: Buyer season—800 tons, \$1.05; 200, \$1.04½. Buyer 1886—700 tons, 99½c; 100, 99½c. Seller season—200 tons, 92½c. Seller 1886—700 tons, 93½c. No. 1 Brewing, buyer season—100 tons, \$1.26½ cts. Buyer season—1100 tons, \$1.04½; 100, \$1.04½. Seller season—100 tons, 92½c. No. 1 Brewing, buyer season—100 tons, \$1.27 cts.

BEANS—All varieties of new are coming to hand, but they meet a ready sale, as yet, at unchanged prices. Old are dull and neglected, with buyers asking concessions.

CORN—The market is steady, with a strong undertone for both Californian and Western.

DAIRY PRODUCE—Cheese is very strong, with an advance obtainable. Gilt-edged butter in rolls is in demand, with some well-known brands fetching an advance; the general tone is stronger. Eggs are higher for all kinds, under light receipts.

FEED—Ground feed is unchanged; but hay is stronger under lighter receipts and a good consumptive demand. The following is the range for hay: Barley, \$6 @ 9; oats, \$8 @ 11; wheat, \$9 @ 13, with something extra selling slightly higher.

## FRUIT—Full particulars elsewhere.

DRIED FRUITS—Receipts continue light, not enough received so far as to allow of correct quotations being given. The quality of that received is unusually good.

HOPS—The market is quiet, but buyers are anxious to secure all desirable parcels. We note the sale of a round parcel to-day for shipping to the East at 32½; the quality was choice, not gilt-edged.

HONEY—The market is lightly stocked, causing a strong market to obtain. Buyers, though anxious for stock, do not advance bids, preferring sellers to name the price at which they will sell.

OATS—The market has a steadier tone, with choice scarce and in request, but buyers are slow in bidding up.

WHEAT—In the sample market there is a deadlock between buyers and sellers, with a difference of fully five cents between them, consequently few sales are reported, and they are said to have been made on a split. The market to-day closed stronger, with sellers of actual wheat out of the market. Transactions on call to-day were as follows: Morning session: Buyer season—100 tons, \$1.41; 100, \$1.41½; 600, \$1.41½; 1300, \$1.41½. Buyer 1886—900 tons, \$1.37; 1700, \$1.37½; 300, \$1.37½. Seller 1886—800 tons, \$1.33½ cts. Afternoon session: Buyer season—300 tons, \$1.41½; 100, \$1.41½; 100, \$1.41½; 200, \$1.41½; 200, \$1.41½; 1300, \$1.41½. Buyer 1886—300 tons, \$1.37½; 100, \$1.37½; 1300, \$1.37; 200, \$1.37½. Seller 1886—100 tons, \$1.33½; 100, \$1.33½; 400, \$1.33 cts.

## Complimentary Samples.

Persons receiving this paper marked are requested to examine its contents, terms of subscription, and give it their own patronage, and, as far as practicable, aid in circulating the journal, and making its value more widely known to others, and extending its influence in the cause it faithfully serves. Subscription rate, \$3 a year. Extra copies mailed for 10 cents, if ordered soon enough. If already a subscriber please show the paper to others.

[COMMUNICATED.]

## Market Information.

## Cereals.

On Thursday, Friday and Saturday several thousand tons of shipping wheat were sold on the basis of \$1.37½ to \$1.38½ for good to choice, while two large, straight parcels fetched \$1.40 alongside of the vessel. Some of the sales made were of wheat that had been delivered on seller's contracts. On Monday buyers began to bid lower, which was followed by still lower bids on Tuesday, not bidding above \$1.33½ for good. Holders who had been offering on the market withdrew, and no sales were made at the lower bids made either on Monday or Tuesday, but some sales are reported to have been made on a split, or at \$1.35 to \$1.36½ from fair to good. Buyers appear to have the daily press, excepting the *Daily Report* in this city, and also those in Sacramento, at their mercy, or at least their quotations are below what could be bought at on the day quoted.

The No. 1 standard of the Produce Exchange for this season's wheat is very poor and does not give satisfaction, consequently the Farmers' Co-operative Union and others have standards of their own, and do not sell by any other.

To show how the daily press, excepting the *Daily Report*, help the buyers, it is only necessary to state that although the English wheat market for California wheat for prompt shipment has only fallen 6d per quarter, about 2½ cts per cental, buyers in this market succeeded in getting the papers to quote lower each day, until yesterday and to-day they are from 5 to 7½ cts per cental lower than on Tuesday of last week, and this, too, in the face of a decline in which charters of fully 2½ cts per cental, equal to the drop in the price of wheat cargoes abroad; so that if wheat was worth \$1.37½ to \$1.40 last week, it is worth the same now, owing to the decline in ship charters.

The exports of flour from this port from July 1st to date are over 10 per cent more than the like time last year, while the export of wheat is three times or 200 per cent more. At this rate there will be very little wheat in the State that will be available for shipping by the end of the present year.

Barley has held to strong prices throughout the week, with the bulk of the feed grades, dark coast. Good to choice feed is scarce and wanted. A cargo of over 2000 short tons of Chevalier barley destined for Liverpool is in the vessel, which will sail soon. Brewing barley is strongly held.

Oats have been easy and in buyers' favor throughout the week. The demand is good, but receipts have been and are still quite heavy.

In rye a fair business is reported to have been done the past week on the basis of current quotations.

There is more inquiry for buckwheat, but as yet sales are light.

Corn has ruled fairly steady with a stronger undertone, but at no higher prices.

## Dairy Product.

Butter if gilt-edged, good color and hard, sells readily at from 32½ @ 35 cts, but poor grades are still hard to place, as the trade is running largely on pickled, owing to its relative cheapness and good quality.

Eggs have worked into better shape with another advance established. The stock of Eastern is lighter, with receipts light.

Cheese holds to strong prices, under a good demand and only moderate receipts, together with an improved market at the East.

## Feedstuff.

Early in the season the press took the position that the crop of choice to gilt-edged hay was light and consequently would fetch high prices; this was generally denied by dealers, but now they admit it is correct. Sales of these qualities sold the past week at from \$12.25 to \$13.50 per ton afloat. All other qualities are stronger under lighter receipts and a good demand.

Bran and middlings are in good demand, but owing to heavy receipts they are weak and favor buyers. Oatmeal, feed meal, rolled and ground barley, etc., are steady.

Straw is selling fairly well at from 30 to 50 cts per bale.

## Live-stock.

Beef cattle weakened off slightly, but recovered again. The consumption is in such an unsettled condition that retail dealers do not carry heavy stocks; some days they do not sell within 50 per cent of the sales of other days. Mutton sheep are offering in excess of the demand, yet prices are fairly well maintained. Lambs and calves are scarcer and if choice will fetch an advance on quotations. In hogs there is nothing doing, except for the block, and the demand for this is light. Packers are not in the market yet, but are expected to enter soon. In horses there is nothing new to report. The demand for all kinds is slacker, with more difficulty reported to effect sales. There is some inquiry for milk cows, but not of pronounced character yet, owing to the scarcity of feed.

## Vegetables.

The potato crop, taken as a whole, of this State this year is not up to an average, for the large proportion received here are more or less wormy and otherwise defective. The inferior quality of so large a proportion creates a strong and active demand for what is called gilt-edged, consequently the latter fetch very high prices. The market the past week has ruled exceedingly strong, with gradual advances up to Monday, since when it has ruled steady and strong at the higher prices.

Sweet potatoes have barely held their own, with only gilt-edged fetching 1 ct in boxes. Receipts have been excessive, necessitating concessions to close up consignments.

Onions have ruled steady with a general strong tone, which allowed at times of a slight advance on current quotations to be obtained.

Tomatoes have been coming in very freely, causing prices to drop to canners' views, who cleaned up the market from day to day, at 20 to 30 cts—average about 25 cts per box, but the trade paid an advance.

Cucumbers, green peppers, egg plants, cabbages and root vegetables have shown, the past week, only slight fluctuations.

Green okra is scarce and choice will fetch full prices. Dry okra is in heavier stock, causing lower prices to rule.

## Fruits.

General demoralization has ruled supreme the past week in the table-grape market, owing to very heavy receipts and no increased demand. Even wine grapes have been depressed under heavier receipts, which have averaged fully 6000 boxes per day. Canners paid from \$20 to \$30 a ton for Muscats and other canning grapes. Two or three days prices were exceedingly difficult to report correctly. As soon as signs of decay or rot were seen, buyers would offer almost nothing, getting some consignments at 15 cts per box and even 8 cts for something about one-quarter rotten. Wine grapes came in so freely that many who had cleaned up table grapes for making into wine would not buy them, which aided in the general demoralization.

Peaches have ruled weak throughout the week, with very choice sold to canners at 75 cts, although the trade took the same kind in a small way at \$1. The demand is light.

Figs have ruled steady, with choice moved off quite freely.

Common pears have been well cleaned up at the best prices obtainable. A consignment which began to rot was sold at 9 cts, but the same variety that was sound sold at from 20 cts to 50 cts per box. Choice pears continue scarce and fetch good prices. Sales were made up to \$2 a box for something extra, with even a higher figure for choice Bartlett's.

Plums and prunes are in lighter receipt, yet prices are no better, but if anything, a shade weaker.

Apples are in better demand, with something extra wanted at full prices. The stock of poorer qualities has been greatly reduced by sales to cider-men and also to peddlers, which admits of better prices being obtained for all kinds. Receipts of Oregon are, as yet, light.

Raspberries are about out of the market. Strawberries and also blackberries have ruled very strong throughout the week under lighter receipts and a good demand.

Cantaloupes have ruled weak throughout the week, as have watermelons, owing to cool weather, with only a moderate demand and free receipts.

## Wool.

The market continues excited, with buyers competing for all desirable clips received. Some Northern fall sold at over 23 cts per lb, but the wool was free from burrs or seeds and was fairly long. It is said that one clip fetched 25 cts per lb. The market is strong and active for all grades, with an advance established over last week. The higher prices here are due to higher prices at the East and also abroad.

The following are to-day's meat prices: Beef—Stall-fed, 7 @ 7½c per lb; grass-fed, extra, 6 @ 6½c; first quality, 5½ @ 6c; second, 5 @ 5½c; third, 4 @ 4½c. Calves, small, 9 @ 10c; larger, 7 @ 8c per lb. Mutton—Ewes, 4½c; wethers 5c. Lamb—Spring, 6½ @ 7c per lb. Pork—Live hogs on foot, 3½ @ 4c for grain and dairy feed; 2½ @ 2¾c for soft; dressed, 6c for hard, and 5c for soft. Grass-fed stock sold on foot, gross weight, at one-half the price they fetch dressed; stall-fed, on foot, fetch one-third less than they sell at dressed.

## Miscellaneous.

The tonnage movement compares with last year at this date as follows:

	1886.	1885.
On the way.....	284,321	228,806
In port, disengaged.....	80,603	99,618
In port, engaged.....	54,137	24,602
Totals.....	429,061	353,026

The above gives a carrying capacity as follows: 1886, 686,497 short tons; 1885, 564,941 short tons; increase over last year, 121,556.

Tonnage on the way to Portland, Oregon, 49,012 tons; same time in 1885, 36,223.

The differences between wholesale and retail dealers in poultry have been arranged, and the market moves smoothly. Good fowls continue scarce and in demand at high figures, something extra fetching an advance on top quotations, but poor stock is in oversupply. Turkeys are in excess of the demand.

Charters to Great Britain are falling. The latest wheat charter to Liverpool was at 26s per long ton for wooden vessel, and 3½ for iron vessel to U. K. for orders.

Walnuts and almonds of this season's crop are expected to hand, but not in sufficient quantity to establish prices.

San Francisco, Sept. 22, 1886.

## Fruits and Vegetables.

Extra choice in good packages fetch an advance on top quotations, while very poor grades sell less than the lower quotations.

FRUIT MARKET.		WEDNESDAY, Sept. 22, 1886.	
Apples, bx com.	35 @ 40	Apricots.....	9 @ 10
do red choice.	1 00 @ 1 50	do evaporated.	2 @ 20
Bananas, bunch.	1 00 @ 2 50	Blackberries.....	2 @ 20
Blackberries, ch.	3 @ 5 00	do.....	2 @ 20
Cantaloupes, bx.	25 @ 30	Cherries.....	2 @ 20
Cherries blk.....	— @ —	do.....	2 @ 20
do Royal Ann.....	— @ —	do.....	2 @ 20
Cherry plums.....	— @ —	do.....	2 @ 20
Crabapples.....	— @ —	do.....	2 @ 20
Cranberries.....	7 00 @ 10 00	do.....	2 @ 20
Currants, bx.....	— @ —	do.....	2 @ 20
Figs, bx.....	35 @ 50	do.....	2 @ 20
Grapes.....	30 @ 40	do.....	2 @ 20
do Rose Peru.....	30 @ 50	do.....	2 @ 20
do Muscat.....	25 @ 30	do.....	2 @ 20
do Tokays.....	40 @ 75	do.....	2 @ 20
Wine, ton.....	15 00 @ 27 50	do.....	2 @ 20
Limes, Mex.....	6 00 @ 9 00	do.....	2 @ 20
do Cal box.....	2 50 @ 4 50	do.....	2 @ 20
Lemons, Cal, bx	8 00 @ 10 50	do.....	2 @ 20
do Sicily, box.....	— @ —	do.....	2 @ 20
do Australian.....	— @ —	do.....	2 @ 20
Nectarines, box.....	— @ —	do.....	2 @ 20
Oranges, Cal, bx	1 50 @ 2 00	do.....	2 @ 20
do Tahiti, bx.....	3 35 @ 3 50	do.....	2 @ 20
do Mexican, M.....	— @ —	do.....	2 @ 20
do Panama.....	— @ —	do.....	2 @ 20
Peaches, bx.....	65 @ 75	do.....	2 @ 20
do basket.....	— @ —	do.....	2 @ 20
Crawford, bx.....	— @ —	do.....	2 @ 20
do basket.....	— @ —	do.....	2 @ 20
do choice.....	75 @ 1 00	do.....	2 @ 20
Pears bx.....	30 @ 75	do.....	2 @ 20
do basket.....	— @ —	do.....	2 @ 20
do Bartlett, bx	1 00 @ 2 25	do.....	2 @ 20
Persimmons.....	— @ —	do.....	2 @ 20
Pineapples, doz.	4 00 @ 5 00	do.....	2 @ 20
Pomegranates, b.....	— @ —	do.....	2 @ 20
Plums b.....	— @ —	do.....	2 @ 20
Prunes bx.....	1 @ 2	do.....	2 @ 20
do Egg.....	40 @ 50	do.....	2 @ 20
Quinces bx.....	— @ —	do.....	2 @ 20
Raspberries, ch.....	4 00 @ 6 00	do.....	2 @ 20
Strawberries ch.	4 00 @ 6 00	do.....	2 @ 20
Watermelons 10	2 50 @ 5 00	do.....	2 @ 20
DRIED FRUIT.			
Apples, dried, b	2 @ 3	do.....	2 @ 20
do evaporated.....	8 @ 8	do.....	2 @ 20
do quartered.....	1 @ 1	do.....	2 @ 20
Apricots, dried.....	5 00 @ 10 00	do.....	2 @ 20
do Summer.....	25 @ 40	do.....	2 @ 20
do.....	20 @ 30	do.....	2 @ 20
do.....	2 @ 3	do.....	2 @ 20
do.....	25 @ 1 50	do.....	2 @ 20
do.....	75 @ 1 00	do.....	2 @ 20



Domestic Produce.

Table with multiple columns listing various domestic products such as Beans, Peas, Potatoes, Corn, and other agricultural goods with their respective prices.

List of U. S. Patents for Pacific Coast Inventors.

Table listing U.S. patents for Pacific Coast inventors, including details like patent number, inventor name, and the nature of the invention.

Irrigation Law. Now that the irrigation question is so prominent in this State, it is desirable that all who are viewing the subject as irrigators, legislators, lawyers or for general information, should know the legal provisions for irrigation in other States.

Don't Fail to Write. Should this paper be received by any subscriber who does not want it, or beyond the time he intends to pay for it, let him not fail to write us direct to stop it.

California Inventors. Should consult DEWEY & CO. AMERICAN AND FOREIGN PATENT SOLICITORS, for obtaining Patents and Caveats. Established in 1860.

TAPE WORM. REMOVED alive in two hours, with head complete, or no charges. More than 1000 Tape Worms removed at my office.

WAKELEE'S

THE BEST IS THE CHEAPEST.



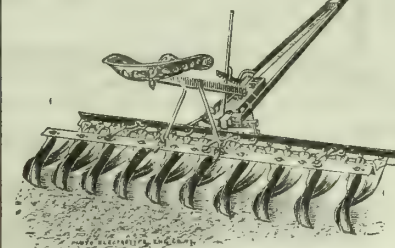
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SQUIRREL AND GOPHER EXTERMINATOR!

IN 1-LB. AND 5-LB. CANS.

FARMERS, READ THIS! IT WILL PAY YOU!

THE "ACME" PULVERIZING HARROW.



CRUSHES THE LUMPS, LEVELS THE GROUND, AND PULVERIZES THE SOIL IN ONE OPERATION.

Prepares Soil for Grain in a more thorough manner and with less expense than any other tool.

Just the Thing for Orchards and Vineyards.

Read what Six of the Leading Farmers in Contra Costa County Say of the "ACME" After Trying It:

BYRON, CONTRA COSTA CO., CAL., Feb. 4, 1884.

We, the undersigned farmers in the vicinity of Byron, have given the Acme Pulverizing Harrow a thorough trial. We have seen a marked improvement in the appearance of the wheat fields this year, and an increased yield in the wheat crop last year upon land cultivated with the Acme Harrow.

All Sizes, Cutting 5, 6, 7 1/2, 10, 12 and 15 feet.

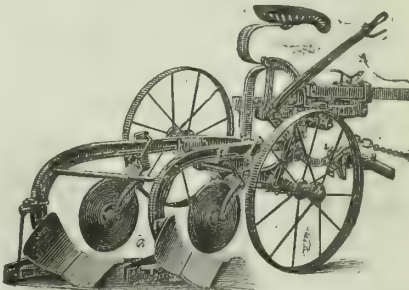
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CONSTRUCTED OF STEEL THROUGHOUT.

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Weight of Gang with two 12-inch bottoms only 550 lbs.; 14-inch Sulky, 400 lbs.

The Lightest and Strongest Plows in the Market. Prices same as for Iron Frame Plows.



I Carry in Stock the J. I. Case Wood and Steel Beam Walking Plows with Slip-Shares (all sizes); the J. I. Case "Racine" Chilled Plow (all sizes); Belle City Prairie Breakers, 4 and 5 tooth; Riding and Walking Cultivators.

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But they will be Astonishingly Low.

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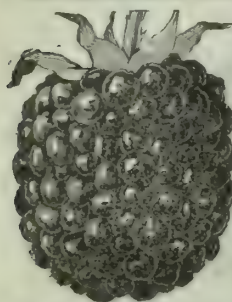
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1886. 1887.

## Mission Rock Grain Dock and Warehouses, SAN FRANCISCO.

Regular Warehouse for S. F. Produce Exchange Call Board.

Storage Capacity for 75,000 Tons of Grain.

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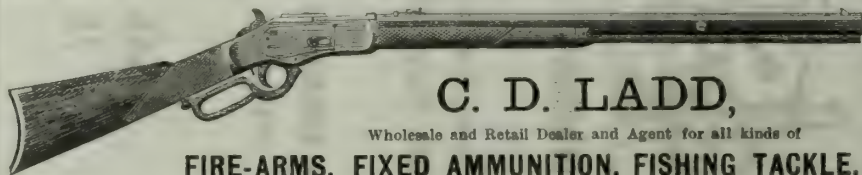
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Freight paid, fire insurance and loans effected, and proceeds forwarded free of commissions. Money advanced at lowest rates on grain in warehouse, interest payable at end of loan. Storage season, ending June 1, 1887, at reduced rates. On all wheat shipped to Mission Rock by barge, freight rates guaranteed the same as to Port Costa. All applications for storage or other business addressed to **CHAS. H. SINCLAIR**, Superintendent.

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GREEN AND DRIED FRUITS,

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Hose; capacity, 8 gallons; also plain nozzle, galvanized  
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**FROM 5 TO 20 POUNDS OF THIS POWDER** will always bring any sized stump or tree with roots clear out of the ground. The **EXPENSE IS LESS THAN ONE-HALF** the cost of grubbing. In most instances, Giant Powder, or any other "High Explosive," is too quick, and ordinary Blasting Powder not strong enough.

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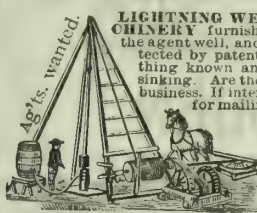
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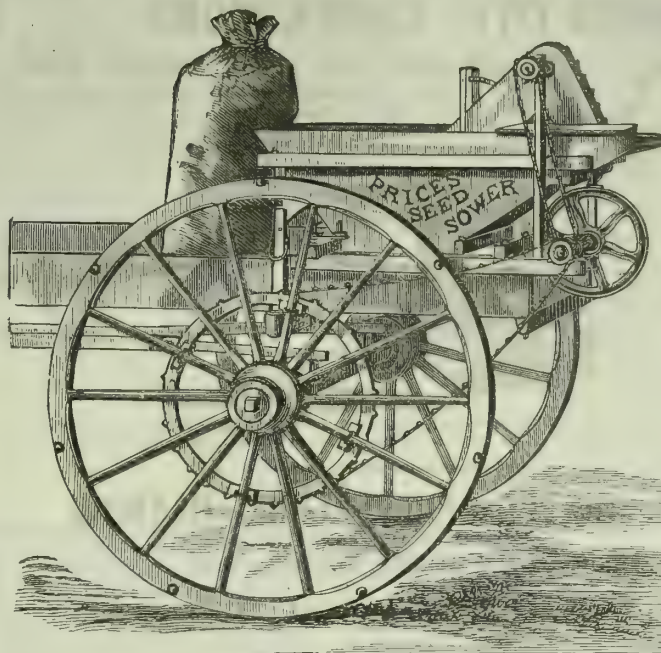


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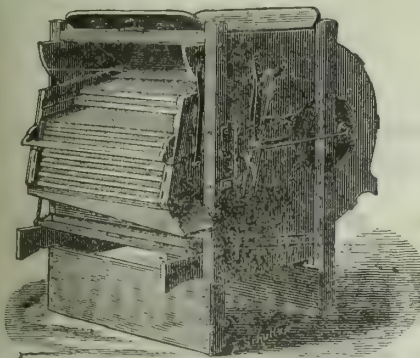


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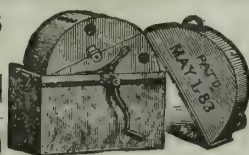
OUR IMPROVED HAND SEPARATOR is a double combined machine, possesses two shoes (instead of one, as in machines of other manufactures), nine riddles and a large independent screen. Each shoe is equal in power and capability to the one in any other mill, and by the operation of the two, double efficiency is secured. Our 25-inch mill will clean from 400 to 600 bushels of seed grain per day, according to the condition of the grain, and we guarantee that all barley, oats, or other foul seed will be thoroughly removed with complete satisfaction.

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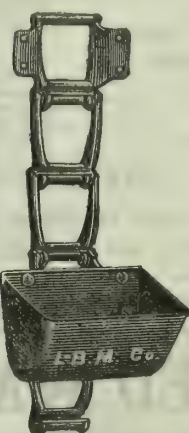
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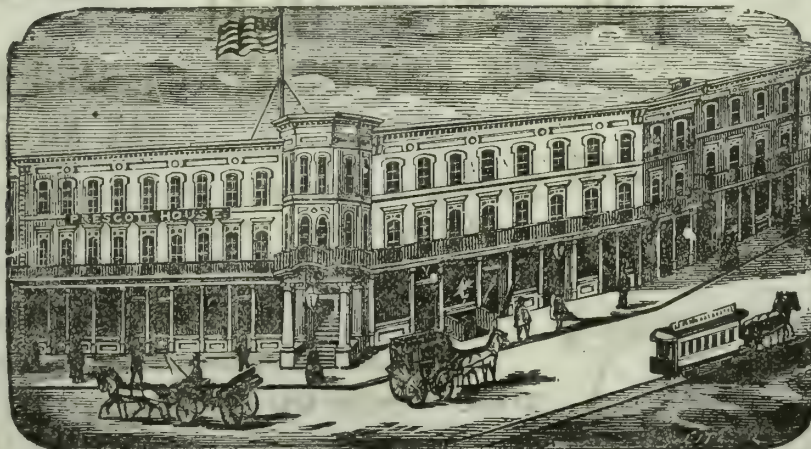
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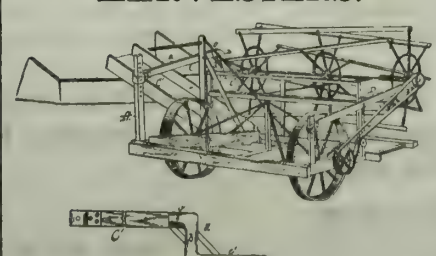
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—FOR—  
**HARVESTERS.**



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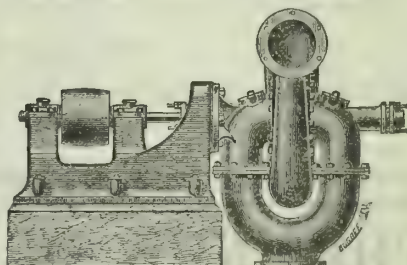
All those desiring the Angular Supporting Arms or in formation about them, will be furnished therewith by addressing

**JOHN B. GEMMILL,**  
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### IRRIGATING PUMPS.

WE ALSO CARRY IN STOCK THE LARGEST LINE OF

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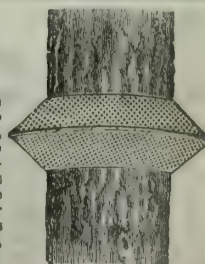
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Will destroy every Codlin Moth Larva that crawls up or down the tree. The best, cheapest and simplest trap now invented. No orchardist can afford to do without this trap. It is a sure cure for the codlin moth. For further information, address **G. W. THISSELL, Winters, Yolo Co., Cal.**



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### WOOD BEAM SLIP SHARE STUBBLE PLOWS.

Hardened Moldboards, Shares and Landsides.

No. 22, Single Shin Steel Tapering Landside, 10-inch cut.....\$14 25  
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### STUBBLE and SOD PLOW.

Sizes, 13 & 14 Inches.

These Plows, as the name indicates, are intended to do old ground plowing. They are a medium between the more ho'd or abrupt old ground plow and the long, slow turning breaker. They work nicely in old ground, being preferred by some to the regular Stubble Plow, and turn tame sod, such as Blue Grass, Timothy, or Clover, admirably. They are numbered 19 and 21. We make with them steel beam, also. The numbers of the steel beam plows of this style are 519 and 521.

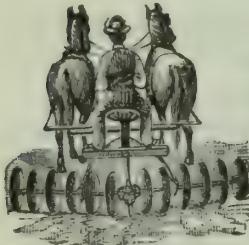
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SUPERIOR TO ALL OTHERS, BECAUSE IT IS

**Simple, Durable and Flexible.**

THOUSANDS IN USE GIVING ENTIRE SATISFACTION.

### POINTS OF SUPERIORITY:



It will do better work.  
It is much easier for the team.  
It is easier to manage.  
It has a lever to change the angle.  
It is not heavy on the horses' necks.  
It has no side-draft.  
It leaves no ridge at the center.  
It has a wrought iron frame.  
Its chilled bearings cause it to wear longer and work easier.  
It is easy to ride.  
It conforms to uneven surfaces perfectly.  
It can be made rigid if desired. It has self-feeding oil cups. Best Disc Harrow in the world.

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Agents for David Bradley Manufacturing Co. A full stock of Plows, Harrows and Cultivators on hand; also a full line of extras. Agents for the celebrated Milburn Hollow Iron Axle Wagon, McCormick Mowers, Reapers and Twine Binders, and Randolph Headers.

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**THE "NEW DEAL."** LIGHT WEIGHT, LIGHT DRAFT,  
LIGHT WORK for man and best.  
**FOR VINEYARD AND ORCHARD PLOWING THE "NEW DEAL" HAS NO EQUAL.**

### THE NEW DEAL GANG PLOW



Having no Tongue, and the team being hitched close to the work, it is so constructed that it can be run closer to the trees and vines than an ordinary single plow.

Send for Descriptive Circular and Testimonials.

For Lightness of Draft, Ease of Management, Strength, Durability and Quality of Work,

**The "NEW DEAL" is without a Parallel.**

3 Gang, 8 Inch.....\$75 00	4 Gang, 8 Inch.....\$80 00
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All with Extra Points.

## KEYSTONE 2-LEVER DISC HARROW.

THE KEYSTONE DISC HARROW has met with wonderful favor since its introduction. It is made with two levers to set the cutters at different angles while the machine is in motion, and to relieve it from clogging by throwing either gang back. It is the only Harrow made with flexible frame so the cutters can adapt themselves to the uneven surface of the ground. The discs are made of steel. The boxes are chilled-hardened to prevent cutting on the axle. It has revolving scrapers, which not only keep themselves clean, but clean the discs.

We have had a Special Size made for Orchard and Vineyard Work (viz., 5 feet), which suits the purpose for which it is intended better than any implement of its kind in the market.

### PRICES:

5 FEET, 16 INCH DISCS.....	EACH, \$55 00
6 FEET, 16 INCH DISCS.....	60 00
8 FEET, 16 INCH DISCS.....	75 00

SEND FOR SPECIAL CIRCULAR.



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## IMPROVED CHAMPION CIDER MILLS AND PRESSES.

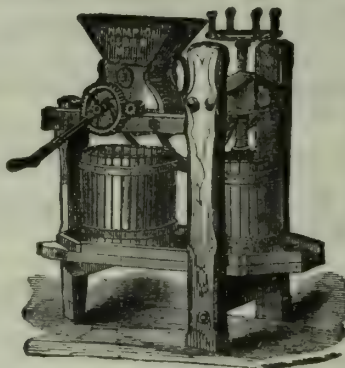
Junior, \$25. Medium, \$30. Senior, \$40.  
MOST EASILY WORKED.

Built Stronger and will Last Longer  
Than any other Cider Mill manufactured.

THEY HAVE AN ADJUSTABLE THROAT,  
Which adapts them to all kinds and sizes of fruit.

The Grinding Rollers are Adjustable.  
They Grind Finer than Other Mills.

They are Light, Substantial and Handsomely  
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THE MILBURN WAGON.

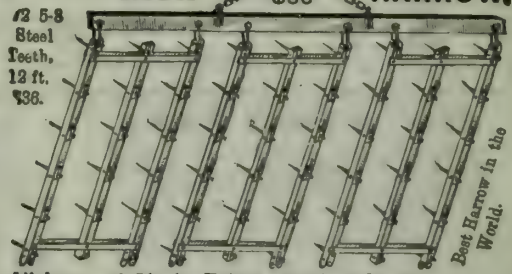


### MILBURN HOLLOW IRON AXLE WAGON.

Lightest, Strongest, Cheapest  
Wagon in the World.

Wheels run through boiling oil. Best and  
strongest wagon in the world. Every one  
guaranteed. BUY NO OTHER.

### TRUMAN'S IRON HARROW.



All Iron and Steel. Takes any-sized Teeth.

All Iron and Steel. Each Harrow will take any  
sized tooth from 1/2 to 1 inch.

The BEST Harrow in the World for the Farmer  
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### THE BEST SELLING HARROW.

A very light-weight Harrow. A thorough pulverizing Harrow,  
Each section independent. The Merchant, by keeping 10 sections,  
can instantly furnish a Harrow of 30 to 180 teeth, for two to ten  
horses, and any sized teeth. A GREAT CONVENIENCE.  
Send for Prices. Prices Greatly Reduced.



# PACIFIC RURAL PRESS

TWENTY-PAGE EDITION.

Vol. XXXII.—No. 14.]

SAN FRANCISCO, SATURDAY, OCTOBER 2, 1886.

{ \$3 a Year, in Advance  
SINGLE COPIES, 10 CTS.

## The Discovery of the Pacific.

The RURAL goes to press on the anniversary of the discovery of the Pacific ocean. On September 29, 1513, Vasco de Nunez de Balboa was the first European to cast eye upon the vast expanse of the Pacific, and in his fervor to take possession rushed with uplifted sword quite into the water and claimed the new ocean in the name of his sovereign, Ferdinand of Spain. In the engraving on this page the artist well portrays the incident which is of especial importance to us, as it marks the beginning of the modern history of the Pacific Coast. Balboa should receive a mead of honor, especially from those whose lives are cast upon the shore of the ocean which he discovered.

Balboa was by birth a hidalgo, or gentleman, but in extremely reduced circumstances. He seems to have been an idle, dissolute youth, but great ideas were in the air. It was an age of romance, adventure and discovery. He drifted with a company of adventurers on a voyage to the western seas, and appears to have settled in San Domingo as a cultivator of the soil. Fortune failed to smile on him, and to escape his creditors he concluded to join an expedition to Darien in 1510, commanded by Francisco de Enciso. To escape their vigilance he was smuggled on board ship, concealed in a cask. Bitter quarrels soon broke out among the adventurers; Enciso was finally deposed and the command was given to Balboa. For taking part in this insurrection he was summoned by the King to Spain. Ruin, and perhaps death, awaited him, and he resolved to placate the King by the brilliancy of his exploits. He had heard that a great ocean lay on the other side of the mountains, and of a wondrous land of gold, called Peru. On the 1st of September, 1513, with 190 men, he started on his perilous journey across the isthmus, and on the 25th of September, 1513, reached the foot of a mountain which had for ages gazed on the mysterious western sea. Behind him was ignominy—perhaps chains and death; before him, immortality and fame. Vasco Nunez was early astir in the morning preparing for the ascent. When near the summit he ordered a halt and ad-



BALBOA TAKING POSSESSION OF THE PACIFIC OCEAN FOR THE KING OF SPAIN.

vanced alone. In the language of H. H. Bancroft, "His should be the first European eye to behold what there was to behold, and that without peradventure. With throbbing heart he mounted the topmost eminence which crowned these sea-dividing hills. Then, as in the lifting of a veil, a scene of primeval splendor burst on his enraptured gaze, such as might fill with joy an archangel sent to explore a new creation. There it lay—that boundless, unknown sea—spread out before him, as far as the eye could reach, in calm, majestic beauty, glittering like crystal in the morning sun." It was three days after that vision before he and his companions reached the border of the sea. Vasco Nunez, armed and armored cap-a-pie, drew his sword and taking from the hand of an attendant a banner, on one side of which were pictured the virgin and child and on the other the arms of Castile and Leon, marched into the water and with loud voice took possession of the ocean in the name of Don Fernando and Dona Juana, Sovereigns of Castile, Leon and Aragon. The next we hear of him he is floating with two brigantines on the sea he had found in search of the Pearl Islands. Visions of a Montezuma empire or of an Inca palace of gold danced before him, but he was not long to enjoy his glory and bright dreams. The cruel, jealous eyes of Pedrarias, Governor of Panama, were upon him, and on the pretended suspicion that Vasco Nunez meditated treason, had him arrested by craft, led away to prison at Acla, and without even the forms of law tried and condemned to be beheaded. Four of his friends were to suffer with him. It was a dismal day at Acla, the chroniclers tell us, when these five brave men were led out to die as victims of a ferocious, savage-hearted old man. Heavily chained, and surrounded by a strong guard, first came Vasco Nunez. Before the prisoner walked the town-crier, who, as he approached the scaffold, exclaimed in a loud voice, "Behold a man disloyal to his king; let death be the doom of traitors." "Tis false," cried Vasco Nunez; "never have I been disloyal or untrue. To infamous treachery and wrong I yield my life, and not to justice."



## CORRESPONDENCE.

Correspondents are alone responsible for their opinions.

## Salt River Valley, Arizona.

EDITORS PRESS:—Not having seen, for some time, any mention of our desert country, I beg leave to make a few remarks on the fertile Salt River valley.

The Salt River valley is an immense body of land about 25 miles long, and the settled part averages about 10 miles wide. At the lower end it continues till it is merged into the Gila valley, so-called. The Salt river runs along the east and south sides till its waters commingle with the Gila river, which there flows on to its connection with the Colorado, near Yuma.

On the south side of the Salt river is bench land, called the Tempe, with a flour mill and quite a settlement at the crossing of the river. About three years ago, a Mormon colony also settled here, but the people are mostly "Gentiles" of a go-ahead class.

This Tempe country is a fine, level country, dotted with farms and spread out east and south until the edge of the desert is reached, or as far as their present water facilities are extended. On the easterly part of this Tempe country the land rises higher and higher until on the mesa proper, and on the road to Florence, is the settlement of Mormons called Mesa City. This settlement is composed of small orchards, gardens and alfalfa patches, and demonstrates what can be done on the desert lands with water. There is a small winery here, and the making of Mission wine is a profitable industry. On one place called Stringtown are some very pretty ranches, sloping off to the west.

On the river bottom, about eight miles north-east, is another Mormon settlement called Lehigh, but the name has been changed lately. This colony is similar to the others—made up of a thrifty class of people, but very poor; always ready for a trade, but no money. This Tempe, altogether, is a splendid country, and with more improved methods of handling water will make homes for a great many people.

Phoenix is the county seat of Maricopa county, and is situated toward the upper end of Salt River valley, and on the north side of the river. It has a population of about 4000, and is making rapid progress as one of the most promising towns in the Southwest. It has a fine brick courthouse, also brick schoolhouse, and also two business blocks of brick, with another one commencing to rebuild, which was recently destroyed by fire. Bricks are sold from \$8 to \$10 per thousand, and are being used largely in preference to lumber, which is \$40 per M. There are a number of fine buildings in the town, principally composed of brick, that are a credit to the county, and will bear comparison with many larger towns.

There has been great improvement in Phoenix during the last three years, and the good work is still going on; and with the promised rail road at our doors, Phoenix is destined to be the most prominent city of Arizona.

## The Weather.

The weather is very warm during the months of June, July and August, and sometimes part of September, but the extreme heat lasts about eight weeks, and is really too hot to be comfortable, although it is more sultry and oppressive in the town, with so many cottonwood trees to break the breeze, when there is any, than it is outside of the suburbs. But it is all nonsense about being so very hot in Salt River valley as people are led to believe. It is as pleasant here 9 months out of 12 as any part of California that is above the fog belt. When a hot wave strikes California it is felt here, and when a cold wave sweeps over the country it will freeze here; but we have no fogs and we never have "northerners." Another good thing is, we have no squirrels to eat up the farmer's grain.

## Soil.

The soil of the Salt River valley is diversified toward the river and the lower end of the valley, and on the west and east of the town the soil is an adobe and is principally planted to grain and alfalfa, of which it will produce immense crops. The southeasterly part of the valley is composed of a sediment overlying adobe, and is the finest kind of soil for sweet potatoes, melons and other garden truck. On the north part of the valley the soil is of a reddish clay, mixed with gravel, and the further north it becomes more gravelly and sandy until the low mountains are reached on the boundary of the valley. From these low mountains, toward town, is an extent of country about 5 miles wide and about 25 miles long, running east and west and widening out to a greater distance on the western end, which is about to be watered by a new canal built by the

## Arizona Canal Company.

It is 30 miles long, 56 feet wide on top, and about 5 feet deep. All the soil under this canal is of a gravelly and loamy nature and well adapted for grapes, deciduous fruit and alfalfa, and no doubt but oranges can be grown there also.

Most of this country lies at an elevation of 100 to 150 feet above Phoenix, and is covered with grease wood and small mesquite. About eight miles northeast from Phoenix the ditch drops over a rock barrier and a town is laid out here, and it is proposed to use the water-power for mechanical purposes.

The ditch has had a setback by receiving the

opposition of the old settlers of the valley, and last winter their dam washed out by the high water and could not be replaced in time to do any good last season. Active preparations will commence soon, and it is expected to have water in the ditch by Christmas, if not sooner.

This class of lands is what will make the Salt River valley the great fruit country of Arizona. There is room under this ditch for several colonies, and when these lands are settled up and planted to all kinds of fruits, it will be the most beautiful part of the Southwest, as all these lands sloping to the south are very uniform grade, giving opportunities to make avenues miles in length.

## Fruits.

Nearly every kind of fruit does well here as far as tested: Pomegranates, pears, peaches, apricots, grapes, figs, prunes, etc. Grapes are very productive here and very early coming in market, from beginning of July until October. But apricots seem to be at home. This last season the trees were loaded everywhere; even the Moorpark trees were full of fruit. It is said that Los Angeles county people are digging up their apricots. I say, "let them dig;" here is a county that can produce enough apricots to supply the United States, and they come in earlier than the California article and can be shipped East two weeks earlier than Southern California.

Figs also make a remarkable growth and bear well. Oranges do very well in the garden around Phoenix, but no orchards have been planted yet and it is difficult to make people believe they will succeed.

What this county needs is men of energy and enterprise, with capital, to take hold of the immense advantages here and show the settlers and "tenderfeet" what can be done. Let such men as made Pasadena, Riverside, Ontario and other colonies come here and take hold, and the possibilities of this soil will surprise even the natives.

## Water.

The water system is the greatest drawback at the present time to this valley. On the south side of the river in the Tempe country are but two ditches of any size; one is the Tempe ditch and the other is a ditch taken out by the Mormons a few years ago. On the north side of the river are three ditches called the Grand canal, Maricopa canal and the Salt River valley canal. The latter supplies the town of Phoenix.

The shareholders of these canals pay so much a year per inch for water, besides the assessments on the shares which may be called for to fix dams or other expenses. Each shareholder buys the amount he may need every fall, but cannot exceed 80 inches to one-fourth section of land, which is the amount one share calls for, although he can buy less or buy some for his neighbors who have no share in his water right.

The water is turned into every shareholder's ditch, and while the river has plenty of water, there is sufficient for everybody, and the gates are left open for each man to take what he needs. But when the rivers run down about June and July, the gates are locked down, and the man that can steal the best gets the most water. It makes no difference how much water the shareholder buys; he gets no more water when it is scarce than the man that buys a smaller amount. But there is always plenty of water for the grain men, and the alfalfa and fruit men are the sufferers in a dry season.

But there is also an immense waste of water in the way it is handled and used. More water is used for fruit trees than necessary, and no cultivation is practiced at all. Such a system speaks for itself; that of allowing half an inch of water to one acre of land, and only 18 to 25 feet to surface water.

In buying the water every fall each shareholder has to sign an agreement that he will not hold the ditch company responsible for more than \$10 if he should suffer loss by scarcity of water. In the grand canal and the Maricopa the water is bought twice a year, and is called winter and summer water (from September to first of June, and June to end of August). This is to let off the grain men who have no alfalfa or summer crop. The water is sold cheaper in the summer. This winter water costs about \$2.50 per inch of two inches pressure, and the summer water \$1.50 per inch. In the Salt River valley ditch the water is sold only once and costs \$2.25 per inch of two-inch pressure.

The new Arizona canal is about to take the water from the river, above all the other ditches, and runs about eight miles direct north of Phoenix. The head of the ditch is 30 miles from Phoenix, and although the settlers have tried to demonstrate that there is no water to spare, it is only a dog-in-the-manger policy and a case of sour grapes, as it is proved that there is enough seepage and waste in the river to give all the water necessary if properly managed.

The water system adopted by the Arizona canal is different from the other ditches. The water rights are sold separate from the stock of the company, and not liable to assessments of any kind. The water rights are issued to each 80 acres of land, and are so secured that they become part of the real estate, and cannot be sold again separate from the land. They are being offered at \$500 per share, or \$1000 for a quarter section of land. The water will be sold by the inch, or its equivalent, and it promises to be a great improvement on the system now in use lower down the river.

## Crops.

The crops mostly raised here at present in the

valley are wheat, barley and alfalfa. A large quantity of hogs and cattle are also raised, and some fruit. Sorghum has been tried by the Mormons, and makes a good article of syrup. Cotton was also raised at Mesa City, and almost anything will grow that is taken care of. Lands are selling by the quarter section from \$200 up to \$4000, according to location and soil. Lands under the new Arizona canal have been offered at \$12 an acre with water right. Lands joining Phoenix are held at \$200 per acre. There are five additions to Phoenix laid out in lots for sale.

Phoenix, Arizona.

TRAVELER.

## The Morning-Glory.

EDITORS PRESS:—This flowering vine has recently been alluded to in your paper, and I thought as I knew a little more about it than the writers it would be of service to give my experience for the benefit of your readers. To think of extirpating the morning-glory in one season, after it has established itself (i. e., left to run to seed one or more seasons), on ever so small a piece of land, is a thing not to be entertained for a moment. About eight years ago I saw it planted in the flower garden and thought at the time what a beautiful, fragile, lovely flower it had, and took delight in looking at it; but one day I passed by two vineyards where I saw the beautiful flowers twisting and twined around and through the grapes, leaves and long canes of the grapevines, and I at once perceived the impossibility of doing anything with it, in this case, for it had already covered large areas of the vineyards, and to hoe them out at that season was impossible.

I at once passed the sentence of death against the thing on my own place and offered inducements to the young ones to bring me all the little seedlings as fast as they came up in the garden, as I could not have it spread into the vineyard on any account; so they brought them to me, hundreds of them, not merely the first year after they had seeded, but every year thereafter, and it is but a few weeks since they brought me a lot more, after irrigation, the seed having lain in the ground and kept alive all these many years, and at the first favorable opportunity started into life with a tenacity unparalleled except perhaps by the grossest of weeds. Vineyardists, be careful about allowing this plant on your places, for irrigation will sometimes carry the seeds and scatter them far and wide and the mischief will be done.

Anaheim, Cal.

## From an Indiana Subscriber.

EDITORS PRESS:—The July numbers of the PRESS I received from your office in good order. I have read and reread them until the papers have become dim by so much handling. I thought possibly a few lines from this part of God's footstool might be of some interest to the many readers of your excellent sheet.

In this part of Indiana we have been blessed with good crops—wheat, oats; hay was beyond an average. Some fields of wheat thrashed 25, 30 and some as high as 40 bushels per acre; oats, 50 to 75 bushels per acre. Corn will be all right if the frost stays away three or four weeks. Owing to the excessive dry June, our potato crop will be short. Our fruit in this part is very light. No peaches are raised here. When we want a feast we buy the California plums. Strawberries were an average crop. Gooseberries and currants are not raised here any more on account of the insects.

JACOB HODGEN.

Frankfort, Clinton Co., Ind.

## POULTRY YARD.

## Notes on Experience.

EDITORS PRESS:—Perhaps some of your readers who are interested in the poultry business will be glad to read an item I found in a New York Weekly Tribune, entitled "Incubation by Irrigation."

A man had watched a setting of choice eggs with much solicitude till the 23d day of incubation, and still there was no sign of their hatching. Seeking advice at this stage, he was told to put them into a pan of warm water and leave them till they began to dance, and then return them to the nest. Five hours afterward he came with the joyful tidings that every egg had hatched. He said the moment they touched the water they danced like puppets. The lining of the shells had become so dry and tough that but for the wetting not one of the chicks would have been able to break the shell. Eggs in that condition absorb the necessary moisture almost instantaneously, though they will not suffer injury from remaining in the water several minutes. Care should be taken to return the hen to the nest with the eggs to prevent the too rapid cooling from atmospheric exposure and evaporation. Sprinkling eggs in the nest during incubation is often recommended, but it is immeasurably better to thoroughly wet them by dipping. My practice for several years has been to wet all the eggs about the nineteenth or twentieth day. If the hen be taken from the nest so that the eggs are in full heat, which is much better than to take the eggs after the hen has gone off and they have become partially cooled, the water should be at a temperature of 100° F. If they are cooled, the water should be tempered accordingly, so as not to suddenly heat up the shells.

I have tried this plan and am convinced it saved me many a setting of eggs. I am only

an amateur in the art of chicken raising, and I find it is indeed one of "fine arts," and not so easy as it looks, when going about a well-kept poultry establishment. For instance, when I found three little chicks dead beside an empty drinking pan, on a hot day, it is plain enough, that while I was away spending the day, they died for want of water; but when I found one unnaturally large on one side, caught it and found it was inflated, like a balloon, I realized that I was, indeed, a novice in the art, and was at a loss to know what to do. At last, for want of any other idea, I pricked the aforesaid inflated chick with a fine needle, when, "presto, change," it was no longer inflated, but like a toy balloon likewise treated, it suddenly collapsed. I put it down, and it ran away, much delighted to find it was no longer one-sided, but could go in and out of the fence with its companions. I went back to the house quite pleased that my "woman's wit" had so easily solved the problem. But alas! when feeding-time again came around, all the vanity was taken out of me, for there was that same white chick inflated again. I gave it another prick with a fine needle, apparently without any pain to it, as it was only the skin; it instantly collapsed, but only to puff up again. No matter or water came out, only air. In a day or two it suddenly fell over and died. Now, will some kind reader gratify my "woman's curiosity," and tell me what caused the inflation and what I should have done for it? G.

Kilfasset Ranch, Santa Cruz.

## THE STOCK YARD.

## Care and Management of Stock.

EDITORS PRESS:—Contributors to the RURAL "Stockyard" do not seem to be numerous, and perhaps a few lines from any one who will write may be admissible.

The season of fairs is about over, and one noticeable departure from the usual custom has been that some stock has been shown without previous preparation. Whether successful or not as a venture for prizes this year, it seems to me that it is a move in the right direction. It is a very common belief among those who view stock, as usually shown, that their superior appearance is in the main, if not wholly, due to the superior care they have received.

When shown in just good breeding condition, as every farmer likes to keep them, their superiority over cattle not purely bred will be plain to every one that takes interest enough to examine. The low price of beef and dairy products has a depressing effect upon all classes of cattle, the best as well as the poorer sorts; but a change in this respect is likely to take place at any time, and agencies may be now at work on overcrowded ranges that will cause a change for the better.

The number of cattle raised on the farms in California has but little influence on the markets, and in dull times we should not let any neglect creep in, in the management of our herds. The young stock should at all times have the best of care, never stinted in the quantity or quality of food, and every animal in the herd be well looked after and cared for. An animal that has at all times been generously fed and sheltered when needful may not always pay a profit to its owner, but it stands a much better show of so doing than if at any time or all its life it has been neglected. At this time of the year, young calves need special care. There is but little on pastures now that is fit food for them. They need liberal rations of hay, and a few sliced beets or carrots, if to be had, will help their growth greatly. Light feeds of bran mixed with ground grains, in proportion of three of bran to one of grain, will be a welcome addition and will be repaid in dollars by and by.

Calves that come in the summer and fall need good food provided for them until the following spring, when the grass gets to be good and the weather warm, when they can be turned out to shift for themselves. While going about among them attending to their wants, there is the best opportunity to make them gentle by handling, and this is more important than perhaps many would think. An animal that is gentle to the touch, that you can go up to and caress, feeds more contentedly, is less easily startled by unusual sights and sounds, and for these reasons will thrive better. Look among your cattle and note if it is not the gentlest ones that are, as a rule, in the best condition. If this be so, does it not pay to have them gentle, to say nothing of the ease with which they are managed, in case one from any cause needs particular attention?

Cattle a year old or more do not require so much care. They do well now on stubble-fields, with strawstacks that they can have access to; but enough of nutritious food to keep them in good condition is necessary at all times.

There is much in the rearing and management of stock that can only be gained by experience, and many theories are advanced by writers that will not stand the test of trial. Therefore, it is best to prove all things, holding fast that which is good.

Shorthorn breeders are cheerful and serene. They do not think that they are, or ever will be, out of fashion. Thoroughly believing in the excellence of their cattle, and strong in the determination to maintain their excellence and improve their herds by every means within their reach, they will pursue the even tenor of



their way, and reap the reward that always comes to persistent effort in the right direction.  
Centerville, Cal. J. A. BREWER.

[Mr. Brewer is right about the RURAL'S "Stockyard." We are very anxious that the growers of all sorts of live-stock should be more confidential with us, and more generous in expressing their views and experiences to each other. Mr. Brewer has given us a letter which is bristling with good points. If all the stock-growers who read the RURAL would write for us as the fruit men do, we should have a host of good things about our animal industries every week.—EDS. PRESS.]

## THE FIELD.

### Origin of the Combined Harvester.

EDITORS PRESS:—I am a subscriber to your valuable paper, and in its last issue, September 18th, I perceive an account of the "Origin of the Combined Harvester," written by W. W. Leland, which is not at all correct. He was too young to know much about it himself, and his memory may not be perfect on that subject.

I inclose to you a copy of the *Daily Evening News*, published at Modesto, April 21, 1886, in which is my letter to my son, S. B. Moore. At his request I have given a true statement of the origin and work of the combined harvester.

I would be gratified if your paper would give the true statement as to the original harvester. The other matters in my letter I do not ask you to mention. Yet I do feel proud of my agricultural life and character generally—never having used liquor or tobacco, and now in my 85th year I am in perfect health.

The law passed for the purchase of a tract of land for a model and experimental farm, for the State of Michigan, was that it should not be less than 500 acres, and situated within ten miles of Lansing, and that it should be selected by the State Agricultural Society, and an Agricultural College should be erected thereon. I was the President of the State Agricultural Society at that time, and called a meeting of the Executive Committee, and purchased 676 acres three miles east of Lansing. Mr. Samuel Bartlett was appointed to superintend the erection of the college. It was finished and accepted by the Governor and Legislature at the session of 1855. It was the first Agricultural College erected in the U. S., and I am informed that it remains the best to the present day.

Tulare, Cal. ANDREW Y. MOORE.  
Mr. Moore's Statement.

The following is the publication in the *Modesto News* to which Mr. Moore alludes: "About the year of 1820, at Utica, New York, John Morgan made an expose of Free Masonry, and in consequence he was removed, and the public never heard of him afterward. John Haskall and others were implicated in the expose, and thought it prudent to leave that country and go West. Mr. Haskall came to Kalamazoo, Mich., and settled there. He was a lawyer, but had no practice, and it was hard to make a living. On viewing Prairie Ronde, in Kalamazoo county, a prairie of some 20,000 acres, seeing that it was good for wheat and thousands of acres uncultivated, he thought if he had a team perhaps he could hold the plow and put in wheat. He knew he could not harvest it, and there were no men to hire. He spoke of it in the family, and in consequence it caused his wife to dream; so one morning thereafter she stated to her husband that she saw in her dream a large machine going over the prairie drawn by horses and harvesting wheat, and described its motion and appearance. Mr. Haskall related the dream to Hiram Moore, of Climax Prairie, knowing him to be of an inventive turn of mind. Hiram asked him how he would have it operate. Mr. Haskall replied, holding out his hand with fingers extended, he would run it through the grain, and with the other hand draw over and backward, he would cut it like that. Hiram did not intend to give it much thought, but it troubled his mind for six months, when he concluded he would put his mind seriously upon it and succeeded in the invention, perfect as he thought, and made a model and took it to Washington City, exhibited it at the patent office and obtained a patent. This was in the year of 1834. By the harvest of 1835, he, at Flowerfield, Mich., made a temporary machine, and went into a field for trial. It cut about two rods and broke something. The thrasher was not in; he merely wanted to try the cutting process. In the failure he said: 'I see the shore afar off and it will take me a long time to get there, but I will succeed in time.' The next season he intended to perfect a machine for further trial. My brother Abner did the carpenter work, and as I had sowed some wheat when I came to Prairie Ronde in October, 1835, he asked me to let three acres stand for trial. It being late in the harvest season, so that he could make a fair trial, I did so, and the harvester cut it and thrashed it in good order, but the cleaner was not yet attached. He asked me to take the time of its work and figure the cost per acre, at the going rate of prices for men's labor and hire of horses. Twelve horses were worked on the machine at that time, besides the team hauling to the barn. I took the exact time for cutting the three acres, and made the actual cost of 82

cents per acre. I inquired of my brothers, who were farmers, as to the cost of harvesting and thrashing in the ordinary way of cradling, raking and binding, shocking, staking, thrashing, cleaning, etc., and upon strict calculation, it cost in that old process \$3.12½ per acre. The contrast was so great that I took an active part in its future. By the harvest of 1837 it cut only about 20 acres, and he found that it wanted further perfection, although the thrashing and cleaning had been added. Before another harvest he said to me: 'Mr. Moore, I can invent, but I can't drive the horses.' I replied that I would drive the horses and would assist him, and I did so each year. In 1841 he invented the Angle Edge sickle, and it would work all through harvest without being ground when first in good order. The first sickle was straight, with teeth cut in sections each way. In the fall of 1841 Mr. Moore went to Rochester, N. Y., and procured good mechanics and he completed two machines. I used one for him and Ira Lyons for the harvest of 1842. In the spring of 1843 I bought the Bates farm, near Schoolcraft, and moved thereon the last of March. I operated his machine as usual, and in that season had the only complete machine built for myself. It was drawn by 16 horses, hitched two abreast, walking by the side of the grain cutting 10 feet wide, thrashing, cleaning and bagging the same, doing 25 acres in a day. I run it every season till the harvest of 1853, when I sold an interest in said machine to Geo. Leland. We shipped it to California the same year, and it cut over 600 acres for Henry Honer and Mr. Brifogle, in Alameda county, in 1854. The next year Mr. Leland was engaged in mining and did not run the harvester, but for the harvest of 1856, Mr. Leland's son put it in the field, and not being skilled in machinery neglected to oil it, and by friction it took fire and was burned in the field. Thus ended the machinery business with me. I will add that in the year 1844, I sowed 300 acres of wheat, which was the largest crop of wheat raised by one man in Michigan at that time. It might be interesting to you to know that in the summer of 1844, Mr. Edmund Baker, of Flowerfield, Mich., informed me that he contemplated making a gang plow, and explained it to me. I asked him what he would charge me for one, that it might be tried; he said \$30 and I told him to make it. He did so and it was a perfect success, and I assisted him in getting a patent for it. It was the first gang plow in the United States. It cut 12 inches each. Afterward he made me one with five small plows, six inches each. The foregoing is true in every respect."  
—A. Y. MOORE.

## THE APIARY.

### Raising Queens.

EDITORS PRESS:—The eggs in the ovaries of the queen-bee are all alike and will, if they are laid as they leave the ovary, produce drones only, no matter whether they are deposited in worker, drone, or queen-cells. If, however, an egg, in passing the seminal sack, through the voluntary act of the queen, receives any of its contents, it becomes fecundated, and this fecundation changes the sex of the egg, so that it in due time will hatch out a female. Virgin queens are therefore able to lay eggs which will hatch, but they only produce drones. If, then, a young queen, either from defective wings, or being by unpropitious weather prevented from flying out during the limited time (i. e., 21 days from hatching) allotted her for successful mating, fails to become impregnated, she will be a drone layer for life. In certain cases where a colony of bees loses its queen, one or more workers will lay eggs which produce dwarf-drones.

#### The Eggs Laid by a Perfect Queen

Are therefore either male or female, and not, as many think, worker, drone and queen-eggs. Any female egg may produce a queen, whether laid by the queen in a queen-cell or moved by the bees from a worker-cell to a queen-cell, or remaining in a worker-cell which is subsequently enlarged by the bees and changed into a queen-cell. On this latter act depends the process known as artificial queen-rearing. The position of the cell and the quality and supply of food determine the future development of the female bee after it is hatched from the egg. Laid in a nearly horizontal worker-cell and supplied only with the usual allowance of pabulum, prepared by the nurse-bees, it becomes a worker or undeveloped female; while if it is placed in a vertical or nearly vertical queen-cell, much larger than a worker-cell and of an entirely different construction, and supplied with an abundance of "royal jelly," it becomes a queen or perfect female bee. If any other factor enters into this process it is known only to the bees themselves, although it has been suggested that the nurse-bees perhaps use the contents of worker-eggs in the preparation of "royal jelly." There are a number of different ways of raising queens, but they may all be classed under two heads, generally called natural and artificial queen-rearing.

#### Natural Queens

Are produced under the swarming impulse, when the bees, anticipating an emigration from their old home, in which emigration (swarming) the old queen always accompanies the swarm, build one or more queen-cells and provide for a new mother of the parent colony after the swarm shall have left.

There are two other conditions under which bees will raise queens: first, when they wish to supersede an old, failing queen; secondly, when the queen gets killed or lost through an accident and they immediately raise another from her own brood to replace her. But these can hardly be classed under either of the above heads.

#### Artificial Queen-rearing

Is done when the owner purposely deprives a colony of its queen and thereby compels the bees to start queen-cells. By an experienced queen-raiser it is generally a strong, populous colony of inferior blood which is thus unqueen-ed and devoted to raising a supply of queen-cells. The colony is either allowed to raise queen-cells on their own brood, and when these cells have been destroyed on the fifth or sixth day after unqueening, it is supplied with eggs from a selected colony of superior blood from which to raise desirable queens for future use; or all the unsealed brood is removed at the time of unqueening and the colony immediately furnished with one or more cards of eggs and very young larvae from a selected queen. This is, of course, a gain in time.

#### Nuclei.

A nucleus is a small colony, formed by taking one or more combs of brood and honey from a hive and placing them with the adhering bees (but without a queen) in a new (to them) hive in another location. A nucleus-hive may be either an ordinary hive, contracted by means of a division-board, or a hive of smaller dimensions, say for three or four combs, which should, however, take the same size of frame used throughout the whole apiary. If the combs used for forming the nucleus do not have sufficient bees adhering to them, or if many bees leave for their old home, more must be added by shaking them from combs of the original hive, the combs being returned to their first place. It is, therefore, best to form nuclei in the middle of the day, when most of the old bees are at work in the field, and the young bees, remaining on the combs and having not yet located their home, will stay wherever they are placed. Nuclei should always be formed the day before you are ready to introduce queen-cells. If given the same day, the bees, not yet knowing that they are queenless, will most likely tear down the cell and destroy its occupant. But on the following day they will all be familiar with their loss, anxious for a new queen, have probably already made preparations for raising a new one from the brood on hand, and the queen-cell given to them will then be safe and well accepted.

#### Introducing Queen-cells.

If a colony is found preparing to swarm and having queen-cells capped, such cells may now be cut out and introduced, one to each nucleus (natural queen-rearing); or if a colony has been deprived of its queen for the purpose of raising queen-cells, on the ninth day after unqueening, or rather after giving them selected brood, the cells will usually be capped and ready to be cut out (artificial queen-rearing). In either case none but the largest and finest cells should be used and the balance destroyed. In removing the queen-cell from its original place, a good-sized piece of the comb, to which it is attached, should be cut out with it—if possible, somewhat wedge-shaped; and where the cell is going to be placed in the nucleus, a hole of the same shape must be cut among the brood in one of the central combs, to receive the cell and to prevent it from falling down before the bees get it fastened. In very warm weather the cell may be placed where the bees have left a hole or passage-way between the edge of the comb and the side of the frame, or it may be pushed down between the tops of two central combs, moved temporarily a little apart. This avoids mutilation of the comb. In either case there should be sufficient room under the point of the cell to allow the queen to emerge without hindrance. In handling queen-cells great care should be taken not to jar or dent them, nor to leave them lying in the hot sun or where the wind may chill them. Combs having queen-cells on them should, therefore, never be shaken to remove the bees, but the bees must be gently brushed off, if necessary, as any jar or dent is liable to maim or kill the embryo queens.

Some bee-keepers prefer queens reared under the swarming impulse, while others contend that artificial queen-rearing is just as good if properly done.

If hives of colonies or of nuclei in which queens are reared stand close together and look much alike, they should be marked by a stone, a board, or some other object, that the young queen, on going out on her wedding-trip, may note her location. Otherwise, she is liable on returning to enter an adjoining hive through mistake and get killed by the inmates, to whom she is a stranger.

As soon as the young queen commences laying regularly, she may be disposed of as the owner sees fit, and, if removed from the place of her birth, the nucleus may be set to rearing another queen in her place and kept at this business throughout the summer. It is, however, incumbent on the bee-keeper to see that the nucleus is occasionally supplied with brood from other hives, in order to keep up the numerical strength of the bees; and also to remove the honey which may accumulate and cramp the bees for room, causing them to idle away their time or to build combs on the outside of the hive.

WM. MUTH-RASMUSSEN.

Independence, Cal.

## THE DAIRY.

### The Holstein and the Jersey.

EDITORS PRESS:—What science is doing for agriculture is shown by comparing the amount of milk given by some of the better dairy breeds with that given by the average cow in this country. The average cow yields not more than 3000 pounds of milk during the milking season, which lasts as long as grass is abundant, and this milk produces not more than 100 pounds of butter.

Compare these amounts with the 26,000 pounds of milk given by a Holstein cow and with 1000 pounds of butter produced by a Jersey in the space of one year, and the comparison is painful.

It is true that the milking season of either of these breeds often extends from one calving time until the next, but this adds to the evidence in favor of scientific dairying, and should convince dairymen that the cow is simply a machine for changing hay and grain into milk, butter and cheese.

The average farmer seems unable to grasp this fact—he goes on, generation after generation, treating the cow as a machine, capable of evolving milk and butter at will, from her inwardness. The element of food is overlooked, and like Diogenes searching for an honest man, the farmer roams the country seeking for the breed of dairy cows that will yield much milk and butter from nothing.

But the breed is of secondary importance. The yield of any breed depends on the care and the food that it receives. The cow that produced 26,000 pounds of milk had other food than pasture in summer and straw and corn-stalks in winter; as did also the one that made a record of 1000 pounds of butter.

A pound of grain changed into butter is of more value than when it was a pound of grain, and the value is sufficiently increased to leave a wide margin of profit after deducting the expenses of making the butter.

To become in the highest degree profitable, the cow must be fed as much as she can digest, just as the steam engine must be fed all the fuel it can consume before its full power can be reached. Not only is the quantity of milk influenced by the food of the cow, but the quality also. The largest milkers are not necessarily the greatest butter-producers.

A German chemist found that it required as high as 56 pounds of milk to make one pound of butter, while a breeder of Jerseys claims for a cow of this breed that 35 pounds of her milk made a pound of butter, and names 30 cows that have yielded one pound of butter from 10 or less pounds of milk.

When it is considered that on an average throughout the country 30 pounds of milk are required to make one pound of butter, and two and one-fourth pounds of cream for a like amount, it will be seen that the milk of the Jersey cow referred to is two-thirds cream. Like the speed of the trotting horse, where is the limit to the possibilities of milk and butter production?

When it is understood that the yield of the cow depends upon the amount of food digested, the question of breed finds a place. In the course of time the milk and butter capacity of most cows can be developed; but there are already breeds in which this capacity has reached a high state of development, just as there are breeds of trotting horses in which speed seems to be almost an instinct.

Which breed is the best for the general-purpose cow is a hard question for the farmer, without experience of thoroughbreds, to decide. If he turn to agricultural papers, he finds little help, for specialists usually praise the breed in which they are interested, and condemn all competitors.

Granting the assertions of the various breeders, a comparison can still be made that will be entirely mathematical.

It is generally admitted that the first place among the dairy breeds belongs to either the Holstein or the Jersey, and by obtaining from the reports of the milk and butter records made by these two breeds the average quantity of milk and butter produced by cows of each breed on the same amount of food, the result gives a fair means of comparing the relative merits of the two.

Taking the tests of a number of Jersey cows published during the current year, the records show that each cow averaged per day 32 pounds of milk, from which 2½ pounds of butter were made; this, on an average grain feed of 26 pounds daily, or one pound of grain fed to a Jersey cow, yields 1.2 pounds of milk and 1.5 ounces of butter.

Taking an average of the tests on a number of Holsteins—many of them two-year-old heifers—the records show that each cow averaged 40 pounds of milk daily, from which 1½ pounds of butter were made, on a daily average feed of 13 pounds of grain, or one pound of grain, fed to a Holstein cow, produces 3 pounds of milk and 1.8 ounces of butter.

This shows the Holstein cow capable of yielding 2½ times as much milk, and 1.2 times as much butter as the Jersey, on the same amount of food, and stamps her as the better general-purpose cow for the farmer.

Glen Ellen.

C. D. STEWART.

ACCORDING to the *Merced Star* a talc mine has been discovered on J. W. Minges farm on the Merced river



## PATRONS OF HUSBANDRY.

Correspondence on Grange principles and work and reports of transactions of subordinate Granges are respectfully solicited for this department.

## Grange Officers.

## Officers of National Grange.

Master—Put Darden, of Miss.  
Overseer—Jas. Draper, of Mass.  
Lecturer—Mortimer Whitehead, of N. J.  
Steward—J. E. Hall, of W. Va.  
Asst. Steward—W. H. Stinson, of N. H.  
Chaplain—A. J. Rosa, of Texas.  
Treasurer—F. M. McDowell, of N. Y.  
Secretary—John Trimble, 514 F St., Wash., D. C.  
Gate-keeper—H. Thompson, of Delaware.  
Ceres—Mrs. Kate Darden, of Miss.  
Pomona—Mrs. S. H. Neal, of Ky.  
Flora—Mrs. Jas. C. Draper, of Mass.  
Lady Asst. Steward—Mrs. E. M. Lipscomb, of S. C.

## EXECUTIVE COMMITTEE.

J. M. Blanton, of Virginia, Chairman.  
J. J. Woodman, of Michigan, Sec'y.  
J. H. Brigham, of Ohio.  
Put Darden, ex-officio of Miss.

## Officers of the State Grange.

Master—Wm. Johnston, Richland, Sacramento Co.  
Overseer—W. L. Overhiser, Stockton, San Joaquin Co.  
Lecturer—Daniel Flint, Sacto., Sacto. Co.  
Steward—Don Mills, Santa Rosa, Sonoma Co.  
Asst. Steward—E. W. Davis, Santa Rosa, Sonoma Co.  
Chaplain—B. F. Frisbie, Yuba City, Sutter Co.  
Treasurer—J. C. Steele, Pescadero, San Mateo Co.  
Secretary—J. Chester, 40 California St. S. F.  
Gate-keeper—J. E. Beach, Rontier, Sacto. Co.  
Ceres—Mrs. S. J. Cross, Antelope, Sacto. Co.  
Pomona—Mrs. A. P. Roach, Watsonville, Santa Cruz Co.  
Flora—Miss Minnie M. Plummer, Brighton, Sacto. Co.  
Lady Asst. Steward—Miss Mary J. Carter, Byron, Contra Costa Co.  
Executive Committee—A. L. Chandler, Oakland;  
J. F. Deming, Vallejo; H. G. Keesling, San Jose.

## District Lecturers Appointed by the Worthy Master.

Nicholas Mertes, for Placer Co.  
B. F. Frisbie, for Sutter Co.  
G. W. Hancock, for Sacramento Co.  
J. D. Huffman, for San Joaquin Co.  
Walter Renwick, for Alameda Co.  
E. T. Blackmer, for San Diego Co.  
A. A. Bayley, for El Dorado Co.  
J. F. Gregg, for Amador Co.  
J. R. Totman, for Colusa Co.  
George Steele and D. F. Stockdale, for San Luis Obispo Co.  
A. Henderson, for Nevada Co.  
A. B. Huntley, for Plumas Co.  
T. C. Alexander, for Los Angeles Co.  
H. W. Brouse, for Merced Co.  
V. E. Bangs, for Stanislaus Co.

## A Lay Sermon.

## Mack Descants on the Beauty of a Farmer's Life, and Gives Some Good Advice.

In one of the early chapters of that dear old but sadly-neglected book, the Bible, we read: "And the Lord God took the man and put him in the Garden of Eden to keep it and to dress it." This is very suggestive. The first man, fresh from the hand of God, and his blushing young wife, just fashioned from one of his ribs, to indicate that she should always keep near his side, were placed in a garden. With what love-glancings and hand-squeezings they must have walked into their fair, bright garden that bridal morning. God must have laughed out loud when He hit upon the idea of making woman, the consummate flower of His works. Indeed, it is said that the morning stars sung together, and all the sons of God shouted for joy. From that hour the culture of the earth and the ownership of a cozy home in the country has come the nearest of realizing Eden. But let us not forget the next lesson: Cain got angry one day and threw a club at the head of Abel and killed him, and was out off from the culture of the earth as a punishment. "When thou tillest the ground it shall not yield thee her strength." "And Cain went out from the presence of the Lord and built a city." He is not the only young man who has given up the tillage of the soil and a quiet country life, and found he had gone out from the presence of his health, purity and manhood. Who can gather up all the blighted hopes, shattered consciences, wasted lives and broken hearts, scattered over these dazzling social breakers?

The tillage of the soil lies at the foundation of social order and stability. The chief distinction between civilized and savage men is the relation they sustain to the soil. The

## Savage has no Fixed Abode.

He makes no claim to a spot of earth. He knows nothing of deeds and leases. All he asks is a place to pitch his tent for a night or during the hunting season. There can be no social organization, no law, no order, so long as men are nomadic, unsettled or lead pastoral lives. Agriculture attaches man to the soil, and this lays the corner-stone of the social fabric. It fixes him to some chosen spot he calls home, and clothes it with sweet and tender memories and associations. There the stars sparkle more brightly, the flowers bloom more fragrant, the fruit tastes more deliciously. Every tree, hill, field and stream is photographed imper-

ishably upon his soul. It is the fairest, loveliest spot on earth to him. It is his Eden. The garden, the orchard and field represent more to him than the annual yield of fruit and grain. It is the home of his wife, the place where he has unfolded his most secret heart-history, and written upon the cradle, play-ground, school-house and rural groves, the evangel of his love. The tillers of the soil

## Ought to be the Best

And most contented people in the world, as they have so little to worry and irritate them. They have no city taxes to pay; they are not pestered and tormented by butchers' bills, gas bills, water bills, rent bills and coal bills every day. There is no water in their milk, and their butter and cheese are not strong enough to walk. The hateful oleomargarine does not trouble them. They are not waked up at all hours of the night by the clang of fire-bells, the rush and rattle of engines, the stir and bustle of a whole town on the alert. A dry winter, the North wind in the spring, the scale bug or codlin moth, a neighbor's dog among the sheep, or breechy cattle may cause some anxiety; but in the main the farmer's life is serene and tranquil, conducive to health and good old age.

We know that it is easier to preach than practice, but we cannot close this homily without dropping into exhortation as

## Silas Wegg Dropped Into Poetry.

And so we say to the farmer: Do not labor so long and hard as to have no time for reading and mental improvement. Soul-wealth will outlast all your farms. Remember that shrouds have no pockets, but the mind will carry away all that is packed into it. Do not go hunting or fishing on Sundays, but get into a clean shirt and go to church and keep awake during the service. Do not fall into gusts of temper at every ill-wind that blows, and rush at your wife and scold your hired man. Never swear at your horses and mules and whip them unmercifully, for, if the

## Darwinian Theory is True,

You may possibly be abusing one of your ancestors; and if the Swedenborgian theory be true, long files of ghosts of dead horses may meet you in the judgment day. Have a place for everything and keep everything in its place. Do not allow wood, lumber, rails and wagon-boxes to accumulate in the lane that passes before your house. People passing along in dark nights may stumble over them, excooriate their shins and be provoked to say bad words. Do not allow the barnyard in rainy weather to accumulate mud and filth, so that you will be compelled to wade over your boot-tops. Never permit any sloven, helter-skelter disorder about the farm. It takes but little time to keep everything in good order, and then one feels so much better. Never borrow only enough to show that you are willing to lend. Loan all the money you can spare, but never hire any; and, above all things, never allow the home-stead to be plastered over with a mortgage. If not married, get a wife as soon as you can, and build a neat, social-looking cottage on your ranch to put her in. And when you get one do not compel her to cook for the hired men, slave over a wash-tub, make cheese and butter, hunt eggs and raise chickens and turkeys till her beauty fades and the sweetness of her disposition sours. Any prudent, economical man, who owns a farm, can easily make enough to keep a servant and make his wife a queen in his Eden. Get her a piano, music, and elegant books to read, and try and make the loneliness of the country as cheerful and pleasant to her as possible. Never grumble at milliners' bills. If your wife knows how to dress in good taste, loves a fashionable dress, a charming hat trimmed in dainty ribbons and pretty ostrich plumes, you ought to be all the more proud of her. What are you for, you great big strapping burly fellow, but to make some woman happy and your home a little heaven to go to heaven in? When you go to town, never go where you would be ashamed to take your wife and daughter. Never stay long in town unless you are a good temperance man. Be honest, independent; keep out of debt; never go security for any one; avoid lawsuits, lotteries and speculation, and your children and children's children will rise up and call you blest.

MACK.

FOR THE ASSEMBLY.—We notice that the Republicans of the 63d District, Santa Clara county, have nominated I. A. Wilcox for election to the Assembly. Mr. Wilcox is well known to readers of the RURAL through the valuable articles he has written on horticultural and other subjects. He is prominent in the horticultural and agricultural interests of his section, being one of the originators and directors of the Horticultural Hall Association, also of the company owning the Santa Clara cheese factory. He is also a leading member of San Jose Grange. We are all glad to see men thoroughly identified with the producing interests receiving attention at the nominating conventions.

PERSONAL.—The last issue of the *Patron* announces the retirement of Sister Flora M. Kimball as editress of the Matron's Department. Sister Kimball has served long and very acceptably in her chair on the *Patron*, and all will hope that her literary labors may be only temporarily suspended. Mrs. M. A. Sheldon, who has long been a contributor to the paper, will assume the charge of the Matron's Department.

## DIRECTORY OF SUBORDINATE GRANGES IN CALIFORNIA.

NAME OF GRANGE.	PLACE, DATE AND HOUR OF MEET'G.	MASTER.	SEC'Y AND ADDRESS.
Alhambra	Martinez, 1st and 3d Sat, 2 P.	Dr. J. Strentzel.	Maria B. Lander, Martinez.
American River	Routiers, 2d and 4th S., *	J. E. Beach.	Jas. E. Cornell, Routiers.
Antelope	Antel. S.H., 1st and 3d S., 10 A.	H. A. Logan.	P. Peterson, Maxwell.
Bennett Valley	Bennett Val'y, 1st and 3d S., 2 P.	J. B. Whitaker.	Don Mills, Santa Rosa.
Carpinteria	Carpinteria, every other W., 2 P.	H. D. Woods.	Miss J. M. Higgins, Carpinteria.
Ceres	Modesto, 4th F., 1 P.	V. E. Bangs.	E. H. Whitmore, Ceres.
Clarksville	Clarksville, 1st S., 1 P.	C. M. Chapman.	Samuel Kyburg, Clarksville.
Danville	Danville, 1st and 3d S., 2 P.	D. M. Sberburne.	Millie S. Howard, Danville.
Eden	Haywards, 2d and 4th S., 1 P.	L. Perham.	Josie Shari, Haywards.
Elk Grove	Elk Grove, 1st and 3d S.	Gillis Doty.	Delos Gage, Elk Grove.
Elliott	Elliott, 2d and 4th S., 2 P.	J. M. Hoyt.	H. H. West, Elliott.
Elmira	Elmira, 2d and 4th S., 2 P.	G. W. Tillotson.	Mrs. Jas. McCrory, Elmira.
Enterprise	Brighton, 1st and 3d S.	A. A. Krull.	Minnie L. Plummer, Brighton.
Florin	Florin, 2d and 4th S., 2 P.	C. Towle.	P. W. Smith, Florin.
Franklin	Franklin, 1st S., 2 P.	L. Freeman.	M. B. Johnston, Richland.
Galt	Galt, 1st and 3d S., 2 P.	Hiram Chase.	A. B. Bryant, Galt.
Georgiana	Georgiana, 4th S., 2 P.	P. H. Gardner.	Laura Smith, Ileton.
Grand Island	Sycamore, 2d and 4th S., 10 A.	J. R. Totman.	E. G. Morten, Colusa.
Grass Valley	Grass Valley, 2d and 4th S., + J.	W. DeGolia.	Richard Williams.
Lincoln	Lincoln, 3d S., 2 P.	J. S. Philbrick.	A. J. Soule, Lincoln.
Lodi	Lodi, 1st and 3d W., 2 P.	A. J. Woods.	J. D. Huffman, Lodi.
Lompoc	Lompoc, every other S., 1 P.	L. F. Potter.	W. H. Schuyler, Lompoc.
Magnolia	C. C. Ragsdale's, 2d S., 10 A.	W. Cunningham.	May F. Bilderback, Colfax.
Merced	Merced, 1st S., 1 P.	R. S. Clay.	L. A. Ostrander, Merced.
Montezuma	Bird's L'g, 1st and 3d S., 1:30 P.	T. T. Hooper.	Ettie Daniels.
National Ranch	National City, 1st & 3d W., 3 P.	R. D. Perry.	Maria D. Grant, National C'y
Newcastle	Penryn, 2d S.	Wm. Barter.	Wm. H. Scott.
North Butte	Pennington, 2d and last S., 1 P.	W. T. Lam.	Ella Hedger, Live Oak.
Paso Robles	Paso Robles, 1st and 3d S., 1 P.	D. F. Stockdale.	A. N. Rude, Paso Robles.
Pescadero	Pescadero, 1st and 3d S.	I. C. Steele.	Mattie Thompson, Pescadero.
Pilot Hill	Pilot Hill, S.	Mrs. A. Bobbas.	F. Wentworth, Georgetown.
Placerville	Placerville, every other wk.	J. C. Marsh.	Annie E. Bliss.
Plumas	Beckwith, 11, 1 P.	Wm. Arms.	Thos. Black, Beckwith.
Plymouth	Plymouth, 2d and 4th S.	W. M. McMillen.	J. F. Gregg, Plymouth.
Point of Timber	Byron, 1st S., 2 P.	Sister L. J. Willis.	Eva Preston, Byron.
Potter Valley	Potter V'y, ev'y other w'k, 2 P.	Jere Lierly.	W. V. Kilbourne, Potter V'y
Poway	Poway Valley, 2d & 4th S., 2 P.	S. Palmer.	J. Anderson, Poway Valley.
Roseville	Roseville, 1st and 3d S.	N. Mertes.	Mrs. S. J. Cross, Antelope.
Sacramento	Sacramento, 2d and 4th S., 1 P.	G. W. Hack.	Rose Hull, Sacramento.
San Jose	San Jose, every S., 10 A.	Frank Dunn.	E. T. Pettit, San Jose.
Santa Cruz	Santa Cruz, semi-monthly.	G. C. Wardwell.	B. Pilkington.
Santa Rosa	Santa Rosa, 2d & 4th S., 1:30 P.	E. W. Davis.	Martha Lumsden, Santa Rosa
Sebastopol	Sebastopol, semi-monthly.	Jas. P. Gannon.	H. B. Morris.
Social	Mich. Bar, 2d and last S., 2 P.	Wm. H. Atkinson.	Mrs. H. E. Putnam, Mich. Bar
South Sutter	Pleasant Grove, 4th S.	Jno. W. Jones.	Ella M. Jones, Pleasant Grove
St. Helena	St. Helena, 1st and 3d S., 1 P.	J. G. Norton.	Jane L. Peterson, St. Helena.
Stockton	Stockton, every S., 1 P.	Jno. L. Beecher.	N. T. Root, Stockton.
Sutter Mill	Coloma, 1, 2 P.	F. J. Veerkamp.	F. Veerkamp, Coloma.
Temescal	Oakland, O. F. hall, +.	A. T. Dewey.	Nellie G. Babcock, N. Temescal
Tulare	Tulare.	A. P. Merritt.	J. W. Mackie.
Turlock	Turlock, 2d and 4th S.	P. R. McCabe.	E. B. Osborn, Turlock.
Two Rock	Two Rock, 1st S., 1 P.	S. M. Marten.	J. C. Parvine, Petaluma.
Vallejo	Vallejo, 2d and 4th S., 2 P.	J. F. Deming.	Miss E. C. Corwin, Vallejo.
Valley	Pacheco, 2d and 4th S., 1:30 P.	G. P. Loucks.	Annie Loucks, Pacheco.
Walnut Creek	Walnut Creek, 2d and 4th S.	E. A. Seaman.	Mrs. L. A. Steele, Walnut C'k
Washington	Comanche, 1st and 3d S.	John Northup.	Miss A. E. McIntire, Clements
Watsonville	Watsonville, 1st and 3d S., 1 P.	J. D. Bagnall.	Mrs. S. J. Kidder, Watsonv'e
W. San Joaquin	Tracy, 1st S., 1 P.	A. P. Stocking.	H. B. Needham, Tracy.
Wheatland	Wheatland, 1st and 3d S., 2 P.	D. A. Ostrom.	I. W. Huffaker, Wheatland.
Woodbridge	Woodbridge, 1st and 3d Tu., 2 P.	G. H. Ashley.	Mrs. E. J. McIntosh, Woodb'ge
Yuba City	Yuba City, 1st S.	B. F. Walton.	Geo. Ohleyer, Jr., Yuba City.

\*Oct. to March, ev'g.; April to Sept., aft'n.  
†1st Saturday, 7:30; 3d Saturday, 2 o'clock.  
‡Sat. on or before full moon and two weeks after.

†2d Saturday, 7:30; 4th Saturday, 3 o'clock.  
§Saturday on or before full moon.  
||Saturday after full moon.

NOTE.—The "A" or "P," after the hours of meeting, stand for A. M. or P. M. respectively.

## Securing the Reduced Rates Home.

The following blank forms have been issued by the S. P. Co. for the use and benefit of Patrons going to Marysville by rail:

SOUTHERN PACIFIC COMPANY.—Received of the attendant, whose signature appears below, \$.... in payment for one unlimited first-class ticket, No. .... to Marysville, en route to attend the annual session of the California State Grange, to be held at that place, commencing Tuesday, October 6, 1886.

....., Attendant at session.  
....., Agent.

MARYSVILLE, Oct. .... 1886.

This certifies that....., whose signature is given above, has been in attendance at the above session. Fifty or more persons, holding certificates of this form, properly executed, have attended this session.

....., Secretary.

The above are indorsed with an order from Gen'l. P. and T. Agent Goodman to the ticket agent at Marysville, as follows:

Upon presentation and surrender hereof by the party named in the receipt and certificate on reverse side, sell to and for the use of such person, one special book ticket, inter-division, outward, to the station named in the receipt, as selling the ticket used in going to Marysville, at one-third (1/3) your unlimited first-class single trip rate to that point, provided the certificate and receipt are properly filled out and signed and presented to you within forty-eight (48) hours after close of session.

P. S.—Owing to the difficulty of seasonably providing the above blanks at all railroad stations, the company will depend upon the secretaries of the State Grange to give certificates for the purchase of return tickets from Marysville at one-third rate to all attendants at the State Grange who pay full fare in going.

## The Order in Oregon.

During the fair of the Oregon State Agricultural Society, at Salem, week before last, there was an open evening meeting of Patrons and their friends. It was held pursuant to call, in hope it might result in their sending lecturers into the field to encourage, build up and open Granges wherever an opportunity should offer. The Willamette Farmer says that Master R. P. Boise called the meeting to order and tried to enforce the old argument that the farmers could be a power in the land if they would only work together with determination. Lecturer Hayes also spoke, and Mr. Shipley made some remarks on temperance, to which all listened with interest. Mr. Minto had something to the

point. He is always able to interest his listeners. Mr. Vorhees talked of drainage. A. F. Miller thought it would be a good thing for the Grange at large to have a sort of home of its own on the fair grounds—a room where the Grangers and their friends might find each other, and rest and converse. It seemed to us a timely suggestion. We would be pleased to see such a place comfortably fitted up for the fair, if a suitable room could be found. The success of the gathering shows that if the Grange had a home there might be a meeting held every evening, partly of a social character. We hope some action will be taken in the Granges before another fair.

## Pomona Granges of California.

SONOMA CO., No. 1.—Meets third Wednesday of January, April, July and October, at 10 A. M. M. G. N. Whitaker; Sec., Don Mills, Santa Rosa.  
SACRAMENTO CO., No. 2.—Meets fifth Saturday of mos. having a fifth Saturday, at 1 P. M. M. C. A. Hull; Sec., J. E. Beach, Routiers.  
SAN JOAQUIN CO., No. 3.—M., Ezra Friske; Sec., J. D. Huffman.

## State Grange.

The Fourteenth Annual Session of the State Grange opens at Marysville at 10 A. M. on Tuesday, October 5th. All Patrons who can should attend for a season of rest, literary enjoyment and good fellowship.

SAN DIEGO HORTICULTURAL FAIR.—We acknowledge with thanks an invitation to attend the Horticultural Fair in San Diego, Oct. 6th to 8th. The invitation includes our "family." We take it that it includes the whole RURAL family. We hope all will attend and pay their way with pleasure to aid in the support of the excellent institution. The president, J. M. Asher, is one of our most enthusiastic and progressive horticulturists, and the society is composed of many others like him.

BOYS AND GIRLS may be had—particularly boys—for service at wages, for indenture, or for legal adoption, by applying with recommendations to E. T. Dooley, Supt. Boys and Girls' Aid Society, Baker street, corner of Grove street, San Francisco.



## AGRICULTURAL NOTES.

## CALIFORNIA.

## Contra Costa.

**SQUIRREL PEST.**—Antioch Ledger: Squirrels are getting to be more troublesome. Farmers generally are diligent in keeping these pests out of their grain fields, but rocky points and odd corners are allowed to become colonized to an extent that passes credence unless seen upon these small areas at times in the day when they are all out foraging for food. They may not be very troublesome as yet, but if allowed to bring forth their *pro rata* of young this winter, the grain fields must of necessity be raided for food next summer. Farmers, it stands you in hand to see that they are killed before the time of reaping next summer, or the click of the header will not be heard so long in the harvest.

## Los Angeles.

**VINEYARD JOTTINGS.**—Anaheim Gazette, Sept. 25: Mr. Langenberger has some vines of the Grenache variety, two and a half years from the cutting, which this season bore two and a half tons of grapes to the acre. The vineyards of Anaheim and vicinity, with the exception of those bearing Mission grapes, are yielding much more than an average crop this year. The Zinfandel and Malvoisie varieties are "panning out" especially well, many vineyards yielding from five to eight tons to the acre. The much-abused Malvoisie almost invariably bears well, and it is a question whether it is not more profitable to raise this grape and sell it at a low price than raise better varieties that yield less.

**WITHOUT IRRIGATION.**—Mr. Chilson exhibited some fine specimens of corn planted in May after the rains and grown with no irrigation and but little cultivation. Many of the stalks bore three large ears, while the bulk of the stalks in the field bore two. Mr. Chilson had some peaches, also grown without irrigation, which were extraordinarily large. The last 30 peaches picked from one of his trees weighed 20 pounds. His land is in Orangethorpe district, and is a fair sample of all in that vicinity.

## Napa.

**HOP YIELD.**—St. Helena Star, Sept. 24: All the hops raised in Napa county are grown in or near St. Helena, and within the limits of five yards. The yield this year was light, not averaging much over half a crop. The figures as given us are as follows: James Dowdell, 15 acres, 13 tons; D. Cole & E. Simpson, 12 acres, 10 tons; R. F. Lane, 16 acres, 8 tons; P. Elting, 12 acres, 8 tons; Storey Bros., 30 acres, 8 acres; St. Helena, and 22 at Rutherford, 10 tons. Total yield from 85 acres, 49 tons. The yield last year from the same acreage was only 36 tons and 1700 lbs., so this year has proven materially better than last in point of production, and our growers have every reason to expect a good price for their hops. A ton of green hops makes about 650 pounds dried and pressed. Chinamen are paid at the rate of \$1.02½ per lb. for picking green hops, which makes the cost of picking alone average about \$65 per ton for dry hops.

**COLORADO CORN.**—Register, Sept. 24: Mr. A. K. Frost, a gentleman who for some months has been visiting in this valley, sent back to his home in Colorado for some seed corn of the "Colorado dent" variety. It was planted the last of May, and harvested the 5th of September, on Mr. Stagg's place above town. The ears are long and well filled with large, plump kernels, and Mr. Frost thinks it far ahead of any corn yet grown in California.

## Sacramento.

**WHITE LABOR.**—Record-Union, Sept. 24: John Rooney, of Brighton, hired white men exclusively to pick his hop crop this year. Some of the men were worthless tramps, but 42 remained until the end of the job, their earnings averaging \$1.50 per day. Mr. Rooney is well satisfied by the experiment that Chinese are not a necessity. Hon. J. Routier has a force of 35 white men picking grapes, and they are doing the work well.

## NEVADA.

**MOUNTAIN FRUIT.**—Record-Union, Sept. 23: A sample box of peaches and pears grown at Nevada City, and sent to Sacramento by the Nevada County Land and Improvement Association, was yesterday inspected with most gratifying results. The peaches measured about 12 inches in circumference, were of the late Bilyean variety, very highly and beautifully colored, and of most delicate and melting flavor. Certainly nothing finer has been seen in Sacramento this season, and they would be exceedingly hard to equal. This shows that Nevada City is in "a most favored peach belt," and in late fruits will come speedily to the front. The pears were Bartlett's, and extremely choice in flavor, and large and attractive in appearance.

**WILD CHERRIES.**—Reno Gazette, Sept. 22: The Truckee river is full of wild cherry trees and they are loaded with the finest kind of fruit this year. It would be a good crop to gather and would make a fine change for rich people's tables.

**THE Red Bluff Flour Mill,** which has just been renewed in every part except the motive power, has started up. The mill is an all-roller mill. Three grades of flour will be produced.

## FRUIT MARKETING.

## When to Ship Fruit for Eastern Markets and What to Ship.

[Special Correspondence RURAL PRESS.]

**EDITORS PRESS:**—For the past few days your correspondent has been making a tour through the fruit belt of Michigan. Through the courtesy of Hixson & Co., formerly Hixson, Justi & Co., of San Francisco, and who, by the way, are establishing a large and highly successful commission business in Chicago, the writer was accompanied by one of their staff who is thoroughly familiar with the entire Michigan fruit country and its growers. An excellent opportunity was thus afforded to see all points of interest and to obtain reliable and valuable information.

Before entering Michigan the writer was filled with the traditional California conceit, and honestly believed in common with thousands of fellow-Californians that there is no other spot in the land so highly favored for fruit, and especially peach culture, as California.

Less than 48 hours' observation in the fruit regions of Michigan, has, however, largely modified his views, and to-day he is ready to confess that Providence did not intend giving California exclusive control of all fruits, but that our Eastern brethren have been permitted to share some of our privileges.

The present and future possibilities of fruit culture in Michigan is a complete revelation. Until within recent years it was believed that the land now devoted to fruit-raising in Michigan had little or no value; and for a time it looked as if the numerous thrifty towns and cities around Lake Michigan, and which for years had been supported by the lumbering interests that had now become exhausted, would meet the fate of so many California mining towns that have lived and died with mining. But experiments in fruit-growing soon demonstrated the fact that a large belt of land, containing about 50,000 acres, around Lake Michigan, is peculiarly adapted to the culture of the peach, quince, plum, pear and vine; and, as a result, it is now estimated by reliable authority, including such well-informed and highly-intelligent growers as Mr. Dykeman, of South Haven, Michigan, that this acreage, if fully developed, might, in a favorable year, yield 25,000,000 10-pound baskets of peaches—enough to almost supply the whole country. The yield may never reach these figures on account of the various drawbacks incident to peach culture; but, undoubtedly, the increase in production will be very large. The Michigan peach crop for the present year is estimated at 5,000,000 10-pound baskets, or but one-fifth of the possible yield of peaches that may, in the near future, be produced in this vicinity. Then other States have a supply of peaches—Ohio, Delaware, Western New York, Indiana, Kentucky, Missouri, Kansas, all of the Southern States and the Maryland regions. This last region already raises immense quantities, and ships largely to the West; but when the peaches from Michigan come in (the latter part of August) these Eastern peaches cannot compete in the market, neither can the Southern.

From the above facts the growers of California must see how delusive is the idea that the East can use all the fruit California may raise. The sooner the California fruit-grower understands that his fruit is from five to seven days' transit from the Eastern market and that it has a restrictive tariff against it of from one and a half to three cents a pound for freight, the sooner will he begin to accommodate his products to these unalterable circumstances. California's products have had a vast market before them, but its growers must learn

## What to Raise, When to Ship, and How to Ship.

California's strongest point in peaches will be to raise for export the earliest good shipping varieties, which can be marketed East in competition with the South and Southeast. She cannot hope to compete with Michigan in the later market, which begins about August 15th. After that date it is unwise to ship any but a very limited quantity of the finest and largest peaches. The writer has seen choice, selected Michigan peaches sold at 70 cents a 10-pound basket by the side of Vacaville peaches one-third less in size for which \$1.75 was demanded for a 20-pound box. Michigan is also destined to be a strong competitor in late pears.

It is evident that for several years past the Michigan peach-grower has made by far more money than his fellow-grower in California. The Michigan grower's returns for peaches have averaged four cents a pound, or \$80 per ton, and with an average yield of three tons to the acre, his income has been \$240 per acre. Deducting 25 per cent for cost of baskets, picking and packing, there remains a net return for peaches on the tree of \$180 per acre. No wonder that choice peach land in the Michigan belt is not in the market, and no wonder that with Chicago, which is one of the best markets in the world, right at their doors, the Michigan peach-grower will entertain no reasonable offer for his land. As many as 40,000 10-pound baskets of peaches have been received in Chicago, and disposed of at fair prices within 24 hours. The holdings of orchard lands in Michigan are principally in small parcels, the largest

being about 80 acres, and the average from 30 to 40 acres.

## The Canning and Drying of Peaches

For market has thus far not been attempted by Michigan growers, and is not likely to be so long, as their peaches will bring anywhere near present prices in their green state. This field is therefore likely to continue in the hands of California growers and deserves much attention. The present Eastern market for dried fruits is in excellent condition. Dried apricots especially are very scarce and in good demand.

## Grapes.

Vast quantities of Concord, Catawba and Isabella grapes are also raised in Michigan and vicinity, which can be retailed at five cents a pound with profit to the grower. The lowest living price that California grapes can be retailed East is 10 cents a pound. Should they be sold here at a less retail price, then it must be done at a loss either to the grower, shipper or retailer. Hence may be seen the folly of shipping to the Eastern market such grapes as must come into competition with their home products—such varieties as the Black Hamburg, Black St. Peter, Black Pinot, Malvoise and kindred small black grapes which can be sent east of the Rockies only at a loss to grower or shipper. It will be the height of wisdom on the part of California growers who now have more of the above varieties planted than the home market can use to promptly graft them either into wine grapes or Muscats or Tokays.

Southern California sent several carloads of irrigated grapes this season to the Chicago market, which proved almost total losses. Such experiences have thoroughly demonstrated the fact that Southern California is entirely out of the grape market for Eastern shipment, and in that branch of industry can never hope to compete with the northern part of the State. The only salvation for growers who have more irrigated grapes than the local California markets can use is to graft them into varieties suitable for raisin-making. Persistent shipping of such products East can only result in a direct loss to the shipper, a depression on the price of good grapes, and a serious injury to the hitherto fair fame of California fruit.

The grower who thinks he can push anything he pleases on the Eastern market and get a profitable return makes a sad mistake. He can only hope to realize fair prices by putting brains and conscience into his fruit boxes. If he fails to do this, he not alone does his more intelligent and conscientious neighbor (whose fruit is sold alongside of his) a serious injustice, but he also suffers a severe penalty in the way of highly ruinous returns. It pays better to let poor fruit rot in California than to let it rot here and pay from one and a half to three cents a pound freight for the privilege.

Your correspondent is now on his way farther East, and in the next letter hopes to give your readers some idea of the prospects for California green fruits east of Chicago.

H. WEINSTOCK.

Saugatuck, Mich., Sept. 19th.

## Thinks a Great Deal of the "Rural."

Inclosed with an original article, which we elsewhere print, there came one day last week a personal note, saying: "We have taken your paper a number of years and think a great deal of it."

It is pleasant and encouraging to those engaged in the conduct of such a journal as we mean the RURAL to be, to receive words of approval and esteem from sincere habitual readers. We are seeking ever to keep our patrons informed of the best ways and means discovered of treating soils, plants, crops and live-stock, and thus to make the rancher's toil at once lighter and more telling. We afford in our columns opportunities of exchanging views and experiences, which are well improved by our supporters and helpers on many scattered farms, and we also try in our "Home Circle" and editorials to foster such feelings and maintain such principles as purify and ennoble character, and strengthen and sweeten human lives. Meanwhile, we thank every friend who both values the RURAL PRESS and cheers us with outspoken assurances that our labors are doing good.

**ALFALFA AS A FERTILIZER.**—A. Ft. Collins correspondent of the Nevada State Journal gives, in proof of the value of alfalfa as a reviver of the soil, facts furnished on the farm of James Culbertson. After nearly exhausting the soil by annual grain-cropping, he put a portion of his farm into alfalfa four years ago. The other day the wheat from five and one-half acres was thrashed, and the yield found to be 48 bushels per acre, besides 12 bushels of alfalfa seed from plants which sprung up again after plowing.

**YIELD OF YOUNG PRUNE TREES.**—Some weeks ago we had an item about the early bearing of peach trees on the place of J. W. Briggs, of Visalia, and now we have a letter from Mr. Briggs giving figures of the yield of his three-year-old prune trees. He states that he picked a row of 17 trees and obtained 3600 pounds of prunes. One of the trees, which was weighed separately, yielded 366 pounds.

## Shasta and Contra Costa at the Mechanics' Fair.

It will be remembered that a neat display of Shasta county products was made in this city at the time of the G. A. R. encampment, and described by us the week ensuing. The less perishable of the articles comprised in this exhibit were soon afterward removed from the Immigration Association's rooms to the Mechanics' pavilion and put in place there with a fresh supply of fruits.

The fossils, quartz and ores were disposed along the base of a terraced stand, with specimens of the vegetables raised in the county. Above them stood glass jars holding samples of the soils and waters, of grain, pulse and nuts; while numerous tall sheaves of grass and cereals crowned the structure.

On an adjacent table were displayed a dozen plates of apples, among which were Ballflowers, R. I. Greenings, Baldwins and Roxbury russets; as many more of pears, Bartlett and Vicars being most prominent; and of grapes, Mission, Tokay, Muscat, Black Prince and Isabella. Peaches, plums, nectarines and blue figs also were represented.

A showy feature was the cotton plant, set in its box of earth, with the bolls burst open and the clean white fiber foaming forth abundantly.

As a county exhibit, this ranked next to those of Sonoma and Placer, winning a silver medal and a cash prize of \$100.

Although the display from Contra Costa was an afterthought, having been brought in by Mr. C. C. Swain subsequent to that county's fair, it proved fine and beautiful. The grapes included superb bunches of the more common sorts, with Sultana, Golden Chasselas, Johannisberger and Syrian; and Martinez showed clusters of the Palestine variety, which, as they lay extended across two plates, measured nearly two feet in length.

From Martinez, also, came green oranges, lemons and limes, borne on boughs set in jars of water. With the fruit on these citrus twigs, some few blossoms were intermingled.

The pears and apples, the peaches and plums, were, of course, like the grapes, subject to more or less change, according to their keeping qualities; but the places of those that fell out of service, as the days drew on, were filled with handsome reinforcements. A few Japanese persimmons were shown, though it was not yet the time of their ripening. There were almonds, and bearing branches of preparturiens walnut and French chestnut, and Florida sugarcane. One sacked cutting of a Tokay vine, planted last March, and dug in September, had grown meanwhile to be 10 feet long. The chief contributors to this exhibit were L. I. Fish, Theo. Wagner, H. Raap, B. J. Merle, H. McBride, Edwards Bros., W. Dukes, R. Hastie, A. A. Bailey, A. E. Austin, and M. R. Barber. R. E. Rowland, of Oak Grove Farm, showed a dozen plates of apples, half as many of pears, two of quinces, and about 20 jars of exceedingly fine fruit in glass.

This county display aroused special interest and admiration, as revealing what can be accomplished horticulturally, without irrigation, within 35 miles of S. F., and must have enhanced in many observers their respect for the capacities of this section of California.

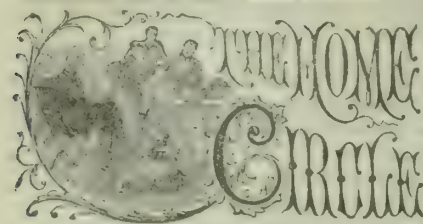
**SETTING FIRES IN THE BRUSH.**—A citizen, writing the Oroville Register about the numerous fires raging through the foothills to the north and east of that town, which are causing great destruction of timber and grass, as well as other property, says: "Many of these fires are the result of carelessness, while not a few of them, we have reason to believe, have been deliberately set. Now section 384 of the Penal Code of this State provides a fine not to exceed \$1000 or one year's imprisonment, or both fine and imprisonment, for setting a fire on State or Government lands, with the intention to burn off timber, brush or feed. We hope that any person knowing of any fires being set carelessly or otherwise will go before some Justice of the Peace, get out a complaint and have the party or parties dealt with according to law. If the people were to take this matter in hand, and vigorously prosecute some of these parties, we would have but few fires hereafter."

**SANTA BARBARA COUNTY FAIR.**—We acknowledge with thanks the receipt of complimentary tickets to the Santa Barbara County Fair, which will be held at Agricultural Park, October 5th to 8th. The catalogue and premium list are also received and indicate that preparation has been made for a creditable display, which we have no doubt will be made.

**HOLSTEINS FOR EXPORT.**—Mr. J. H. White, of Lakeville, sold two Holstein heifers to be shipped to the Sandwich Islands. Mr. White reports a growing demand for Holsteins. We expect to give a full account of a Holstein sale made at the State Fair as soon as we can get time to write out our notes.

**SETTLERS COMING.**—A Swedish colony, organized in Michigan, has just sent an agent into this State, fully authorized to locate Government land or buy for 30 families of settlers. Another man is here from Germany, looking for land for from 8 to 15 parties. Both these are bound northward.





James Russell Lowell.

[A lecture delivered by EDWARD BERWICK before the Chautauqua L. & S. C. in Pacific Grove, and furnished for publication in PACIFIC RURAL PRESS.]

I can give you no more concise epitome of the career of J. R. Lowell than that furnished by your motto, "For God and Home and Native Land." Prouder record than that of the Roman Caesar, whose "Feni, vidi, vici," represented the victory of brute force and personal ambition; always necessarily accompanied by a correlative of cruel suffering and personal degradation. Lowell's three-score years and ten spent for God and Home and Country represent the triumph of spirituality and self-sacrifice, and justify the universal record of that highest title in earth's hierarchy—the title of poet-patriot. A nobility that implies, not the vassalage and degradation of others, but their co-exaltation; the truly Christian nobility, not of being ministered unto, but of ministering.

You will perceive that I am not here to-day to make an apology on behalf of poets and poetry, or even on behalf of lovers of poetry. With the last I am proud to rank myself, and am bold to claim that the apology is due from those whose ignorance, obtuseness, or audacity permits them to sneer at poetry as "namby-pamby nonsense," or "sentimental rot." What professor of Christianity dares condemn poetry, when one-half of the book he holds most sacred is a collection of Hebrew verse? What student of history can afford to despise the poets, when to them alone he is indebted for the earliest annals of our race? What philanthropist can refuse to acknowledge the debt that humanitarianism owes to the poets, when the noblest aspirations for the race—aye, the noblest achievements of the race—have been, and are, due to the inspirations of the poets?

"Like strains of martial music  
Their mighty thoughts suggest  
Life's endless toil and endeavor."

Further, of the two phases of life, the poetic or the prosaic, which interests us the more? Is it Cinderella the prosaic drudge, scouring pans and sweeping cobwebs, that enchants us all, or the poetic Cinderella transfigured by the fairy godmother into the all-radiant princess? The drudgery of life is ever prosaic, the sunshine of life is poetry. And there is no health, bodily, mental or spiritual, without sunshine. Now, of all the health-giving, sunny poets, I find Jas. R. Lowell the freshest, the most inspiring, the sunniest. With Longfellow, he believes that they alone can please who follow nature, and he thus expresses his views in good old-fashioned Yankee. In his assumed character of Hosea Biglow, he says:

Mister Wilbur, sez he to me onct, sez he, "Hosea," sez he, "in litteryoor the only good thing is Natur. It's amazin' hard to come at," sez he, "but onct git it an' you've got everythin'." Wut's the sweetest small on airth?" sez he, "Noomone hay," sez I poety bresk, for he wuz allus hankerin' round in hayin'." "Nawthin' of the kind," sez he, "My leetle Huldy's breath?" sez I agin. "You're a good lad," sez he, his eyes sort of ripplin'-like, for he lost a babe onct nigh about her age—"you're a good lad, but 'tain't thet nuther," sez he, "Ef you want to know," sez he, "open your winder of a mornin' et any season, an' you'll larn that the best of perfooms is jest fresh air, fresh air," sez he, emphy-sizin', "athout no mixtur. Thet's wut I call natur in writin', an' it bathes my lungs an' washes 'em sweet whenever I git a whiff on't," sez he.

I intend to-day, as far as possible, to let Mr. Lowell lecture to you. There is an axiom in geometry and logic that the less cannot by any possibility comprehend the greater. Would that this axiom were more entirely received as a prime canon of criticism! Acting on this canon, Mr. Lowell shall to-day be his own critic, I proudly taking the office of exponent and paregryist.

I shall offer you no personal details of his private life. There is a morbid craving for such details that is not only useless but mischievous. Ever since Carlyle's death the mean, flaw-seeking things, that delight to honeycomb a noble reputation, have been busily striving to belittle one of the grandest prophets of the century. As though a divine message to mankind were less in worth because the human mouth-piece was that of a being tortured by the demon of dyspepsia, or because the toiler for humanity sacrificed his wife's energies as freely as he sacrificed his own. Living or dead, a man's heart should not be set "upon his sleeve for daws to peck at." So the proffered message be a veritable gospel, it matters little be the messenger fisherman or tent maker, carpenter's son or minister plenipotentiary. So the poets' thought assist to ennoble your life; it imports not to you whether the poet sink in self-seeking below, or soar in self-sacrifice above his ideal.

But those who know Mr. Lowell best tell us that he is, as he should be, "something better than his verse." One circumstance only hinders our due appreciation of his worth. He has the misfortune to be still alive. Would he but die, we should at once spring to a consciousness of how sublime a genius America had lost.

But "be he live or be he dead," I make no apology for preferring such a modern poet to one of the "grand old masters." With all due reverence to those "bands sublime," I regard Jas. R. Lowell as their equal—and something more. The rising generation will find in him the American Shakespeare, Burns, Milton, Butler and Hood. To him belong the human in sight of Shakespeare, Burns' sympathy with the poor, the pathos and humor of Hood, the causticity of Butler, and the sublimity of Milton.

And who shall deny to him a sublimity deeper than that of Milton? Between Milton and the miracle and mystery play-mongers, his predecessors, there is truly a gulf unfathomable. But is there not one equally unfathomable between the most realistic and magnificent anthropomorphism and the conception of a Deity who is spirit and truth—a God

"Who is in all that liberates and lifts,  
In all that humbles, sweetens and consoles?"

I trust to convince you to-day that in Mr. Lowell—

"The world has not lacked a poet  
Such as it had  
In the ages glad  
Long ago."

But let us distinguish at once between poets and poetasters or rhymsters. In a criticism on one of these latter, a master of irreproachable verbiage, and meter and rhyme, our poet writes:

"There comes Poe with his raven, like Barnaby Rudge,  
Three-fifths of him glories and two-fifths sheer fudge,  
Who talks like a book of iambs and pentameters  
In a way to make people of common sense damn meters.  
Who has written some things quite the best of their kind,  
But the heart somehow seems squeezed out by the mind."

Now if the heart of a man be squeezed out, you can generally afford to throw away the rest of him. Capacity to compose verse, however "light and jinglish," titillation of the ear with the sweetest of tinkling tintinnabulations, are the smallest of the real poet's functions. Of old the true poet—

"In his heart was ever meek and humble,  
And yet with kingly pomp his numbers ran  
As he foresaw how all things false should crumble  
Before the free uplifted soul of man:  
And when he was made full to overflowing  
With all the loveliness of heaven and earth,  
Out rushed his song, like molten iron glowing,  
To show God sitting by the humble hearth.  
With calmest courage he was ever ready  
To teach that action was the truth of thought,  
And, with strong arm and purpose firm and steady,  
An anchor for the drifting world he wrought.  
So did he make the meanest man partaker  
Of all his brother gods unto him gave;  
All souls did reverence him and call him Maker,  
And when he died heaped temples on his grave.  
And still his deathless words of light are swimming  
Serene throughout the great deep infinite  
Of human soul, unwaning and undimmed,  
To cheer and guide the mariner at night."

How far Mr. Lowell fulfills this, his ideal of the "grand old masters," let his own auto-criticism tell you:

"There is Lowell, who's striving Parnassus to climb  
With a whole bale of isms tied together with rhyme;  
He might get on alone, spite of brambles and boulders,  
But he can't with the bundle he has on his shoulders.  
The top of the hill he will ne'er come nigh reaching  
Till he learns the distinction 'twixt singing and preaching;  
His lyre has some chords that would ring pretty well,  
But he'd rather by half make a drum of the shell,  
And rattle away till he's old as Methusalem  
At the head of a march to the last New Jerusalem."

Now that's the poet you are all looking for. You want a leader to the New Jerusalem; you want the benefit of the last peep within the gates; you want a poet who can render light-some and glad some your march to Beulah land with his martial music, his "verse that clanks like armor in the charge." Not that Lowell presumes to solve the secrets of that bourne from whence no traveler returns. The kingdom of God within you is what he strives to develop and unfold.

"Rabbi Jehosha had the skill  
To know that Heaven is in God's will."  
"Tis Heaven must come, not we must go."

With Mr. Lowell, as with Christ, eternal life is the knowledge of God, and that knowledge it is his life's object to spread. With him the bard's true lyre is the nation's heart, and to reach that heart he is not ashamed to use the nation's everyday tongue to make their vernacular his verses' vehicle, to spio his speech with the relish of their homely humor. Says he:

"I ken write long-tailed if I please,  
But w'en I'm jokin', no, I thankee;  
Then, 'fore I know it, my idees  
Run helter-skelter into Yankee."

And, let me tell you, there is no writer living who can pack more fun in a line than he. Scholar though he be, he is no pedant. His is no nature mummy-wrapt in learning. Hood himself must give place even in the mechanical

trick of punning. Here is a sample on a grim subject:

WHAT AN AVERAGE GRAVEYARD CONTAINS.

"There lie levelers levelled, duns done up themselves,  
There are booksellers finally laid on their shelves;  
Horizontally there lie upright politicians,  
Dose-a-dose with their patients sleep faultless physicians;  
There are slave-drivers quietly whipped underground,  
There bookbinders, done up in boards, are fast bound;  
There card-players wait till the last trump be played,  
There all the choice spirits get finally laid;  
There the babe that's unborn is supplied with a berth,  
There men without legs get their six feet of earth;  
There lawyers repose, each wrapped up in his case,  
There seekers of office are sure of a place;  
There brokers at length become silent as stocks,  
There stage-drivers sleep without quitting their box."

Some may object to any jesting over the dead, but we jest over births; and if Solomon be right, a man's deathday is better than his birthday. Even the heathen proverb tells us that Death calls early those whom the gods love. Our false views of death constantly belie our creed. If we so will it, there is—

"Death, the divider, the unmerciful,  
That digs his pitfalls under Love and Youth,  
And covers Beauty up in the cold ground:  
Horrible Death, bringer of endless dark!"

But that's sheer heathenism, ancient or modern! Surely a truer aspect gives us—

"The reconciler, he who lifts the veil,  
The reuniter, the rest-bringer—Death."

In Mr. Lowell's creed the "conqueror worm" is not the hero of the "tragedy Man." With him, "the grave's real chill is feelin' life wuz wasted." And his idea of a wasted life is expressed in the soliloquy of an octogenarian, visited on his death-bed by two ghosts, not unfamiliar to some of us—the ghost of his dead youth and lost ideal:

"God bends from out the deep and says,  
I gave thee the great gift of life;  
Wast thou not called in many ways?  
Are not my earth and heaven at strife?  
I gave thee of my seed to sow,  
Bringest thou me my hundred-fold?  
Can I look up with face aglow,  
And answer, Father, here is gold?  
Yes, I, who now with angry tears  
Am exiled back to brutish clod,  
Have borne unquenched for four-score years  
A spark of the eternal God,  
And to what end? How yield I back  
The trust for such high uses given?  
Heaven's light hath but revealed a track  
Whereby to crawl away from heaven."

Not such has been our poet's garnering. The poet's career in its amplest sense has been his. Scholar, bard, humorist, satirist, patriot—all these, if you please; but philanthropist, will you, will you? The isms that he pleads guilty to may all be summed up in that grandest of isms—humanitarianism. His life's object has been to—

"Light in muddiest souls quick seeds of fire,  
And strain life's chords to the old heroic mood."

And this not for any purpose of self-aggrandizement: he asks

"no payment  
Of fame or gold, but just to wear  
Unspotted raiment."

Surely, the methods, the aims, the works of such a man are pre-eminently worthy of study. Did time permit, I should like to tell you something of his village school education. As usual, with the first small accession of knowledge came a large accession of conceit.

"Nothin' from Adam's fall to Huldy's bonnet  
That I warn't full-cocked with my judgment on it."

But his education by no means ended with his school days. Other things than "book-froth, which only seems to whet your hunger," have been his teachers.

"Since I began to scribble rhyme  
I tell ye wut, I hain't been foolin':  
The parson's books, life, death, and time  
Hev took some trouble with my schoolin'."

Distinctly American by birth and schooling, Mr. Lowell disdains to pour his native talent into old-world molds. He has no sympathy with Anglo-maniacs or devotees of Paris fashions.

"Though you brag of your new world, you don't half believe in it,  
And as much of the old as is possible, weave in it.  
You steal Englishmen's books, and think Englishmen's thought,  
With their salt on her tail your wild eagle is caught;  
Your literature suits its each whisper and motion  
To what will be thought of it over the ocean;  
The cast clothes of Europe your statesmanship tries  
And mumbles again the old blarney and lies:  
Forget Europe wholly, your veins throb with blood  
To which the dull current in hers is but mud:  
Let her sneer, let her say your experiment fails—  
In her voice there's a tremble, e'en now while she rails,  
O my friends, thank your God, if you have one,  
that He

"Twixt the old world and you set the gulf of a sea:  
Be strong-backed, brown-handed, upright as your pines;  
By the scale of a hemisphere shape your designs;  
Be true to yourselves and this new nineteenth age,  
As a statue by Powers or a picture by Page,  
Plough, sail, forge, build, carve, paint, all things make new;

To your own new-world instincts contrive to be true;  
Keep your ears open wide to the future's first call  
Be whatever you will, but yourselves first of all."

As Mr. Lowell here preaches so he practices;

but his motto is not "Our country, right or wrong." It is the right first—our country second.

"Before man made us citizens, great Nature made us men."

And his love of right and country inspires his soul and compels his utterance. Lacking such inspiration, his harp is silent.

"When I can't, I can't, that's all,  
For Natur' won't put up with gullin';  
Idees you hev to shove an' haul  
Like a druv pig ain't wuth a mullin';  
Live thoughts ain't sent for: thru all rifts  
O' sense they pour, and resh ye onwards  
Like rivers when south-lyin' dr' fit  
Feel thet th' old earth's awheelin' sunwards."

But the poet must not only be in sympathy with Nature. From off the "starry mountain peak of song," his clearer eye should see "in all earth's seeming woe the seed of heaven's flowers." It is his office, likening to the "inner flow of things, to speak to the age out of eternity." And to this Mr. Lowell has aspired—aye, has attained.

Probably there were no two literary men who did more to procure the abolition of slavery than Theodore Parker and Jas. R. Lowell. Of course, now abolition is an accomplished fact, to laud and admire it is no great virtue. But if we recall that just one short half century ago W. L. Garrison was dragged, with a halter to hang him with, through the streets of Boston by an infuriated mob, we shall realize that there was then need both of physical and moral courage to advocates of the cause. How fearless Lowell's advocacy was you shall hear. The capture of certain fugitive slaves near Washington thus fires his breast:

"Look on who will in apathy, and 'stifle, they who can,  
The sympathies, the hopes, the words, that make man truly man.  
Let those whose hearts are dungeoned up with interest or with ease  
Consent to hear with quiet pulse of loathsome deeds like these."

"Shame on the costly mockery of piling stone on stone  
To those who won our liberty, the heroes dead and gone;  
While we look coldly on, and see law-shielded ruffians slay  
The men who fain would win their own, the heroes of to-day!"

"Are we pledged to craven silence? O, fling it to the wind,  
The parchment wall that bars us from the least of human kind,  
That makes us cringe and temporize, and dumbly stand at rest,  
While pity's burning flood of words is red-hot in the breast."

"Tho' we break our Father's promise, we have nobler duties first;  
The traitor to humanity is the traitor most accursed.  
Man is more than constitutions; better rot beneath the sod  
Than be true to Church and State while we are doubly false to God."

"We owe allegiance to the State, but deeper, truer, more,  
To the sympathies that God hath set within our spirit's core;  
Our country claims our fealty; we grant it so, but then  
Before man made us citizens, great Nature made us men."

"He's true to God who's true to man. Wherever wrong is done  
To the humblest and the weakest, 'neath the all-beholding sun,  
That wrong is also done to us; and they are slaves most base  
Whose love of right is for themselves and not for all the race."

Such words are inspired words, full of the spirit—the holy spirit—of truth and love, and as such they are living words to-day and for all time. Shakespeare knew no truer inspiration, Burns no livelier sympathy with his fellow-men. But although I should wish to detain you further with samples of Mr. Lowell's slavery-abolition work, I wish yet more urgently to set forth his views on another abolition work—the abolition of war. You know there is no such effective weapon in the world as the tongue. "The word is quick and powerful, and sharper than any two-edged sword." And in the use of such effective weapons as satire, irony, humor and ridicule, Lowell is in no way inferior to the author of "Hudibras." In the world-known "Biglow Papers" he deals such unsparring, trenchant blows with these weapons as to leave no doubt of his earnestness of purpose. He realizes how the war trump's brawling clangor "fools the poor to hate the poor," and it is not his fault if the war trump does not get too cracked and battered to emit the feeblest sound in the future.

"Ez for war, I call it murder—  
There you hev it plain an' flat—  
I don't want to go no furder  
Than my testament for that.  
God hez sed so plump and fairly,  
It's ez long ez it is broad;  
An' you've got to git up airly  
Ef you want to take in God."

"Taint your eppylets and feathers  
Make the thing a grain more right;  
'Taint a follerin' your bell-wethers  
Will excuse you in His sight,  
Ef you take a sword an' dror it,  
An' go stick a feller thru,  
Guvment aint to answer for it—  
God'll send the bill to you."



"Wut's the use of meetin'-goin'  
Every Sabbath, wet or dry,  
Ef it's right to go a mowin'  
Fellow-men like oats and rye?  
I dunno but wut it's pooty  
Trainin' round in bobtail coats;  
But it's curus Christian dooty,  
This 'ere cuttin' folks' throats."

Lowell sees clearly how wars originate; how "the sore points on both sides are skillfully exasperated by interested and unscrupulous persons, who see in war the hope of personal profit or advancement." He hears the "always supercilious, often insulting, and sometimes even brutal" tones of certain journals and public men which incite nations to strife and sprinkle pepper on the raw wounds of peoples. He finds the British especial sinners in such matters, and he has at John Bull thus:

"Of all the sarse that I can call to mind,  
England doos make the most onpleasant kind.  
It's you're the sinner ollers, she's the saint—  
Wut's good is all English, all that isn't ain't.  
Wut profits her is ollers right and just,  
An' ef you don't read scriptur so you must,  
She's praised herself until she fairly thinks  
There ain't no light in Natur when she winks.  
Hain't she the ten commandments in her pus?  
Could the world stir 'thout she went, too, ez nus?  
She's all thet's honest, honorable and fair,  
An' when the vartoots died they made her heir!"

I should much have liked to have related to you the adventures of a full private in the Mexican War—Mr. Birdofreedom Sawin. You will recall the late Gen. Gordon's opinion of military glory: "I am persuaded," writes he, "that nine-tenths of military glory is mere twaddle—yes, ninety-nine-hundredths of it is mere twaddle." Mr. Sawin's experiences were vastly similar. The Mexican climate was not exactly to his taste.

"One day a reg'lar shiver-de-freeze, an' next as good ez bakin';  
One day a brilin' in the sand, then smoth'rin' in the mashes—  
Git up all sound, be put to bed a heap of hacks and smashes.  
But then, thinks I, at any rate there's glory to be hed,  
Thet's an investment, arter all, thet mayn't turn out so bad.  
But somehow wen we'd fit an' licked, I ollers found the thanks  
Gut kin' o' lodged afore they com as low down ez the ranks;  
The gin'als gut the biggest sheer, the cunnles next, and so on—  
We never gut a blasted mite o' glory ez I know on; An' s'pose we hed, I wonder how you're goin' to contrive its  
Division so's to give a piece to twenty thousand privits;  
Ef you should multiply by ten the portion of the bravest one,  
You wouldnt git more'n half enough to speak of on a gravestun;  
We fit an' licked, we're jest the grist that goes into war's hoppers,  
Leftenants are the lowest grade that help pick up the coppers."

Such being his estimate of military glory, you will not be surprised to hear that Mr. Lowell, in conjunction with all the poets and prophets, foresees—

"That down the happy future runs a flood  
Of prophesying light.  
It shows an earth no longer stained with blood,  
Blossom and fruit where now we see the bud  
Of Brotherhood and Right."

This must be the last extract I can give you, but you have yet a most inadequate idea of the riches awaiting you in this small volume—treasures of wisdom and knowledge, inspired lessons on a thousand subjects, burning words that should stir to action any man "whose faith in God hez arroy root that goes down deeper than his dinner."

I am sure that those to whom Mr. Lowell was already known will not have regretted this short renewal of their acquaintance; and those to whom I have had the honor of introducing Mr. Lowell, if they pursue his friendship, will have ample cause to be thankful for this introduction. Few other friends will prove so amusing, so instructive, so inspiring—never intrusive, never wearisome—always sympathetic, always elevating: the highest type of American manhood.

KITCHEN UTENSILS.—A "domestic note" in the New York Commercial Advertiser says: "When we are in our kitchens, surrounded by all the conveniences that the present day affords, we little think that many of the cooking utensils have remained the same for 1800 years. We fry, bake and stew in pans formed precisely like those used in Pompeii and Herculaneum. We even use the same shaped pans for eggs sur le plat as were used in those cities long before the fateful eruption of Vesuvius buried them in ashes and lava. Many of the ordinary utensils of the ancients are well worth the attention of our potters and tinsmiths. The jelly and pastry molds even of two centuries ago were of delicate classic form, quite different from the designs with which we are familiar, and far more tasteful. We have, to be sure, preserved in our syrup-jugs many of the fine models of the covered jugs of that epoch, but it is a little singular that the beautiful forms of the Pompeian buckets and jars have not been imitated for household use at the present time. Every detail of each article was always accurately carried out, even the strainers being remarkable for the beauty of their perforations. Geometrical combinations, frets and arabesques appear to have been the favorite designs."

## YOUNG FOLKS' COLUMN.

### About "Dickie."

Dickie was Stuart's pet, a gift from Aunt Mary—a tame squirrel with a fine soft, gray coat, and such a lovely tail, so broad and bushy! Stuart kept him in a revolving cage, and Dickie whirled and whirled so much that he wore this long, bushy tail all away. I do not suppose he cared for that; it is not likely he knew anything about it, but Stuart did and felt badly enough, for Dickie's beauty was quite gone.

Just about that time Stuart's mother made up her mind to go into the country to stay a few weeks, and planned to take Stuart and his sister Maria with her.

"And how would you like to take Dickie? The change may be good for his health," she said, smiling.

"For his tail, mamma? Would it grow, do you think?"

"If we could find a place where he could be taken out of his cage, I think it would."

"Oh! oh!" cried happy Stuart.

They went to board at Mrs. Green's, in a large, old-fashioned house on top of a high hill. On the ground was a little schoolhouse that had been built for the children of the family who once owned the place, but now it was not used at all.

"That's just the place for Dickie," said Mrs. Green. So there he was put, and what a good time he had there! Stuart and Maria went in to see him every morning. They had to open the door just a little way and throw some nuts 'way across the room, and while Dickie ran for the nuts they opened the door and went in. Then what a frolic they had! Dickie ran all over them, perched on Stuart's shoulder and on Maria's head, and ate nuts from their hands. You would laugh to see him take a nut even out of Stuart's mouth. Maria never encouraged any such liberties with herself, but there was one little trick Dickie would perform with her without asking leave: he would hide his nuts in her pockets and in the ruffle of her dress, and once he stowed one away in the braid of her hair.

After a few days his tail began to grow. The hair came out soft and bushy, prettier than ever. When mother looked out of her window across to the schoolhouse, she often saw Dickie sitting on the window-frame or whisking across it, and she could scarcely believe he was the same Dickie.

When Aunt Mary came to see them, she was so pleased with Dickie's improvement that she said he ought to have a companion; and pretty soon another beautiful gray squirrel was sent to the children.

"Her name is Nan," wrote Aunt Mary, "and I hope she and Dickie will live very lovingly together."

But alas! they did not. Dickie proved very selfish. His naughty behavior quite offset the beauty of his plume-like tail. He would snatch Nan's nuts right out of her paws, and chase her around the room and chatter, chatter most unamiably. Poor Nan had a hard time.

"Mamma, what shall we do?" exclaimed Stuart one day; "the squirrels do quarrel so."

"Reason with them," said mamma.

"Mamma!" laughed Stuart.

"Lay your commands on them."

"How can they understand? We shall have to punish them."

"How? You mustn't be cruel."

"Oh, no, mamma."

Then he and Maria had a consultation. They had been to see the educated canaries, and concluded if canaries could be taught, squirrels could be. They decided to get a cage and put it in the schoolhouse, and whenever they saw Dickie behave selfishly they would shut him up.

Mamma approved this plan, and they carried it out. When Dickie was unkind, they put him in the cage, telling him as well as they could, by voice and motions, that he was a naughty squirrel, and then they would pet Nan right before his eyes. They let her run up on their heads and over their arms and eat nuts from their hands.

Do you think this did any good? Well, it did. Dickie's heart was not changed, for he, only a little squirrel, had no heart to change; but he learned that he was to let Nan alone when she was eating her dinner, and that he must not chase her excepting in play. After that they lived in peace, and their broad, plume-like tails flourished.

Soon Stuart began to worry about the going home. "How shall we fix it, mamma?"

But it was already "fixed" very nicely. Mamma had already ordered a large cage made for them at home, with a tree instead of a run-around in the middle of it. The squirrels made the journey home in a box, and when they were put in their new house seemed very happy. They had not as much room as they had had all summer, but they ran about and up and down the tree and ate their nuts very contentedly.

"I think the squirrels must feel as Maria and I do," said Stuart one day, with a gloomy air.

"How is that?" asked mamma.

"Like prisoners, all crowded in. They've been running about in that large room all sum-

mer, and we've been having all outdoors for our playground, and now we feel shut up."

"They seem content and happy," said mamma, with a curious little smile around her lips.

"That means that we ought to be, too, I suppose," said Maria.

"And they do their duty every day without a complaint, I see."

"Their duty!" exclaimed Stuart. "What duties do squirrels have, I wonder?"

"They eat, drink, play and sleep."

"Ha, ha, if we had only that to do!" and Stuart laughed.

"Then you would be no better than they—no better than squirrels."

Stuart took in mamma's meaning and sobered down. "I am better than a squirrel," said he.

"We'll have to put one thing more in our list."

"Just so!" said mamma.

"Eat, drink, play, sleep and study."

"Exactly!"

"All right! You'll see that we will be as good in our way as the squirrels are in theirs," said Stuart resolutely.

And Maria chimed in, as she usually did, with all that her brother said, with her cheerful "That's so!"

## GOOD HEALTH.

### Pure Air and Pure Water.

EDITORS PRESS:—For the last 8 or 10 years I have given the subject that heads this article a great deal of thought and study. I have read and studied with a great deal of interest every article that I have observed in such journals as the *Scientific American* and other valuable papers. I have often wondered why our leading papers do not publish more sanitary articles—more to enlighten the people on the subject of health, more in regard to the cause and cure of diseases. Comparatively how few of the people fully realize the importance of pure air to breathe and pure water to drink. The recent powerful microscopic lenses, in the hands of eminent scientists, both in this country and Europe, have led to some wonderful discoveries in regard to the causes of certain diseases. They have proven beyond a doubt that a certain order of bacilli does exist in certain diseases, for these same diseases have, by inoculation of the diseased blood into the blood of the lower order of animals, been produced. It is said, also, that these bacilli are found in the dust upon our walls, and that they exist most abundantly in filthy soils, foul air and bad water.

Years ago the prevailing theory was that the atmosphere became loaded with the miasmatic exhalations from some stagnant pool of water or the upturning of some hitherto uncultivated soil, and thus produced fever and ague. No doubt the air does become contaminated in this way, and persons in locating a residence should see that the prevailing winds do not lift this bad air into their dwellings. But equally important is to find out whether their well is furnishing pure, healthy water. How often is the well dug too near the privy vault or the cesspool, located in close proximity to the well, to save the expense of a few feet of sewer-pipe. Water to be good and wholesome should be thoroughly aerated. Hence, I should discard all bored or tubular wells. McAlpin, the greatest living water engineer, and perhaps the best authority in the world, says: "The smooth casing affords a most excellent conduit for surface water." I should prefer the old-fashioned dug well, walled up with brick or stone, imbedded in cement, and top open to admit the air, with a good tight curb resting on ground, well rounded up to prevent all surface water from running in.

Just here permit me to quote from the report of the New Hampshire Board of Health, "The History of a Rural Well."

"Let us examine one (or a thousand) of our grand old farm establishments of a hundred years' standing. Clustered on a few square rods of land are the farm buildings, the dwellings, the wood-shed, wash-house, horse-stable, cow-barn, sheep-yard, swine-house, hen-house, corn-house, compost-heap, cesspool and privy. All these are arranged in a hollow square and in the midst is the farmer's well, with its curb, sweep and bucket, or its cover, pipe and pump. Around this center are concentrated all the activities of life upon a New England farm. Birth, life and death, bloom, fruit and decay of men and animals, of shrubs and trees, have transpired here for a century. All the waste has been dropped upon the surface, there to accumulate, decay and putrify. Then again, the bottom of the well, the very center of all these activities, must be at or below the level of the natural water basin in the immediate vicinity, and must rest upon or in clay, marl or rock impervious to water. The well is excavated through sand, gravel, drift or other earth pervious to water. All these conditions must exist or there can be no well. Let us picture the life upon these few square rods for 100 years.

"In and about these buildings live 300 creatures—men, beasts and birds. They are stabled here during winter, and yarded here during summer; here they take their daily food and drink, and discharge their daily waste. During 100 years there have been nearly 11,000,000 days of animal existence,

all within draining and leaching distance of the source of water supply of the whole establishment. The amount of waste that cannot be removed by evaporation, drainage or absorption is enormous. The fact must be apparent to the most skeptical that the earth beneath farm buildings, stables, cesspools and privy vaults, and about wells near the same, is surcharged with animal and vegetable waste. This point must be conceded by all. It needs but a moment's attention to convince the dullest mind that every establishment with only the usual sanitary precautions is resting on and above a mass of most dangerous filth, and that this filth is being daily leached into the bottom of the well."

I quote again from the *Sanitary Era*. The typhoid fever epidemic at Waterford is attributed to the pollution of the water supplied to a public well, by the careless washing of the utensils of a sick-room near it. From this well 40 school children and others drank water, and soon showed symptoms of the dread disease. Physicians were called from Chicago, Milwaukee and other cities, but still the progress of the epidemic was not stayed. A genuine panic existed, and business was partially suspended. The State Board of Health has been investigating the situation.

The whole village of Plymouth, Penn., was poisoned, and many deaths occurred by drinking impure water.

The writer, when a young man, was living in Springfield, Ky., when the cholera suddenly made its appearance and many deaths occurred. The inhabitants fled to other localities. I well remember the bad quality of the water. The wells and springs were totally dried up in the daytime, and enough water would accumulate in the night to furnish a scanty supply during the day. No other town in the vicinity that had a good supply of wholesome water suffered from the epidemic. I have always attributed that scourge to bad water.

I have written the above that the readers of your valuable paper may have their attention directed to these two important factors that contribute to good health. One of our best physicians says when he is called to visit a case of typhoid fever or diphtheria he at once proceeds to investigate the surroundings, and he can generally trace the cause of the attack to a broken sewer-pipe underneath the house that vitiates the air, or to the cesspool too near the well that poisons the water.

PRO BONO PUBLICO.

Santa Rosa, Sept. 20, 1886.

## DOMESTIC ECONOMY.

ASPIC OF LAMB.—Have two lambs' heads thoroughly cleansed and boil them. When done, cut them in neat, square pieces. Arrange these pieces neatly in a pie-dish, alternating with slices of hard-boiled egg, ham and beef, with some minced parsley, taking care not to place them too closely. Make a rich gravy of some of the water in which the lambs' heads were boiled, seasoning with pepper, salt, sweet herbs and a tablespoonful of mushroom catsup, adding half an ounce of gelatine which has been dissolved in a little of the gravy. Pour this gravy over the meat until the dish is full. When cold, set it in the ice chest and serve the next day, turning it out on a dish.

BEEF AU GRATIN.—Put two ounces of butter in a saucepan upon the fire; when melted, sprinkle into it one teaspoonful of minced onions, one teaspoonful of chopped parsley, three mushrooms finely minced, a pinch of salt, pepper and allspice, and two tablespoonfuls of fine bread-crumbs. Stir for two minutes and add enough broth to make the mixture liquid. Cut one pound of boiled beef in slices; lay these in a silver or tin dish; pour the mixture over them and cover with a thin layer of sifted bread-crumbs. Put small bits of butter here and there on the top, and bake in a good oven for 15 minutes. Serve hot.

FRUIT PUDDING.—Chop six apples fine, grate six ounces of stale bread, add six ounces of brown sugar, six ounces of currants washed carefully and floured; mix all well together with six ounces of butter, a cupful of milk and two cupfuls of flour in which two teaspoonfuls of baking powder have been thoroughly mixed. If too thick, add more milk in mixing. Spice to your taste. Put in a pudding bag, tie loosely and boil for three hours. To be eaten with cold sauce made of butter and sugar stirred together, a cupful of sugar to one-half cupful of butter.

CRAB-APPLES.—Select perfect ones; pour boiling water over them, which removes the skin; lay them in water enough to cover them; let them simmer slowly until soft; take them out and drain; make a clear syrup, pound for pound; boil them in it till clear, lay them on dishes to cool, and place them in jars; cook the syrup a little longer, and pour it over the apples when hot; seal.

TEA CAKE.—Mix for 15 minutes four eggs with half a pound of sugar, half a grated nutmeg and as much powdered cloves as will lie on the tip of a dinner knife. Then add half a pound of dry and sifted flour, and mix thoroughly; have a greased or waxed tin, drop a tablespoonful of the dough at intervals upon it, and bake a pale brown in a moderate oven.





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Published by DEWEY &amp; CO.

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SAN FRANCISCO:

Saturday, Oct. 2, 1886.

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## The Week.

The darkening days and the "feeling" in the  
air bespeak the coming of the rains. No doubt  
the advance guard of the winter rains will soon  
be upon us. It behooves all who have produce  
exposed to house it without delay. The first  
rain is often light, though sometimes it attains  
soaking dimensions. After it there comes the  
most delightful autumn days, with the air and  
face of Nature cleansed from the dust of the  
long summer.

The week has been a busy one in the grape  
districts. The vintage is well under way and  
the raisins are spread out. To the raisin and  
dried fruit men the postponement of the rain  
for awhile would be a blessing. It cannot,  
however, be counted upon for the completion of  
the grape harvest, for the vine clings to the  
dying season with tenacity, and contests the  
advance of winter until the invader uses his  
keenest weapons.

The political thermometer mounts higher.  
More conventions, more candidates, more con-  
fusion in the minds of the electors as to which  
peculiar way they will save their country.  
One thing is happily assured—the country will  
be saved!

## The Brotherhood of the Soil.

Ideas are organic. They are like the mys-  
terious life-principle hidden in a seed that seeks  
to build itself a home to live in when placed in  
a goodly condition. Love bourgeons into the  
rosebower of home, the religious sentiment ef-  
fulges into a church, the love of life, liberty and  
property takes on the shape of law and govern-  
ment, and industrial interests find expression in  
all sorts of guilds and associations. As the  
State Grange is on the eve of meeting, it may  
be well to refresh our minds with the growth  
and development of an idea that has no parallel  
in history—an idea that has surprised its  
friends and alarmed its enemies by its rapid  
growth; one that bursts upon the sky like a  
comet and remains shining there with the per-  
manent brilliancy of the sun.

The Patrons of Husbandry came among us  
like the rainbow, born on the bosom of a reed-  
ing storm-cloud. The Civil War, that had  
dashed fire and blood like storm-spray over  
nearly all the homes in the land, left a  
wounded, draped and mourning people, with a  
longing for brotherhood such as had never been  
felt before. A great variety of fraternal orders  
has come of this impulse. The tillers of the  
soil have especially felt the thrill of aspiration.  
In the South and portions of the North the  
hoof of war had trodden down the hope of the  
field and vineyard, destroyed houses, barns and  
fences, and swept away the horses and cattle,  
leaving the people poor, helpless and deeply  
conscious of the need of sympathy. And then  
the fact that the vast national debt must ulti-  
mately be paid by the bone and sinews of the  
producers, made the necessity of a social and  
industrial union and harmony of interests, by  
the close bonds of association, become more  
and more apparent. Then the feeling had long  
been germinating that something should be done  
to enhance the comfort and attraction of rural  
homes, keep young men from flocking to the  
cities, improve and diversify the quality of  
fruits, grains and the breed of cattle and horses,  
reduce the expense of production, and pro-  
tect the market from systematic rapacity,  
discourage credit and litigation, and, in  
short, secure and develop the spirit of  
good-will, fellowship and brotherhood among  
the farmers. The immediate cause that gave  
parturition to the idea of a brotherhood of the  
soil was the danger to be apprehended from the  
gigantic monopolies that had possession of all  
the lines of transportation and travel, and held  
Congress and Legislatures firmly by the  
throat. The feeling that two or three men  
could meet in the room of a hotel, wine and  
dine, and then, by the skip of a pen, levy a tax  
on all the productive industries of the land,  
that the Czar of Russia would not dare at-  
tempt, was becoming unbearable. The present  
form of the Order seems to have hovered for  
some years in the brain of one O. H. Kelly, of  
Minnesota, then in the Department of Agricul-  
ture, and on the evening of December 4, 1867,  
it finally took shape by the organization of the  
National Grange, at Washington, D. C. The  
first dispensation for a Subordinate Grange was  
granted to an application from Harrisburg,  
Penn.; the second one from Fredonia, N. Y.; the  
third to a Grange at Columbus, Ohio; and the  
fourth to one in Chicago. Only 10 Granges  
were organized the first year, and at the end of  
the second the movement only numbered 31.  
From that small center of beginning has come a  
power that is felt on every acre of land and  
wave of sea. The necessity of some kind of an  
organization to protect the grain market from  
being manipulated in the interest of wheat  
rings and speculators was early realized among  
the farmers of California, and led to the forma-  
tion of local clubs and the Farmers' Union. But  
it soon began to appear that greater privacy  
would be indispensable to carry on the business  
as contemplated. Hence the farmers were ripe  
for the Grange movement, and on the 15th of  
July, 1873, at Napa, the California State  
Grange was organized.

While the Order of the Patrons of Husbandry  
is not a political organization, and partisan  
politics are eschewed in all their meetings, still,  
as the New York Tribune says, it has "altered  
the political equilibrium of the most steadfast  
States." At first the monopolists and bread  
buccaneers jeered at the movement as a passing  
show, but in a few swift years they began to  
lay in a stock of umbrellas. And yet it is a  
mistake that many still seem to indulge in to sup-

pose the Grangers cherish any ill-will against  
transportation companies or any form of corpo-  
rate capital. It is only against extortionate  
freights and fares, the greed of middlemen and  
produce gamblers, they war. In what is popu-  
larly called the "Granger cases," they made  
their power felt and respected.

One of the most attractive features of the  
order is its non-sectional character. From the  
granite hills of New England to the wheat val-  
leys and orange groves of California, from Min-  
nesota wrapped in buffalo robes five months in  
the year to the rice and cotton fields of the  
South, this great brotherhood, like a giant  
banyan tree, has spread its boughs. An associa-  
tion so widely spread and so closely knit to-  
gether by kindred feelings and interests, con-  
stitutes one of the strongest bonds of national  
unity.

The settlement of personal disputes among  
members of the order by arbitration, instead of  
going to law, and wasting time and money in  
the courts where victory often hangs upon an  
absurd technicality of pleading or evidence, is  
a good example that might be followed in other  
forms of business with advantage. The admis-  
sion of woman to full membership has proved  
an incalculable good. The charm of her society  
not only enlivens the meetings, but her quick  
perceptions and intuitions often outrun man's  
slow-paced logic. Then home is made brighter  
and more cheerful when men take their wives  
and daughters into the fellowship of their busi-  
ness. Nowhere has the barrier to social inter-  
course caused by wealth, the despotism of fash-  
ion and freezing conventionalities, been so com-  
pletely cast down as in the Granger's hall. Here  
the rich and the poor, the large land-owner and  
his tenant, meet on the same level, sing the same  
odes, and eat at the same table. In short, the  
Grange is a household where the home feeling  
is cherished, and perhaps no Order has suc-  
ceeded in giving a more full and sincere ex-  
pression to the sentiment of fraternity, not  
merely on feast days and business meetings, but  
in all hours of adversity, in the fellowship of  
sorrow, when sad hearts are wrapped in silence  
and solitude in the presence of the ancient  
mystery.

## Fruits and Freights.

We publish in this issue another letter from  
Mr. Weinstock which treats of an aspect of the  
Eastern marketing of California fruit which has  
not been lost sight of by the thoughtful ones in  
the fruit industry, but which has not been gen-  
erally given the prominence it deserves. Mr.  
Weinstock's letter will serve to call general at-  
tention to the fact that the Eastern or Western  
States can really grow some fruits (strange as it  
may seem), and that it is important that Cali-  
fornia should give most attention to those kinds  
which do not come into direct competition with  
their home produce. The possibilities of the  
Michigan peach belt evidently impress Mr.  
Weinstock deeply. We suppose there is a  
chance for a wave of new climate there as well  
as in other parts of the East, where, within 25  
years, regions which produced fine peaches have  
become wholly unreliable as peach producers;  
but it is not, perhaps, wise to count too much  
upon such a wave coming at any set time. It is,  
however, wise to do just what Mr. Weinstock  
suggests—confer and counsel upon just which  
fruits can be profitably sent East, and which  
cannot. It was mainly this idea which led  
Prof. Hilgard to send the American Horticul-  
tural Society an invitation to hold a meeting in  
California, under the auspices of the State Hor-  
ticultural Society of California. Such a meet-  
ing would give a good opportunity to Eastern  
and California growers to discuss together what  
each should grow, that the markets could be  
well supplied, but ruinous competition avoided.  
This matter will, no doubt, have to be carefully  
scrutinized and action based upon conclusions  
thus to be reached.

There is another matter which is emphasized  
by the facts which Mr. Weinstock presents,  
and that is that the distance and cost of trans-  
portation cut a greater figure in the matter  
than has been lately claimed. When the trans-  
portation managers exhibited such a mellow  
disposition toward reducing freight rates, fos-  
tering the industry, etc., last fall, we have  
come to look upon the distance as not so great  
a matter and the freight rates as likely to ap-  
proach the vanishing point. This year's ex-  
perience does not warrant holding such views

any longer. The distance and time are great,  
and the task of paying freight charges when the  
cargo has hardly paid for packing and boxes be-  
comes a heavy one. It is very clear, indeed,  
now that it is worse than foolish to ship any-  
thing which will not stand the journey in good  
shape. It is also clear that the charge for  
freight remains one of the greatest factors in  
the handling of California fruit at the East.  
As we understand it, all the fruit which has  
gone on fast time, except on the contract fruit  
trains, has paid \$600 and upward per car. In  
view of this year's experience this charge must  
be pronounced exorbitant, and the contract  
trains have only been used to a limited extent  
by the growers. A number have been sent by  
the fruit shippers, but it does not appear how  
much they have gained by their enterprise.

The question returns, then, with renewed  
force upon what it actually costs to move  
freight, and how our fruit shippers can secure  
service at a fair advance on the actual cost.  
On this subject the San Jose Times of Sept. 23d  
says:

On July 6, 1883, the Central Pacific officials,  
in a letter to the Railroad Commissioners,  
stated that their average freight rates of 2.9  
cents per ton per mile were "reasonable and  
should not in any particular be disturbed." Soon  
afterward, on request of Commissioner  
Foote, Railroad Superintendent Townsend fur-  
nished data proving conclusively that for dis-  
tances of 200 miles and over one cent per ton  
per mile would afford an ample profit. Other  
authentic data indicate that about one-sixteenth  
of that sum is the actual cost, and they now  
carry wheat from San Francisco to New Or-  
leans, 2500 miles, for 35 cents per hundred  
pounds, or less than one-third of one cent per  
ton per mile. As in the case of school-books,  
the limit of cheapness will not be reached until  
the effort is made. The charge of \$600 per car  
for fruit to Chicago, New York, etc., is from  
two to two and a half cents per ton per mile,  
and could doubtless be reduced, with a liberal  
profit to the railroad companies, from half to  
two-thirds. But it is not likely that it will be  
unless by means of government railroads.

There is difference of opinion as to the wis-  
dom of government ownership of railroads, but  
if the data as to the cost of the service is cor-  
rect, we should not have to pay over \$200 per  
car for fruit from California to Chicago. With  
such a price there would be a better outlook for  
selling our fruit in the East, and growers owe  
it to themselves that they inquire diligently in-  
to this matter and discover by what means de-  
sirable results can be best and most speedily  
attained. We notice that according to the in-  
terviews in the daily papers, Mr. Huntington  
says that it is a great advantage to railroads to  
have freight rates very low. The Chronicle  
attributes these statements to him:

He says that he is carrying blue-grass hay  
from Kentucky to the racing stables at Sacra-  
mento and Palo Alto; ice by the trainload from  
Chicago to San Francisco; Hawaiian sugar in  
carload lots to the Mississippi valley; California  
vegetables, especially beans, to New York and  
other Eastern cities; and train after train of  
wheat at one-third of a cent per ton per mile  
from Port Costa to New Orleans. Of course,  
this new traffic generates local traffic; the move-  
ment of articles which were never moved before  
gives employment to men who must also be  
moved with their tackle, apparel and supplies.  
Hence a new source of revenue for the road,  
and new profits, which would never have been  
reaped if the old high tariff had continued to pre-  
vail.

Mr. Stanford made some such observations  
last year. It is Mr. Huntington's turn to say  
something kind. The only question which oc-  
curs to the grower is: "If it is so profitable to  
reduce freights, why is it not done?"

**STATE FAIR PREMIUM LIST.**—We print upon  
another page of this issue the awards made at  
the State Fair for agricultural exhibits. Owing  
to the length of the list, we have had to re-  
strict the mention to articles produced either  
directly by agriculture or directly for it. We  
have made due effort to secure correctness in  
the list as printed, but in a schedule covering  
so many entries there is a great chance for  
error. If our readers discover mistakes, we  
shall be obliged for information concerning  
them. This list of awards may be made very  
useful, especially in the line of live-stock, to  
point out who is breeding certain kinds of an-  
imals, etc., and it is certainly due to those who  
take the trouble to exhibit their goods that the  
list of awards be carefully looked over.

**FIRES in the woods and on the mountains are**  
frequently reported, especially in the northern  
half of the State.



## State Horticultural Society.

The regular September meeting was held on the 24th, in Irving hall parlor, S. F., Vice-President Hatch in the chair. W. H. Pepper, of Petaluma, G. M. Gray, of Chico, and D. H. Lennox, of Colusa, were elected members.

I. A. Wilcox, of Santa Clara, called the attention of the society to the announcement that the American Horticultural Society would hold its next meeting in February, 1888, in California, and stated that he, on behalf of the Horticultural Hall Association, of San Jose, of which he is a member of the Board of Directors, had extended the American Society the use of the hall, in San Jose, for their meetings. He suggested that the State Society recommend that the meeting be held in San Jose. The secretary stated, for the information of the members, that President Hilgard had tendered the American Society the invitation, on the part of the California State Horticultural Society, which led to the selection of California as a place of meeting. The availability of different places in the State for holding the meeting was discussed by several members, and finally, upon motion, further discussion of the matter was postponed until the next meeting of the society.

## Stocks for Budding and Grafting.

The discussion of the stated subject for the meeting, "Stocks for budding and grafting fruit trees," was opened by James Shinn, of Niles. He spoke first of the general importance of the subject and the fact that so far as possible it was best to observe natural relationship in the selection of stocks for scions. The apple is natural to the apple, the pear to the pear, and so on. If deviation is made from this rule there should be some good reason for it, and there are very important reasons for deviation in some cases. Sometimes reasons for deviation which are of force in other States do not exist in California. An example of this is the working of the pear on quince stock. In this State pears do well on pear stocks and there is no reason for recourse to the quince.

The importance of choosing a good stock is shown in the losses which result from a stock not suited to the conditions, or from inharmony between the scion and the stock. He saw recently, in Sacramento, a number of trees in nursery rows in which peaches had been budded upon myrobalan. They had made a growth of about three feet, but now most of them were dying. Many are now thinking of putting the peach upon myrobalan, so that peaches can be grown upon ground too wet for the stocks usually used for the peach; but will it succeed upon the myrobalan? That is a question which is of great importance to determine. There are many cases of inharmony between scion and stock. The Quackenbos plum used to be budded on the peach, and it grew nicely at first, but when first in bearing would die when the fruit was nearly full-grown. He had noticed this in other orchards than his own.

Mr. Rock, of San Jose, being asked for his observation on this point, said he remembered a row of Quackenbos plum on peach stock as far back as 1860. The trees bore six or eight crops, but one year, when they had an extra heavy crop on, the wind blew off the tops at the connection with the stock. As for the apricot on the myrobalan, he knew of trees six years old which were doing well.

Mr. Hatch, speaking of apricot on peach stock, said he had observed scale on the peach below where the apricot wood began, but there were no scales on the apricot wood. On the other hand, speaking of gophers, Mr. Hatch and Judge Blackwood said they had seen cases of the gopher avoiding the peach root, but gnawing off the apricot bark and girdling the tree above the peach wood.

Mr. Wilcox stated that on his low, moist land in Santa Clara the myrobalan stock was the best for any kind of plum or prune. It does not sucker. For heavy land, where there is much water, or where there is a little water, he prefers the myrobalan root, as it seems to be hardy and able to thrive in either situation. The peach stock he thought adapted to high, well-drained lands. He said with him prunes grew faster on apricot roots than on myrobalan, and he was prompted to think well of the apricot stock, even in his moist, low location.

Mr. Pepper and Judge Blackwood could not approve the apricot root for such soils, and Judge Blackwood spoke of the liking of the

gopher for apricot wood as a fatal objection to its use.

## Address of W. H. Pepper.

Mr. Pepper, of Petaluma, addressed the meeting as follows:

The subject of fruit-tree stocks, suitable and unsuitable, is one of very great importance to the fruit grower. Many thousands, I may say, hundreds of thousands of fruit trees have been planted on this coast in the past four or five years that were worthless from having been grown on unsuitable stocks. For instance, the apricot and plum on almond, the plum on apricot and peach, etc. The peach may do as a stock for the plum in some localities, but it does not answer in my section. I have lost two sets of plum trees on peach stocks, whereas, in the same grounds, I have plum trees in good health on the Canada plum stock that were planted 25 years ago. The peach root does not stand wet winters as well when the plum is worked on it as it does when used for the peach. The peach root water-logs and drowns out more readily when used as a stock for the plum than when used for peach or almond. The probable reason is because the plum does not commence to grow as soon and take the early flow of sap as readily as the peach and almond; hence the greater liability to water-kill. The apricot and almond are not suitable in this section as stocks for any kinds of fruit. Water kills the apricot and almond more readily than any other kinds of fruit-tree stocks that I have handled.

The peach makes the best stock for the almond. All of the old almond trees in this section (many of them 18 to 20 inches in diameter) are on peach roots.

The apricot takes readily to the myrobalan plum, and, all points considered, I believe makes the best stock for the apricot; the peach is the second best—possibly in a few localities preferable.

The peach, so far as my experience reaches, is not successfully grown on other stock than the peach. I have tested several kinds of plums as stocks for the peach, but have found none satisfactory. I have tried two of our native species, the Canada (*Prunus Americana*) and the Texas (*P. umbellata*); also St. Julian and other strains of the same species (*P. domestica*).

Seedlings from Bradshaw, Columbia—Pond's Seedling—make very good stocks for the plum, and the peach does better on this kind of plum stock than any I have tried.

The plum, until the past few years, has been propagated principally upon peach stocks and Damson plum suckers. The myrobalan plum stock is found to be the best one for this coast. It is not inclined to sucker from the root, is of rapid growth and attains a large size for a plum tree. Much has been said and long articles written about the "Franc myrobalan" or the genuine kind. The true kind is *Prunus Myrobalana* (the cherry plum). But what is the cherry plum? Downing says it is a very distinct species, growing rapidly, with slender shoots, small leaves, with a spreading head. Paxton, in his botanical dictionary, classifies it as a variety of *Prunus domestica*. I have no other works mentioning it. Its seedlings, like all other tree seedling, differ in size of leaf and habit of tree, and, like other species of plums, differ in size and color of fruit—some yellow, others almost black, while the prevailing color is a lively red. The strain from which I am growing my seedlings is the best that can be produced. I selected extra strong growing seedlings, and planted in orchard a few years ago. Some of the trees are 8 to 10 inches in diameter, 20 feet high, with heads covering 25 feet in diameter.

Plum stocks from cuttings is no new thing with me. I grew plum stocks from cuttings of the Imperial gage over 20 years ago and tried them. I found many of them would form a mass of fibrous roots at the lower end of the cutting, and when transplanted failed to send out strong supporting roots. I also find this to be the case with myrobalan stocks grown from cuttings. I see no need of any nurserymen using plum stocks grown from cuttings when first class seedlings can be procured for \$10 or \$12 per thousand.

Good, strong-growing seedling stock is the best to propagate on in all kinds of fruit-tree growing—apple seedlings for the apple and pear seedlings for the pear. Seeds should be saved from strong-growing, vigorous kinds only. Japan pear seedlings are being tested here for growing the pear on. They are more robust on the start, continue growing late in the season, and may be budded later in the season than common pear stocks. Whether they will continue their vigorous growth for years and prove superior as stocks for the common pear is yet to be tested.

The cherry: The Mazzard and Mahaleb are both used as stocks for propagating the cherry. In my experience, I find the former preferable. The Mahaleb is not so spreading in its roots as the Mazzard. Trees worked on it cease their annual growth earlier in the season and the wood becomes more thoroughly ripened before cold weather comes on, which makes it preferable as a stock for cold countries. The cherry with me ripens about 10 days earlier on the Mahaleb stock than on the Mazzard, and the fruit is usually smaller.

In the above remarks I have barely touched upon one of the most important points pertaining to fruit growing, namely, quality of stocks.

## Discussion.

Mr. Pepper illustrated his remarks with roots of the various plum stocks he alluded to. He

spoke of the too prevalent practice of nurserymen to use second and third-class seedling stocks and force them into large growth by the free use of water. This he strenuously objected to. He believed that a much smaller top growth upon a first-class selected stock and the growth made without irrigation would yield a much more vigorous tree. He condemned also the root cuttings upon which too many nursery trees are grown. He thought to get a good tree it was necessary to use the natural root crown of the seedling, and not a distant piece of the tap root or a lateral. A tree must have a good bottom if it is expected to be long-lived and vigorous. He makes his nursery rows six feet apart, and has the trees 10 inches apart in the rows. In this way you can get better trees than by having the rows four feet apart and then using irrigation to force them. Tree planters should be willing to pay the nurserymen a fair price for a first-class tree. It would be much more economical in the end than buying cheap trees.

Mr. Wilcox spoke of the difference between the myrobalan and the cherry plum as he understood it. The cherry plum makes a rank growth and has a large leaf; the imported myrobalan has a small leaf.

Mr. Hatch, speaking of plums from cuttings, remarked that he had good Columbia plum trees from cuttings.

Mr. Rock said it was hard to make the Columbia unite well with any stock. It does best on myrobalan.

L. W. Buck, of Vacaville, said the Columbia plum on peach stock was not satisfactory, though the peach stock was generally preferred in his locality.

Mr. Rock, being called upon for his views on stocks, said that the orchardists were the proper ones to discuss the question, because they are the ones who observe the aftergrowth of the trees when in orchard. The nurseryman has to use all stocks to suit the demand of his customers. He has to sell what is called for, and customers have their own ideas as to what they want. He would say, however, that his experience approved apricot and almond stocks on thoroughly-drained soils, or where it is deep to water; on low, moist land they will die. He considered the myrobalan best for general use. As for the peach on myrobalan, he would repeat what he said at the last meeting, that 10 to 15 per cent had been lost in the nursery in peach trees worked on myrobalan that had not well united. He had peach trees which had been growing six years on myrobalan roots on wet land, where peach stock had died from too much water in the winter. He considered the apricot root satisfactory on thoroughly well-drained soil, free from alkali. Plum roots will stand a certain amount of alkali in the soil.

Judge W. C. Blackwood, of Haywards, being called upon, stated that he had an orchard of various kinds of plums and prunes on myrobalan—a good orchard. He had also about the same varieties on peach stock, 13 years old. They are double-worked; first the Imperial gage was put upon the peach root, and then the varieties desired were worked upon the gage. These varieties are Washington, Jefferson, Columbia, Coe's Golden Drop, Yellow Egg, French and Italian, or Fellenberg prunes. All are now doing well. The land is a clay loam all the way down to water, which is reached at 45 feet below the surface. The apricot he considered good stock for the apricot, on dry but not on wet land. It is very sensitive to water and will not do well where water will stand even for a few weeks. As for the gopher and the apricot root, he had an old orchard, some trees on apricot but mainly on peach. There is not now a single tree remaining on apricot root—the gophers took them all.

## Stocks for the Cherry.

There was a general talk on stocks for the cherry. Judge Blackwood pronounced the Black Mazzard best; the Mahaleb stock gives a small tree, bearing early, but for a standard orchard the Mazzard is best. Mr. Hatch asked if a tree on Mahaleb would last as long, and Judge Blackwood thought not.

Mr. Rock remarked that the Mahaleb stands a northern climate best, but here it is not as good as the Mazzard.

Mr. Hatch said he had Black Tartarians on Mahaleb stock; nice trees, but some are dying every year.

Judge Blackwood described the dying of full-grown cherry trees here and there in the or-

chards of San Lorenzo and Haywards. They are in the habit of cutting back quite freely every year, but this could hardly be the cause, for the trees were all treated about alike, but the deaths were here and there.

Mr. Pepper thought the cause was alkali spots. He had had such experience. As for the effect of the Mahaleb stock on the cherry, he thought it did not dwarf the tree as much as other speakers described. He has trees on Mahaleb 25 years old, and some of them 25 inches in diameter. On the Mahaleb the growth starts earlier and the wood ripens earlier in the fall, and for this reason stands more cold. In his soil it seems just as hardy as the Mazzard, but the Mazzard stock he considers preferable.

## Nomination of Officers.

Nomination of officers to be elected at the annual meeting in October were made as follows: For President, E. W. Hilgard; Vice-President, A. T. Hatch; Secretary, E. J. Wickson; Treasurer, R. J. Turnbull. Directors—James Shinn, W. C. Blackwood, John Rock, I. A. Wilcox, L. Coates, F. C. De Long, D. Lubin, L. W. Buck, L. F. Moulton, W. H. Pepper, W. W. Smith. Of the members named, five are to be selected to constitute the Board of Directors.

## Exhibits at the Meeting.

Mr. Hatch showed fruit grown upon a tree which was purchased for the Silver prune, and asked members to examine it and give opinion as to its identity or difference when compared with Coe's Golden Drop. Mr. Hatch said the fruit ripened from two to four weeks earlier than Coe's. Mr. Rock thought it different from Coe's, noting especially its smooth skin as contrasted with that of the Golden Drop. Messrs. Pepper and Blackwood could see no difference in the two plums. Mr. Hatch thought a distinction would hold both on the skin and on the time of ripening.

Mr. Shinn showed the Persian walnut and the Eastern "butternut." He showed also the Salway peach and a seedling sent by I. H. Thomas, of Visalia, which he names the "Excelsior." It has a resemblance to the Salway, but is firmer and better flavored and has less red about the pit. He showed also the Ringold Mammoth peach, a variety he thought as good as the McKevitt, but it curls badly.

Mr. Hatch alluded to the Roseville cling, which is a favorite with canners, who consider it from one-fourth to one-half cent per pound better than any other peach. Mr. Hatch admitted that it curled, but still bears more fruit than any other variety.

The subject chosen for the next meeting was "Fruit Drying and Packing and the Appliances Therefor," and the meeting adjourned.

## Agricultural Machinery at the Mechanics' Fair.

A broad space of floor, next the north wall of the pavilion and stretching nearly its entire length, was given up to displays of agricultural implements and machinery.

Nearest the entrance was the exhibit of G. G. Wickson & Co., consisting of a horse-power in motion, driven by steam; Ross hay-cutters, both hand and power; Scientific feed-mills and ranch blacksmith outfit, and improved dairy apparatus. The last-named was remarkably varied and complete, embracing the Stoddard churn—an end-over-end revolving barrel—in five sizes, both hand and power; the American churn, made at Westfield, Mass., a horizontal cylinder with dasher turned by a crank; the De Laval separator, and a host of lesser conveniences, such as milk-pails, calf-feeders and the patent hydraulic-pressed salt-rolls for livestock, sheltered by wee galvanized roofs.

Beyond, Arthur W. Bull showed a portable engine and a separator in motion. These were from the great factory of the J. I. Case Co., Racine, Wis. The engine (which took a silver medal as the best for general use of the three on exhibition) is adapted for burning either coal, wood or straw. There were a number of plows from the same shops—walking, sulky and gang plows, of both chilled iron and steel—and a riding cultivator. Mr. Bull also had a walking "vineyard gang" plow of his own make, and the "Farmer's Friend" gang, manufactured by H. B. Millmine, of Toledo; Nash & Bros.' "Acme Pulverizing Harrow," long familiar to readers of the RURAL PRESS; the Lansing Spring-tooth seeder of E. Bement & Son, and Sieberling & Co.'s Empire mowers.

Baker & Hamilton marshaled an army of ma-



chines, larger and lesser, in whose foremost rank stood a score of walking plows, both wooden and steel beams, of various make, with Eureka and Granger gang plows and the "Perfect" gang, steel beam. Here, too, were the side-bill plows of Knapp and of Kilgore; and the mighty Fresno ditching and grading plow. (This last and the "Perfect" gang took silver medals.)

Then came the Tiger mower, its cutters in rapid motion; the Tiger rake; the "Hollingsworth Tiger," a combined rake and tedder—all from the Stoddard Manufacturing Co., of Dayton, O.—and the Benicia mower. The Boss barrel churn, from Rockford, Ill., was whirling end over end. Also shown in motion were the Bronson thrasher, with Jackson's self-feeder attached (silver medal); the Benicia barley crusher, and the portable engine, for coal, wood, straw or oil, with Laufenburg's patent boiler. Farther on were the Benicia iron harrow, Climax disk harrow, Young's combined harvester (which won another silver medal), Buckeye cider-mill, feed cutters, etc., with the Triumph seed drill, Bain wagon and Gorham broadcast seeder and cultivator. They (Baker & Hamilton) were awarded the gold medal for best display of agricultural implements, besides lesser medals and diplomas quite too many to be here recounted.

The great 14 foot Perkins' windmill, gaily painted, served as a "banner on the outer wall" of the Hawley Bros.' Hardware Co. Beneath it were arrayed Deere plows, both wooden and steel beamed, walking and sulky, and cultivators in variety. Here was a large listing plow, which throws the earth on both sides alike—used chiefly on sugar plantations; a potato-digger, to be driven along lifting and sifting the "spuds" as it passes; and, chief of all, the magnificent "New Deal" four-gang plow, with steel beam and no tongue. Other noticeable objects were the Illinois tree-digger—to be drawn through a nursery tree-fashion, cutting top roots and laterals, wholesale; Stearns' vineyard plow; Knapp's revolving plows; the Taylor rake, self-dumping; the Farmer's and the Veteran corn-shellers, made by the Sandwich (Ill.) Co.; the Rice portable engine—prize straw-burner; the Schuttler wagon; Pitt's separator, and "Improved Hoosier" grain-drill.

This company also displayed two Adriance Buckeye mowers, from Poughkeepsie, one of which, having the wooden frame elegantly finished and painted and the metallic portions handsomely plated, is said to be the identical machine that won the gold medal at Philadelphia in 1876. Besides these were a Buckeye self-rake reaper, a Blake-Beebe Champion fan-mill, and feed-cutters, cider-presses, coffee-mills, lawn-mowers, etc., innumerable.

In P. P. Mast & Company's output, the most striking features were the Iron Turbine wind engines, whose peculiarly-shaped wheel utilizes the force of the wind as, they claim, past any other device of the kind, while the material and its treatment insure great durability. This firm showed Buckeye sulky-rakes—light in construction, but practically self-dumping; three or four varieties of Buckeye grain-drills, with force feed, gauge for regulating the quantity of seed sown to the acre (changeable in a moment), and "surveyor," registering the number of acres traversed. They, too, had superior cultivators, a potato-digger and a large assortment of the New Buckeye force-pumps, with patent brass valve-seats, which are claimed to work with less friction and to be simpler and more lasting than any others in vogue. Among the smaller articles in their display, the McCoy "Perfection" single, double and triple trees were noteworthy.

Passing out of the main hall into the machinery annex, among the whizzing steam-engines and splashing pumps, we soon came upon the Cyclone windmills. A small model was spinning swiftly round in the blast blown upon it by a Blackman's Ventilator Wheel—the latter being run by steam-power. They are now building 18 and 20 foot mills for the S. P. Co., and are confident that the latter size will irrigate four acres an inch deep daily.

Near these the Buckeye Down Binder was busily at work, tying knots in the strong manila cord for whoever wished to see its dextrous fingering—which earned a silver medal for its exhibitors, More Bros., of Hayward; and close by were the fine McLean orchard and field cultivators, shown by the agents, Frank Bros.

A few other articles were shown in the line of agricultural implements and machinery, but we believe the foregoing notes cover all the important exhibits of that class, unless it be the ever-fascinating incubators, which were in brisk operation, and drew around them the usual throng of curious watchers.

## State Fair Premiums.

We give below the awards at the State Fair, last week, for products in the agricultural and related industries:

### Horses.

Thoroughbreds, stallions—Best four-year-old, H. S. Sargent's Joe Daniels; 2d, T. Jones' King Daniels; best three-year-old, L. H. Todhunter's Monte Cristo; best two-year-old, F. Depoister's Blackstone; best one-year-old, C. Halverson's Daily Dimple; 2d, W. M. Murry's Brother to Collier. Mares—Best three-year-old, C. Halverson's Louise D; 2d, C. Halverson's Nellie Fashion; best mare colt under one year, C. Halverson. Families—Best thoroughbred dam with two colts, all thoroughbreds, C. Halverson's Maggie S.

Horses for all work, stallions—Best four-year-old, J. Sovereign, Woodland, Grover Cleveland; 2d, C. L. Fox, San Jose, Edinburgh; best three-year-old, W. E. Comstock, Pleasant Grove, General; 2d, Wm. Bundeen, Sacramento, Silver Leaf; best two-year-old, W. F. Bryan, Routiers, Comet; 2d, Walter Mastin, Davisville, Yolo Chief; under one year, R. J. Merkle, Sacramento, Bay Tim; 2d, A. D. Miller, Walsh's Station, Bay DeForest. Mares—Best four-year-old and one with colt, M. Wick, Oroville, Fly and colt; 2d, P. Russell, Brighton, Kate and colt; best four-year-old, W. E. Comstock, Lena Leinster; 2d, J. T. McIntosh, Chico, Solitaire; best three-year-old, W. E. Comstock, Dolly Douglas; 2d, A. D. Miller, Buttercup; best two-year-old, Ben. E. Harris, San Francisco, Edna; 2d, W. A. Munion, Dixon, Minnie; best one-year-old, A. D. Miller, Luella; 2d, W. A. Munion, Susie; best sucking colt, R. J. Merkle, Nan; 2d, A. D. Miller, Rosebud.

Draft horses, Normans—Best stallion, other than thoroughbred, with five colts, Irvin Ayres' Mambrino Wilkes; best dam, not thoroughbred, with two colts, M. W. Hicks' Mary. Horses—Best under one year, F. B. Chandler, Elmira. Mares—Best four-year-old with colt, F. B. Chandler's Bisch; 2d, T. Whitney's Gypsy; best four-year-old, J. T. Whitney's Gypsy.

Draft horses, Percherons, stallions—Best four-year-old, C. E. Porter's Bertem; 2d, L. C. Ruble's Damala; best two-year-old, C. K. Bailey's Black.

Draft horses, Clydesdales, stallions—Best four-year-old, C. Halverson's Canadian King; best three-year-old, Jas. Roberts' Duke. Mares—Best four-year-old with colt, J. Roberts' Jule; best two-year-old, J. Roberts' Damsel; best one-year-old, J. Roberts' Dolly.

Draft horses other than Normans, Percherons or Clydesdales, stallions—Best four-year-old, H. S. Madison Young's Donald Dinnee; 2d, R. J. Merkle's St. Lawrence; best three-year-old, R. J. Merkle's St. Lawrence; 2d, F. Cox's Black Prince; best two-year-old, W. L. Overhiser's Granger; 2d, F. Cox's Charley; best one-year-old, R. J. Merkle's Vandee, Jr.; 2d, A. J. Ogden's Napoleon; best under one year old, C. K. Bailey; 2d, R. J. Merkle. Mares—Best four-year-old with colt, R. J. Merkle's Fanchon; 2d, J. T. Whitney's Catch; best four-year-old, R. J. Merkle; 2d, J. T. Whitney; best three-year-old, C. E. Porter; 2d, H. H. Wilson; best two-year-old, C. P. Berry; 2d, R. J. Merkle; best one-year-old, Mike Judge; 2d, J. T. Whitney; best sucking colt, J. T. Whitney.

Standard trotters, stallions—Best four-year-old, W. M. Billups, Colusa, Tilton Almont; 2d, H. S. Beals, Sacramento, Berlin; best three-year-old, J. W. Martin, Yolo, Clay Duke; 2d, L. Whitmore, Woodland, Caliph; best two-year-old, Irvin Ayres, Oakland, Romain; 2d, C. B. Abrams, Biggs, I. L.; best one-year-old, M. W. Hicks' Waverly; best sucking colt, M. W. Hicks' Majesty; 2d, G. W. Hancock's Specie. Mares—Best four-year-old and over, F. T. Underhill's Acme; 2d, J. H. Tennant's Arctena; best three-year-old, H. S. Beals' Miller's Maid; best two-year-old, Irvin Ayres' Veronica; 2d, G. W. Hancock's Daisy; best one-year-old, R. McEnespey's Bridget Mc.; 2d, J. A. McCloud's Carrie Vernon; best sucking colt, M. W. Hicks' Mollie.

Jacks, jennies and mules; jacks four years—Henry Klemp, Pleasant Grove, Jumbo; W. L. Ashe, Stockton, Mocking Bird. Jacks, sucklings—Levi Carter, Ceres, Washington Eclipse, Jr.; W. A. Munion, Black Jack. Jennies, four-year-olds—Levi Carter, Julia; W. A. Munion, Fanny. Mules, spin of any age—C. P. Berry, Done and Bummer; W. A. Munion, Susie and Beauty.

### Cattle.

Durhams, bulls—Best three-year-old, Col. Younger, San Jose, Forest King; 2d, Hyde & Moore, Visalia, Oxford Duke Third; best two-year-old, Peter Peterson, Maxwell, Maxwell Chief; 2d, Col. Younger, San Jose, Third Kirklevington of F. H.; best one-year-old, Peter Peterson, King Phillips; 2d, R. J. Merkle, Sacramento, Lafayette; best bull calf, R. J. Merkle, Sacramento, Pat Henry; 2d, Hyde & Moore, Kaweah Duke Third. Cows—Best three-year-old, Col. Younger, Red Dolly Fourteenth; 2d, Willford Page, Petaluma, Belle Medico; best two-year-old, Col. Younger, Amelia Eleventh; 2d, W. Page, Peerless; best one-year-old, Col. Younger, Oxford Rose Sixth; 2d, Peter Peterson, Rosalie K.; best heifer calf, Peter Peterson, Jennie McL.; 2d, W. Page, Belle of the Mead. Herd—Best herd of thoroughbred Durham cattle over two years old, one male and four females, Col. Younger.

Jerseys and Guernseys, bulls—Best three-year-old, Thos. Ward, Oakland, William; 2d, H. S. Sargent, Stockton, Earl of Mameluke; best two-year-old, E. W. Maslin, Loomis, Rino; 2d, Thomas Ward, Oakland Chief; best one-year-old, Thos. Ward, William; 2d, Robert Beck, San Francisco, Roderick Dhu; best bull calf, Robert Beck, Fitz-James; 2d, A. L. Nichols, Sacramento, Ben Nevis. Cows—Best three years, J. D. Smith, Livermore, Susan Titus; 2d, H. S. Sargent, Daisy W.; best two-year-old, H. S. Sargent, Queenie; 2d, Thomas Ward, Lady Maud; best one-year-old, A. L. Nichols, Bellaire; 2d, H. S. Sargent, May Day; best heifer calf, H. S. Sargent, calf by Earl Mameluke; 2d, fawn calf by Bay Knight of St. Louis. Herds—Best herd of thoroughbreds over two years, H. S. Sargent, Earl of Lockford and four cows.

Devons, bulls—Best one-year-old, R. McEnespey, Chico, Salute. Cows—Best three-year-old, R. McEnespey, Mayflower; 2d, R. McEnespey, Princess; best one-year-old, R. McEnespey, Helene.

Ayreshires, bulls—Best three-year-old, Tyler Beach, San Jose, Narragansett Chief; 2d, Bement & Son, Linda Second; best two-year-old, Tyler Beach, Burton; best one-year-old, Bement & Son,

Ethelbert; second, Bement & Son, Campbell; best bull calf, Bement & Son, Elecior; second, Tyler Beach, Quicksilver. Cows—Best three-year-old, Tyler Beach, Prissy; second, Bement & Son, Stella; best two-year-old, Bement & Son, Sybella; second, Tyler Beach, Dina; best one-year-old, Bement & Son, Mirella; second, Tyler Beach, Medea; best heifer calf, Bement & Son, Ethelbert; second, Tyler Beach, Mattie B. Herd—Best thoroughbreds of any age, one male and four females, owned by one person, Bement & Son, Archie, Stella, Lady Faxon, Mariana and Sybella.

Herefords, bulls—Best three-year-old, Williams & Saxe, San Francisco, Poverty; best two-year-old, Williams & Saxe, Rocket; best one-year-old, Williams & Saxe, Fairfax; second, Williams & Saxe, Pleasant Wilton.

Holstein or Friesian, bulls—Best three-year-old, J. H. White, Lakeville, Usurper; second, L. Stanford's Yount Kurt; best two-year-old, L. Stanford's Mahomet of Palo Alto; second, J. H. White's Prince of Harlem; best one-year-old, L. Stanford's Nodine Veeman; second, J. H. White's Leicester; best bull calf, J. H. White's Cochise; second, L. Stanford's Lecto. Cows—Best three-year-old, L. Stanford's Clara Hamilton; second, J. H. White's Anemie; best two-year-old, J. H. White's Wayward; second, F. T. Underhill, Santa Barbara, Dame Trot; best one-year-old, J. H. White's Ocala; second, L. Stanford's Barbara Maid; best heifer calf, L. Stanford's Infelice; J. H. White's Laquite. Herd—Best herd of any age, one male and four females, J. H. White's Usurper, Anemie, Wayward, Ocala and Sierra.

Angus or Galloways, bulls—Best three-year-old, Leonard Bros.' Sir Stafford; 2d, Leonard Bros.' Hopeful of Lyons; best two-year-old, Leonard Bros.' The Badger; second, Leonard Bros.' Lyman of Mt. Leonard; best one-year-old, Leonard Bros.' The Boss; second, Maryville Live-stock Co.'s Leander; best bull calf, Leonard Bros.' Bruce of Mt. Leonard; second, Leonard Bros.' Lux of Mt. Leonard. Cows—Best three-year-old, Leonard Bros.' Dolly Second of Tarbreoch; second, Leonard Bros.' Sally of the Hirs; best two-year-old, Maryville Live-stock Co.'s Forest Rose; second, Leonard Bros.' Cratich of Mt. Leonard; best one-year-old, Leonard Bros.' Nancy Lee of Mt. Leonard; second, Maryville Live-stock Co.'s Princess Isabel; best heifer calf, Leonard Bros.' Joy of Mt. Leonard; second, Leonard Bros.' Romola Second. Herd—Best herd of thoroughbred, Angus or Galloway cattle, of any age, one male and four females, Leonard Bros.

Graded cattle, cows—Best three-year-old, Robert Ashburner, Baden Station, Music; best two-year-old, P. H. Murphy, Brighton, Daisy; best one-year-old, P. Peterson, Maxwell, Rose.

Sweepstakes—Bull of any age or breed, Robert Ashburner, Baden; best cow of any age, Colonel Younger, San Jose, Red Dolly; best bull and three calves, Colonel Younger, Fifth Kirklevington.

Herd Sweepstakes, brief breeds—Best herd, one bull and five cows or heifers, Colonel Younger, Forest King and family. Milk breeds—Best herd, one bull and five cows or heifers, Leland Stanford, San Francisco, Mahomet of Palo Alto, and family.

### Sheep.

Merinos—Best ram, two-year-old, F. Bullard's Long Wool; second, James Roberts, Irvington, Squatter; best ram, one-year-old, F. Bullard's Golden Fleece; second, James Roberts' Bulger; best three ram lambs, F. Bullard; second, James Roberts; best pen of five ewes, two-year-old, F. Bullard; second, James Roberts; best pen of five ewes, one-year-old, F. Bullard; second, James Roberts; best pen of five ewe lambs, F. Bullard; second, James Roberts; best ram and five lambs, F. Bullard; second, James Roberts. Southdowns—Best ram, any age, R. H. Crane, Petaluma; second, George Bement, Redwood City; best pen ewes, any age, R. H. Crane; second, George Bement; best ram and five lambs, R. H. Crane; second, George Bement. Sweepstakes—Best ram of any age or any breed, and five of his lambs, Long Wool, F. Bullard, Woodland.

### Angora Goats.

Thoroughbreds—Best buck, two years old, T. H. Harlan, Williams; Governor Helm; best buck under two years old, M. Wick, Oroville, Lawrence; best pen of three does, two years old, J. Weyand, Colusa; best pen of three does, under two years, T. H. Harlan. Grad-d—Best pen of three does, two years old, J. Weyand; best pen of three does, under two years, T. H. Harlan. Herd—Best herd of ten of any age or breed, J. Weyand.

### Swine.

Berkshire—Best boar, two-year-old, A. Smith, Redwood City, Redwood Duke; second, J. Rider, Sacramento, Royal Bismarck; best boar, under two years, J. Rider, Mingo Chief; best boar, six months old and under one year, A. Smith, Redwood Duke 2d, second, A. Smith's Tyrant; best breeding sow, J. Rider's Princess Bismarck; second, A. Smith's Belle Roche Princess; best sow, six months old and under one year, A. Smith, Redwood Princess; second, A. Smith, Redwood Lass 2d; best pair of pigs, under six months old, and second ditto, A. Smith. Essex—Best pair of pigs, under six months old, G. Bement & Son, Redwood City. Poland China—All awards to J. Melvin, Davisville; except for second pair pigs under six months old, to P. H. Murphy, Brighton, Dick and Bess. Durocs or Jersey Reds—Best boar, under two years old, J. Kennedy, Sacramento, Dick; best breeding sow, J. Kennedy's Susie; second, T. Waite, Brighton, Shippee; best sow, six months old and under one year, J. Kennedy's Phoebe Jane. Sweepstakes—All taken by A. Smith.

### Poultry.

Light Brahms—Best cock and hen, M. W. Parker, Biggs; best cock and pullet, to same; best breeding pen, one male and four females, to same. Dark Brahms—Best cock and hen, Pacific Incubator Co., Oakland; best cock and pullet, T. Waite, Brighton; best breeding pen, one male and four females, same. Langshans—Best pair, to same; best cock and pullet, to same; best breeding pen, one male and four females, to same. Buff Cochins—Best pair, M. W. Parker; best cock and pullet, E. I. Robinson; best breeding pen, one male and four females, to same. Partridge Cochins—Best pair, Pacific Incubator Co.; best cock and pullet, T. Waite; best breeding pen, one male and four females, Pacific Incubator Co. Plymouth Rocks—Best pair, J. J. Jones; best cockerel and pullet, T. Waite; best breeding pen, J. J. Jones. Brown Leg-

horns—Best pair, J. J. Jones; best cockerel and pullet, T. Waite; best breeding pen, J. J. Jones. White Leghorns—Best pair, T. Waite; best cockerel and pullet, and best breeding pen, J. J. Jones. White-faced Black Spanish—Best pair, E. I. Robinson; best cockerel and pullet, same; best breeding pen, same. Houdans—Best pair, Pacific Incubator Co.; best breeding pen, same. Silver-spangled Hamburgs—Best pair, best cockerel and pullet, and best breeding pen, T. Waite. Polish—Best pair white-crested, T. Waite; best pair golden-spangled, Pacific Incubator Co.; best cockerel and pullet, and best breeding pen, T. Waite. Wyandottes—Best pair, best cockerel and pullet, and best breeding pen, T. Waite. Seabright Bantams—Best pair, Pacific Incubator Co. B. B. R. G. Bantams—Best pair, Pacific Incubator Co. Pit Gimes—Best pair, P. J. Williams, Sac.; best breeding pen, same. Turkeys—Best pair bronze, T. Waite. Geese—Best pair, T. Waite, Toulouse geese. Ducks—Best pair Rouens, T. Waite; best pair Pekins, same. Guinea Fowls—Best pair, Pacific Incubator Co.; six carrier pigeons, Pacific Incubator Co.

### Incubators.

Egg package, small, Pacific Incubator Co.

### Agricultural and Horticultural Products.

Flour and Grain—Best sample baker's flour, C. McCreary & Co., Sac.; whitest sample family flour, same; best bushel yellow corn, B. N. Bugbey, Sac.; white Chih wheat, L. Vertrees, Sac.; white sample of barley, same; exhibit garden seeds, Cal. production, Mrs. R. S. Lockett, Sac.; sample Australian wheat, J. Reith, Sac.; sample of prop. wheat, M. Wick, Butte P. O.; sample Sonora wheat, E. G. Morton, Sac.; best bale hops, D. Flint, Sac. Vegetables, Roots, etc.—Best six sugar beets, P. H. Murphy, Brighton; one-half peck gherkin cucumbers, Mrs. R. S. Lockett, Brighton; six crooked-necked squash, to same; twelve parsnips, F. Gabriella, Brighton; twelve carrots, to same; turnip beets, to same; peck of tomatoes, to same; six drumhead cabbage, to same; six heads red Dutch cabbage, to same; six heads other varieties, to same; three heads cauliflower, to same; six heads lettuce, to same; half-peck white onions, to same; six heads peppers for pickling, to same; twelve roots salsify, to same; six stalks celery, to same; dozen sweet-corn (green), to same; three muskmelons, to same; half-peck of dry white beans, to same; half-peck kidney bush beans, in pod, to same; half-peck pole beans, other than Lima, in pod, to same; half-peck field peas (dry), to same; half-peck castor-oil beans, to same; greatest variety of dry peas, to same; three mountain sweet watermelons, W. O. Davis, Florin; three cantaloupes, to same; six Hubbard squash, E. F. Aiken; six Boston marrow squash, to same; licorice root, Isaac Lee, Florin; six long blood beets, Mrs. R. S. Lockett, Brighton; half-peck of garden peas, dried, to same; three purple egg plants, to same; three watermelons, J. H. Hamilton, Sac.; half-peck Lima beans, in pod, E. F. Aiken, Sac.; red onions, F. W. Fish, Redding; yellow onions, to same; large pumpkin, Geo. F. Bronner, Sac.; six cucumbers, E. F. Aiken, Sac.; best table of vegetables, exhibited by producer, F. Gabriella, Brighton; squash and pumpkins, E. F. Aiken. Green Fruits—Apples—Best display and variety, F. W. Fish, Redding; 2d, Mrs. J. Lansing, Sac.; 3d, S. Purrrington, Brighton; 4th, P. H. Murphy, Brighton. Pears—Best display and best variety, Mrs. R. S. Lockett; 2d, Mrs. J. Lansing; 3d, F. W. Fish; 4th, P. H. Murphy; 5th, S. Purrrington. Peaches—Best display and best variety, J. G. Robinson, Newcastle; 2d, P. W. Butler; 3d, C. T. Adams, Newcastle; 4th, E. Greer, Sac.; 5th, Mrs. R. S. Lockett. Plums—Best display and best variety, C. T. Adams; 2d, P. W. Butler; 3d, Mrs. R. S. Lockett; 4th, P. H. Murphy; 5th, S. Purrrington. Figs—Best display green figs, E. Greer; 2d, Jas. Rutter, Florin. General Display—Best display of fruit by the producer, Mrs. R. S. Lockett; 2d S. Purrrington. Grapes and Raisins—Best six varieties table grapes (Flaming Tokay, Black Morocco, Muscat, Rose de Peru, Purple Damascus and Blue Malvoise), Wm. Foster, Lincoln; 2d (White Syrian, Black Hamburg, Isabella, White Tokay, Emperor and Black Prince), P. H. Murphy, Brighton; best three varieties table grapes, M. Mertes, Placer county; 2d, P. J. Adams, Newcastle; best variety table grapes (Emperor) Weinstock & Lubin, Mayhew's Station; 2d, L. Bannon, Penryn (Flaming Tokay); best seven varieties wine grapes (Catawba, Zinfandel, Verdal, Franken, Reising, Gray Reising and Golden Chasselas), J. B. Whitcomb, Rocklin; 2d, (Golden Chasselas, Rose Chasselas, Johannisberg, Reising, Zinfandel, Fehér, Szarga and Red Traminer), W. A. Heims, Rocklin; best three varieties wine grapes, Wm. Foster, Lincoln; 2d, W. A. Heims, Rocklin; best variety wine grapes (Zinfandel), Hawk & Wood, Rocklin; 2d, (Mataro), M. Mertes, Placer county; best general display of grapes, James Rutter, Florin; 2d, S. Purrrington, Brighton; best display seedless raisins, S. Purrrington, Brighton. [The reason for awarding the premiums to the Emperor and Flame Tokay was not for their superior quality as grapes for eating, but from the fact of their excellent shipping qualities, which make them of greater value in a commercial point of view.]

Dried and preserved fruits, nuts, etc.—Best to pounds dried apples, W. J. Hunt, Sebastopol; dried pears, same; dried apricots, same; dried cherries, same; dried blackberries, same; dried raspberries, same; 2d display of dried fruits by producer, same; best dried peaches, Mrs. R. S. Lockett, Brighton; dried nectarines, D. H. Clippinger, Brighton; dried prunes, same; dried plums, same; dried figs, same; best general display, same; 2d dried figs, Mrs. W. H. Hobby, Sacramento; best half peck soft-shelled almonds, W. H. Williamson, Router's; English walnuts, James Rutter, Florin; best package for shipping fruit, S. F. Woodworth, Clippert Gap.

### Brandies and Wines.

Best grape brandy, one year old, L. Bannon, Penryn; best over one year old, same; best white wine, same; California sherry, Mrs. H. Cronkite, Sacramento.

### Candies, etc.

Best display confectionery, E. M. W. Holden, Sacramento; candies made in hall during exhibition, same.

### Honey, Preserves, Pickles, etc.

Best display pickles, Mrs. James Lansing; six jars red currant jelly, Mrs. H. Cronkite; six jars raspberry jelly, same; six jars blackberry jelly, same; six



jars strawberry jelly, same; six jars quince jelly, same; six jars raspberry jam, same; six jars blackberry jam, same; best display jams and jellies in glass, same; 2d display jams and jellies in glass, Mrs. James Lansing; best display brandied peaches, Mrs. H. Cronkite.

**Bread, Butter, etc.**

Best soda biscuit, Mrs. P. M. Artz, Brighton; domestic rye bread, same; Graham bread, same; domestic brown bread, Mrs. A. W. Morrell, Sacramento; domestic corn bread, Lizzie B. Aiken, Sacramento; domestic bread, Rosa Sert, Sacramento; four loaves baker's bread, W. F. Peterson, Sacramento; pilot bread, H. Fisher & Co., Sacramento; butter crackers, same; sweet crackers, same; Boston crackers, same; soda biscuit, Lizzie B. Aiken, Sacramento; tub firkin butter, James Askew, El Dorado; special premium for fruit cake, I. Isaacs, Shasta Co.

**Miscellaneous.**

White Egyptian corn, early amber sugarcane, Chinese cane, China sorghum and field corn, P. H. Murphy, Brighton; bundles broom corn, B. N. Bugbey, Sacramento; hard-shell almonds, W. H. Williams, Routier's; Japanese persimmons, P. T. Adams, Newcastle; pumpkins, P. M. Artz, Brighton; butter-firkins, J. J. Miller, Lake Tahoe; quinces, P. W. Butler, Penryn; olives, same; assorted dried fruit, D. H. Clipping, Brighton; dried corn and peas, same; King Philip's corn, on stalk and in ear, John F. Silva, Nicolaus; goat's wool, mohair and goat skins, Julius Weyland, Colusa; cotton plant and flaxseed and sheaf, Mrs. R. S. Lockett, Sacramento; currant and cherry syrup, Mrs. H. Cronkite, Sacramento; catsup, same; peanuts, E. F. Aiken, Sacramento; various kinds squash, same; vineyard plow, Stanton, Thompson & Co., Sacramento; McCoy's patent doubletree and singletree, same; sack elevator, J. H. Wisheart; sack holder and filler, W. F. Jeans; Doby shovel and cultivator, E. E. Krause; plow, cultivator and weed-cutter combined, William Forbes & Son; spray pump for exterminating insects, John Bean; spring whiffletrees, H. H. Linnell, Sacramento; spray pump and combination, same; wine pump, same; wagon jack, A. & A. Heilbron, Sacramento; display dairy machinery, G. G. Wickson; tread horse-power, same; farmers' blacksmith outfit, same; garden barrow and stove trucks, Benicia Agricultural Works; lard press, canal barrow, hand garden cultivator, chilled gang-plow bottoms, single shovel plow, Stanton, Thompson & Co., Sacramento; orchard and vineyard singletree, milking pails, milk strainer, G. G. Wickson & Co.; gopher and squirrel exterminator, M. Scholl.

**SHEEP AND WOOL.**

**Wool-Growing in the United States.**

At a recent exposition of wool and woollen fabrics, at Indianapolis, Ind., Mr. J. C. Stevens, president of the Ohio Wool growers' Association, spoke as follows:

Since the most remote periods, wool has been the first and principal material employed by man for his clothing. Sheep husbandry has always been, and must continue to be, one of the most essential as well as the highest type of agricultural employment, furnishing, as it does, both food and clothing, and at the same time preserving the original fertility and productiveness of the soil, which is entirely unlike the growing of the cereals, tobacco or cotton, which constantly deteriorate, and without an expensive application of proper fertilizers will eventually exhaust the same. The meat of the sheep is of the very best quality as food for man, while the fiber or wool affords material for clothing quite equal in beauty to, and far surpassing, either in respect of durability or comfort, the products of silk or cotton. A pursuit furnishing employment for so many people, and demonstrating, as our agricultural journals and the great display of textile fabrics here on exhibition attest, the tremendous progress we are making in the material sciences, is certainly encouraging to the American citizen.

While wool-growing is carried on to a considerable extent in this country, it is susceptible of being vastly increased and profitably extended over a large expanse of territory lying west and south of us, where the climate and cheapness of soil render it peculiarly fitted for profitable sheep husbandry. With our constantly-increasing population, there should be a correspondingly increased production of wool, which should equal the wants of the American people in times of desolating war, as well as in times of profound peace. A country like ours, vast in extent and variety of resources, should be placed beyond the dependence of other countries for the supply of the necessities of life.

This may be accomplished by that wise system of legislation foreshadowed by the fathers of our Republic. \*\*\*\*\* All history demonstrates the fact that the statesman or ruler who has done most to develop, encourage and protect the material interests of the industrial population has invariably been the most renowned.

In these United States, and particularly in the Southwest and Northwest, the entire extent of the great Mississippi valley, where wool-growing may be so profitably extended in all of the varieties of sheep, and where wool may be grown equal to the best produced on the globe, and where all the material that enters into the manufacture of the same exists in such abundance, would it not be wise political economy to encourage home production? By so doing we relieve ourselves of those great burdens that are weighing down so heavily on the shoulders of our industrial population—the paying of freight commissions, etc., upon the raw material we export and a like duty upon the same thing imported, but in a different shape. Whenever you see a prosperous manufactur-

ing town or city, in that community the agriculturists are in a like prosperous condition, affording, as it must, a reliable home market for their wool, mutton, beef, pork, grain and vegetables, and at the same time giving employment to vast numbers that otherwise would be idle and dead weights on society.

The wool-growers of the United States should supply our manufacturers with all of the varieties of wool in request, but this is expecting very much of them, unassisted by proper legislation, under our system of intellectual and social culture, high taxes, the support of schools and churches, high-priced labor and real estate, to compete with the cheap wools of South America, South Africa, Australia, or other countries, where wool can be grown for from 8 to 15 cents per pound under their system of pauper labor, and the accumulated capital of Europe seeking investment at a very low rate of interest.

And the manufacturers ought to supply our people with all the goods of the best quality necessary for home consumption. And lastly, as the interests of the wool-growers and manufacturers are identical, and the chief cornerstones that underlie our varied system of industry, it is desirable that they rally to the defense of each other's rights whenever assailed.

**Australian Wool.**

The Australian colonies form the chief wool-producing region of the world. The tendency to wool-producing there gives no apparent sign of diminishing, as may be remarked in the quantity of wool yearly exported. Within the last 10 years the exports have increased, in the number of bales, 43 per cent, though in the last five years the increase has been only a little more than 14 per cent.

From the statistics, as furnished by the United States Consul at Sydney, it appears that nearly all the wool produced in those colonies finds its way ultimately to England and the continental cities of Europe. The Australian official reports give the exports of wool from the colonies for the three years last passed, as follows: For 1885, 1,094,000 bales; for 1884, 1,112,000; for 1883, 1,054,000. The statistics of all the wool reaching the European ports during those years show that but very little more wool was received in Europe than was exported from the Australian colonies. The statistics of wool imports into England and continental ports are given as follows: 1,095,000 bales for 1885, 1,135,000 bales for 1884, and 1,016,000 bales for 1883.

There is quite a marked difference in the character of the wool from the different colonies, especially this season. That from the southern portion of the colonies is reputed to be "well nurtured, bright, deep grown, sound and elastic, although somewhat heavy in yolk." That from the central portion "presents what is called a hungry appearance, being not only tender and short in staple, but containing, in many instances, a large quantity of earth, sand and burr." The causes of the difference in the condition of these two clips are attributed to the benefits of plentiful rainfalls in one instance and the baneful effects of drouth in the other, which was so severe as to necessitate the removal of many of the flocks to other pastures.

The best clothing wools, or rather the finer grades of wool, grown in New Zealand are obtained from South island, and the condition of them is reported to be lighter in grease and freer from tick stains than at any period in the history of the colony. The limestone districts of South Australia are developing peculiar characteristics to the wool grown therein, and remind one of the advantages found in the south of England, affecting the wool of the Southdown and other breeds of sheep.

**Complimentary Samples.**

Persons receiving this paper marked are requested to examine its contents, terms of subscription, and give it their own patronage, and, as far as practicable, aid in circulating the journal, and making its value more widely known to others, and extending its influence in the cause it faithfully serves. Subscription rate, \$3 a year. Extra copies mailed for 10 cents, if ordered soon enough. If already a subscriber, please show the paper to others.

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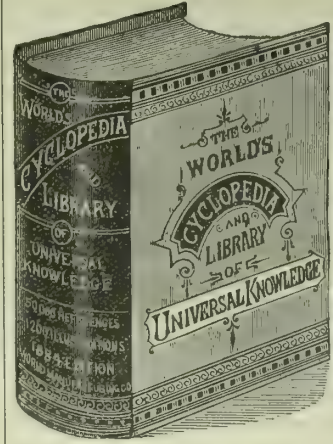
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Fine Arts, are full and explicit. Botany, Chemistry, Geography, Geology and History, are each treated ably and explicitly. The article on Engineering is still further amplified by a full description, illustrated with plates and diagrams of the Great Brooklyn Bridge; Mechanics with plates illustrating Mechanical Motions; Mineralogy, Medicine, Law, Languages and Government, are so clearly treated of, that every one who reads can understand. In addition to the full and complete Cyclopædia, arranged in alphabetical form, we have, bound up in the volume, a Complete Library of Knowledge, including a Guide to Correct Speaking and Writing; Book-keeping, a complete guide to business; Chronological History; Mythology; AN INDEX TO THE HOLY BIBLE; a complete brief Biographical Dictionary; full and complete statistical history of the United States, corrected down to 1884. The Interest, Banking, Usury, Insolvent and Homestead Laws of the United States, are for the first time gathered together in one volume. A LIST OF COUNTERFEIT NOTES WITH RULES FOR DETECTION OF COUNTERFEITS. Separate Dictionaries of Musical, Nautical, and Geographical terms; a carefully prepared treatise on Pronunciation, giving rules and examples whereby every one can become his own teacher. AN APPENDIX OF THE ENGLISH DICTIONARY, giving hundreds of words not contained in the ordinary dictionary. FLAGS OF ALL NATIONS, beautifully illustrated by colored plates. In fact the book is a library in itself. It has 800 pages, and is more profusely illustrated than any other Encyclopædia at the price, and contains a mine of information on almost every subject known to man. Every one of the many departments is worth more than the cost of the book. As "knowledge is power," this Cyclopædia will be a source of wealth to thousands in all ages and conditions in life. This handsome octavo volume is printed in good paper, and handsomely bound in cloth embellished with gold.

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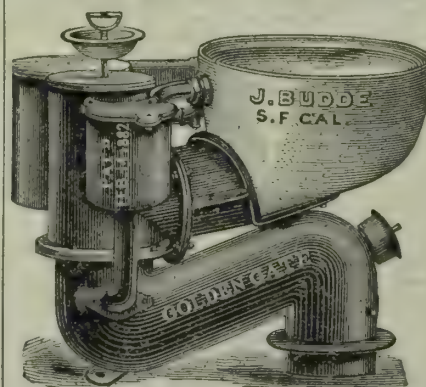
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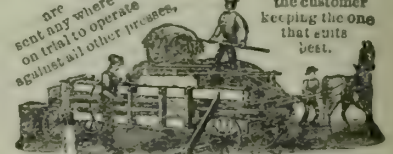
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## The Fair at Stockton.

The Sixth Annual Fair of the San Joaquin Valley Agricultural Association opened at Stockton on the morning of Sept. 21st, with the fire-bells ringing and bands playing. The work of arranging exhibits, however, went on all day, and it was not until evening that the pavilion was ready to receive the thronging visitors. The building was comfortably filled with booths for the numerous and rich exhibits, and while there was no crowding, little space was left vacant. Twenty electric lights were used in illumination.

The San Joaquin County Pomona Grange had an excellent and valuable display of grain, fruits and nuts raised in the county, and many varieties of flower seeds. The most admired feature of their exhibit was a miniature farm, with fields of growing grain; farmhouse surrounded by flower beds; a barn and everything complete.

Two large tables were devoted to pears, quinces and apples from Placer county. The Oak House farm had a table of grapes, peaches, nuts, etc.

The amateur sericulturists were well represented by cocoons and skeins of silk.

F. E. Austin showed models of the Relief windmill.

One of the largest crowds of the week assembled Thursday night, when Hon. P. D. Wigginton delivered the annual address. He is an entertaining speaker and held the attention of the audience until the close.

On "Flower Day" the interior of the pavilion looked peculiarly attractive. School children and ladies turned out in force and the building was full of delighted visitors. Many beautiful floral designs were on exhibition, and the air was redolent with fragrance.

On Friday they had a culinary display of home-made bread, cake and pastry. The exhibit was not large, but presented a neat and tasteful appearance. The first prize for bread was awarded to Miss Lotta Bell, 11 years old.

In carriages, Wm. P. Willet, of Stockton, exhibited a list of fine buggies that would compare favorably with the Brewster or any of the notable Eastern manufactories. This line of carriages and buggies cannot be duplicated in any manufactories in this State, and for which he took first prize on buggies.

M. P. Hudson & Son had a full line of carriages, phaetons and buggies, for which they were awarded six premiums.

The display of fruit was the finest ever made in the State, a portion of it being from the highlands.

H. H. Moore & Son had an artistic display of the H. H. horse medicine and a new remedy entitled the Arkansaw cough syrup and remedy. In this connection we may say that the H. H. horse medicine is growing in popularity and has become a staple article in California. We have learned that a new remedy that he is introducing has met with flattering results.

One very pleasant feature of the fair was the regulation that after 9 o'clock on each evening terpsichorean exercises were kept up with much interest to the spectators and participants until 11 o'clock.

Williams & Moore had two pyramids of domestic and toilet soap, and it was much admired.

Mr. Biven had the Peerless Incubator at work and a large number of chicks were hatched out during the fair. In this connection we may say that this incubator has proved a great success, and an illustration will appear in the RURAL PRESS soon.

The Stockton Business College had an artistic display of penmanship. The affable proprietor, Mr. Bainbridge, was in attendance each evening with his assistants, entertaining visitors with his educational enterprises.

The Becker Washer, which is being manufactured by E. W. Melvin, of Sacramento, seemed to have a special attraction for the ladies, who crowded around to see the manner of working.

George West exhibited a fine line of wines and brandies, some made as early as 1875.

The exhibition at the pavilion was such a noted success that there is no doubt that there will be a larger one in the coming year at Stockton.

## At the Park.

The recent fair held at Stockton was one of the best and most successful fairs ever held in this district. The live stock was represented by several notable herds of cattle, among which were Col. Younger's Shorthorns, Sargent's Jerseys, Leonard Bros.' Galloways, F. A. Burke's Holsteins and Tyler Beach's Ayreshires. There was a good showing of hogs—Duroc, Berkshire and Poland-China swine.

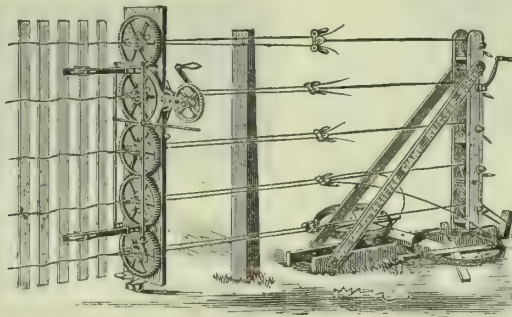
The display of horses was large, and included Clydesdales, Norman Percherons, Hamiltonian and Morgan strains. The largest of the Norman Percherons was A. C. Bailey's, of Stockton, whose family of horses had as their foundation the Duc de Chartres.

The contests for speed were well managed, and those who like this sport had the satisfaction of viewing lively and well-contested racing.

The exhibition of machinery was extensive and, in some respects, perhaps, the most notable ever seen at any fair in the history of the county. In Machinery hall, hear the race-track, were six combined harvesters; the Stockton Combined Harvester Works exhibited the Houser Improved. One of the notable improvements was an iron brake, invented by D. Gratt-

ton, of Stockton, which enables the sack-holder to stop the machine almost instantaneously. S. L. Gaines, of Stockton, exhibited the "G. C. H." harvesters, a light running machine for small farmers which it is claimed can be handled with 12 horses. C. K. Meyers, of Stockton, showed Meyer's harvester, several of which have been run with success the present season. Mattleson & Williamson exhibited a combined harvester known as the Harvest Queen, which claims to have a light draught and other points of excellence, especially the ease with which the platform may be lowered and facilities for turning short corners.

David Young, for whom it is claimed that he made the first successful harvester, exhibited "Young Centennial," which has been manufactured this year by the Benicia Agricultural Works. Preparations have been made to turn out a large number this year. E. J. Marston, of Stockton, exhibited Marston's combined harvester, which was awarded the first prize of \$250. It is not our purpose to enter into detail and describe the relative qualities of the several machines mentioned in this article. There are many features connected with them that are no doubt great improvements, and they will be satisfactorily brought to the attention of the read-



LITTLE GIANT FENCE LOOM.

ers of the RURAL PRESS for the next season. There is no doubt as much unanimity on the question of using combined harvesters for harvesting grain in the great inland country as there is generally found among men.

Our representative conversed with over 50 different farmers, and with but one exception, each declared that the combined harvester was one of the great inventions of the day, as a labor-saving, economical means of harvesting grain. It was not uncommon to hear these expressions: "They are the greatest thing ever made for the rancher." "We could not raise grain without them." "It is a saving of 50

ers and thrashers. M. P. Henderson & Son exhibited the Salsbaker farm and fruit wagon.

## The Result.

The attendance throughout the week has been larger than was expected, and without doubt the aggregate receipts of the Association have been greater at this Fair than for several years past.

## Little Giant Fence Loom.

We give on this page an engraving showing the Little Giant Fence loom, which was shown at the State Fair, by P. D. Poole, of Alameda, and noticed in our report of the implements and machinery shown at Sacramento. This is the device which weaves the wire and laths or pickets right in the line where the fence is to stand, and we saw from its operations at the fair that it would make a strong and true fence when correctly handled. The work seemed to be very easily done. This style of fence is becoming very popular in this State for all farm uses. Its strength can be made less or more by using lath for poultry, rabbits, etc., or square pickets for live-stock. Mr. Poole has

other specialties in his agency besides the fence loom. In this week's RURAL he has advertisements of a road grader and a line of school-desks.

## A Combined Sprinkling Nozzle.

We give, on this page, an engraving of a new nozzle for a garden hose, which has attracted much attention at the Mechanics' Fair, and which seems to have important advantages. The engraving gives a good idea of its construction and operation. By its use one can have a straight stream or a coarse sprinkle or a fine



WAINRIGHT'S COMBINED HOSE NOZZLE AND SPRINKLER.

per cent in harvesting." "We have harvested 500 acres this year and our expense for repairs was less than \$5.00." "In light grain I can cut and put up in the sack for 75c per acre." "All there is about it, if we did not have the harvesters, we could not raise grain at these prices." "I do not believe that all these manufactories can make enough harvesters to supply the demand next year." "The most I feared was the runaways, but since they have got brakes so that the driver and sack-tender can block the wheels, there is no danger from runaways."

In agricultural machinery H. C. Shaw had the largest exhibit, among which were the New Clipper mower, Triumph reaper, Buckeye seed drill, Ashley disk pulverizer, H. C. Shaw gang plow, Slip share plow, etc., etc. The Grangers Union, of Stockton, had a large exhibition of agricultural implements and farm wagons, carriages, phaetons and Mitchell-Lewis vehicles, "Empire mower and reaper" and improved Chill plow, "Farmer's Friend gang plow," Combined fence builder. Hudson Caubney exhibited fine light express wagons, and the Prize drill, notes of which appeared in our last issue, and illustrations of each will appear in our columns hereafter. W. H. Jeans, of Woodland, exhibited his patent sack-holder, which is a subject of favorable comment among the farm-

spray merely by the use of the thumb upon the attachment while the water is still flowing. Thus no time is lost in stopping the water to change nozzles, nor is the hose put to the great strain of having the full pressure of the water upon it. It is also claimed to throw a wider and longer spray with less force of water, and as the exit of the water is comparatively large there is no chance for obstruction, as in the case of the ordinary "rose," or sprinkler. It has an adjusting screw which can be set to regulate the fineness of the spray. We are told that this nozzle has been used with advantage in connection with a force pump in whitewashing barns in place of using a brush; also, that it answers well in place of an atomizer in applying pest destroyers to fruit trees. It is the invention of Wm. Wainwright, 1409 Jackson street, S. F., to whom all inquiries should be addressed.

P. A. BIDWELL & Co.—The great planing mill of Stockton, recently destroyed by fire, is now being rebuilt and reconstructed in a fire-proof building 100 by 180 feet, with a 75-horse power engine, and is expected to be running within six months. As showing the demand for manufactured lumber and the business of this firm, they have three small mills now running in Stockton to fill their contracts for this year.

## Yuba County Hops.

EDITORS PRESS:—We think we have grown the banner crop of hops for this season. From 97 acres of ground we have just harvested 627,000 pounds of green hops, these made 90 tons net of dry hops, three tons of which we lost by fire on the night of the 22d. Of these green hops, about 200,000 pounds were picked by white people of our town, at 75c per cwt. The balance were picked by Chinamen at 70c. Every one seemed satisfied and we expect to have less trouble to get white pickers hereafter. Pickers made from 75c to \$2.25 per day, and quite a number averaged \$1.50 per day.

All of these green hops, except about 50,000 pounds, were cured in our one house. We dried 26 days, with an average of over 22,000 pounds of green hops per day. Our largest single kiln was something over 16,000 pounds. The size of the kiln floor is 30x60 feet, and we think our driers, Messrs. Buck and Talbot, deserve credit for the quantity and quality of the crop turned off.

This is the largest record for a single house that we have ever heard of. We also have a record for baling which we are proud of. We use the Bear River hop press, a patent for which I secured through Dewey & Co. last year. On August 19th four men and one horse put out 120 bales of hops in 10 hours 5 minutes of working time. The four men did all the work and took the bales from the press. The bales were sewed entirely before being taken from the press. We think we could put out 130 bales in the same time. Four ordinarily good men will put out 100 bales per day and call it a day's work every day in the week. The trade says we make the neatest bale that goes from this coast.

The best record, so far as we can learn, for any other power hop press, is 65 to 70 bales; some say they can put out 80 bales; but we do not think it has ever been done. We can double an ordinary day's work on the Sacramento press "and not half try."

In short, we claim the banner crop for '86. The highest and most uniform quality, quantity considered, the best record for a season's curing and the highest baling by 50 bales in 10 hours' run. We challenge comparison on all these points, and consider that Sacramento county will have to look to her laurels in hop growing.

M. H. DURST.

Wheatland, Sept. 27, 1886.  
[The sample of hops duly received. It is a splendid product. We have donated the specimen to the agricultural museum of the State University, where it will be appreciated both for its excellence and because Mr. Durst is a graduate of the College of Agriculture, who is making his mark as a practical farmer.—Eds. PRESS.]

## The Walnut Crop.

EDITORS PRESS:—Your correspondent, J. R. F., in the issue of the 25th, says the walnut crop of California is estimated to be all of 20 per cent greater this year than in 1885. As this is so evidently a mistake, and is so palpably wrong, it should be corrected. In Santa Barbara county the largest growers estimated the crop at not over a fourth, if it is that. The reports from Ventura are about the same, and the Los Angeles and San Bernardino papers state that the walnut crop is a failure in those counties. Mr. Elwood Cooper, the largest grower in the county, states that this is the first failure in 16 years to produce a crop.

Many causes are ascribed for the failure. Honorable Russell Heath gives it as his opinion that the dry season last year did not allow the formation of sufficient sap, and the inner bark of the tree became dry and this year's sap could not force itself quickly enough through the bark to cause the trees to bud out uniformly. This looks reasonable, since the leaves and buds came out in a scattering manner, and the young nuts kept coming on for three or four months instead of coming out promptly and evenly. The pollen blossom thus mostly came on so far in advance of the nuts that but few of the nuts were properly fertilized, and, as a consequence, most of the nuts dropped before half grown.

L. B. CADWELL.  
Carpinteria, Santa Barbara Co., Cal., Sept. 26, 1886.

## Fairs Still to Come.

There are several fairs to come off this month in California, beside the Nevada State Fair, at Reno, Oct. 4th to 9th. We give the list below:

Seventh District—Monterey, Santa Cruz, San Benito and San Luis Obispo counties—Salinas City, Oct. 5th to 9th.  
Santa Barbara Agricultural, October 5th to 8th.  
Twelfth District—Lake and Mendocino counties—Lakeport, Oct. 5th to 8th.  
Los Angeles Co. Fair, Downey, Oct. 5th to 9th.  
Santa Cruz County Fair, Oct. 6th to 9th.  
San Diego Horticultural Society, Oct. 6th to 8th.  
Sixth District—Los Angeles, Santa Barbara, Ventura, San Diego, San Bernardino and Inyo counties—Los Angeles, Oct. 11th to 16th.  
Ukiah Park Association, Ukiah, Oct. 14th to 16th.  
Arroyo Grande Agricultural Association, S. L. O. county, Oct. 14th and 15th.  
Santa Maria Valley Agricultural and Stock Association, Santa Maria, Oct. 27th to 29th.



## Breeders' Directory.

Six lines or less in this Directory at 50c per line per month.

### POULTRY.

D. D. BRIGGS, Los Gatos, Cal. Fancy Poultry breeder.

O. J. ALBEE, Santa Clara. Thoroughbred poultry.

E. C. CLAPP, South Pasadena, Cal. Light Brahmas and Plymouth Rocks. No fowls for sale. Eggs from first-class k, after Nov. 1st.

AXFORD INCUBATOR—Best in the world; never beaten in competition; from \$37.50 to \$50.00. Pekin and Rouen Ducks; best in the State; \$7.50 per trio, or \$2.00 each per doz. Eggs \$3.00 per doz. For particulars address I. P. Clark, Mayfield, Cal.

CALIFORNIA POULTRY FARM, Stockton, Cal. Send 2-cent stamp for illustrated Catalogue.

W. O. DAMON, Napa, Wyandottes, W. and B. Leghorns, P. Rocks, L. Brahmas, Pekin Ducks.

MRS. M. E. NEWHALL, San Jose. White and Brown Leghorns, Langshans, Plymouth Rocks, Light Brahmas, Pekin Ducks and Bronze Turkeys.

GEO. B. BAYLEY, 1317 Castro St., Oakland, Importer and Breeder of all the best known and most profitable Land and Water Fowls. Publisher of the Pacific Coast Poultryers' Hand Book and Guide. Price 40 cents. Send 2-cent stamp for illustrated Circular.

JAS. T. BROWN, 18 Georgia St., Los Angeles, Cal. Breeder of Thoroughbred Poultry of the leading varieties. Send for circular and price list.

T. D. MORRIS, Sonoma, Cal. Toulouse and Embden Geese, Bronze and W. Holland Turkeys, and all leading varieties of Thoroughbred Poultry.

CHOICE LAND AND WATER FOWLS for sale at all times of the most popular and profitable varieties. Please inclose stamp for new circular and price list to R. G. Head, Napa, Cal.

D. H. EVERETT, 1616 Larkin St., S. F., importer and breeder of Thoroughbred Langshans and Wyandottes.

J. N. LUND, Box 116, Oakland, Cal. Wyandottes, Langshans, L. Brahmas, P. Rocks, B. Leghorns, B. E. R. Game Bantams, T. Guineas, Hom'g Antwerp Pigeons.

### HORSES AND CATTLE.

P. H. MURPHY, Brighton, Perkins P. O., breeder of Shorthorn Durhams, and Poland-China Hogs.

ONTARE RANCH, three miles west of Santa Barbara, Santa Barbara county; California. Coach Horses, Draft Horses, Trotting Bred Horses and pure Holstein-Friesian Cattle. Young cattle and matched teams always on hand. Francis T. Underhill, Proprietor. C. F. Swan, Manager.

COTATE RANCH BREEDING FARM, Page's Station, S. F. & N. P. R. R. P. O., Penn's Grove, Sonoma Co., Cal. Willard Page, Manager. Breeders of Short Horn Cattle, English Draft Horses, Spanish Merino Sheep and Berkshire Swine.

P. S. CHILES, Davisville, Yolo Co., importer and breeder of registered Shorthorns of the best families.

STINSON & MARSH, Dayton, Nevada. Registered Shorthorns of choice breeding strains.

T. P. A. WILLIAMS, Columbia, Boone Co., Mo., breeder and importer of Thoroughbred Herefords.

LEONARD BROS., Mt. Leonard, Mo., importers and breeders of Galloway, Aberdeen-Angus and Short-horn cattle.

M. D. HOPKINS, Petaluma, importer of Thoroughbred Shorthorns and Red Poll cattle for milking strains.

HYDE & MOORE, Visalia, importers and breeders of Shorthorn cattle. Young stock for sale.

J. A. BREWER, Centerville, Alameda County, Cal. Shorthorns and Grades. Young stock for sale.

R. J. MERKLEY, Sacramento, breeder of Norman, Percheron Horses and thoroughbred Shorthorn Cattle.

Estate of M. E. BRADLEY, San Jose, Cal., breeder of recorded thoroughbred Shorthorn Cattle and Berkshire Hogs. A choice lot of young stock for sale.

E. W. STEELE, San Luis Obispo, Cal., breeder of Thoroughbred Holstein and Jersey Cattle.

J. R. ROSE, Lakeville, Sonoma Co., Cal., breeder of Thoroughbred Devons, Roadsters and Draft Horses.

SETH COOK, Danville, "Cook Farm," Contra Costa Co., breeder of Aberdeen Angus, Galloways and Devons (Registered). Young stock for sale.

H. S. SARGENT, Stockton. Thoroughbred Jersey Cattle, and Poland-China Hogs from imported stock.

PETER SAXE & SON, Lick House, San Francisco, Cal. Importers and Breeders, for past 14 years, of every variety of Cattle, Horses, Sheep and Hogs.

WILLIAM NILES, Los Angeles, Cal. Thoroughbred Poultry, Cattle and Hogs. Write for circular.

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G. N. WHITAKER, Santa Rosa, breeder of Shropshire Down Sheep; 10 fine bucks for sale.

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R. H. CRANE, Petaluma, Cal., breeder and importer. South Down of Long John Wentworth herd for sale.

E. W. WOOLSEY & SON, Fulton, Sonoma Co., imp's & b'd's Thoroughbred Merino, & Jersey Cattle.

EASTON MILLS, Lakeville, Sonoma Co., thoroughbred Spanish Merino Sheep. Choice rams for sale.

J. B. HOYT, Bird's Landing, Cal., importer and breeder of Shropshire Sheep; also breeds cross-bred Merino and Shropshire Sheep. Rams for sale.

L. U. SHIPPEE, Stockton, Cal., importer and breeder of Spanish Merino Sheep, Durham Cattle, Red Duroc and Berkshire Swine. High graded Rams for sale.

JULIUS WEYAND, breeder of pure-blooded Angora Goats, Little Stony, Colusa Co., Cal.

KIRKPATRICK & WHITTAKER, Knight's Ferry, Cal., breeders of Merino Sheep. Rams for sale.

### BEEES.

J. D. ENAS, Napa, Cal., breeds pure Italian Queens. The best honey and wax extractor; manufactures comb foundation, sections & hive material; send for circulars.

### SWINE.

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TYLER BEACH, San Jose, Cal., breeder of thoroughbred Berkshires.

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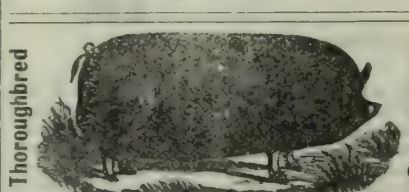
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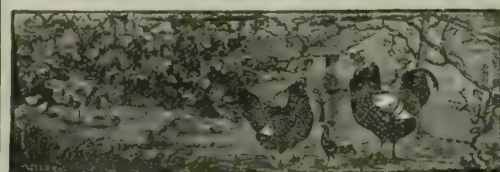
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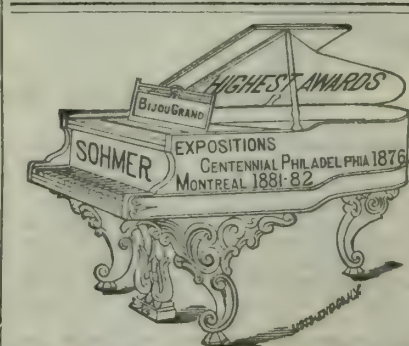
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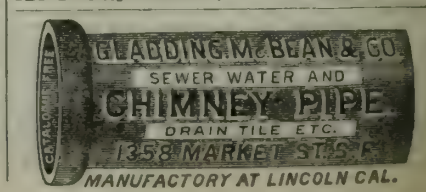
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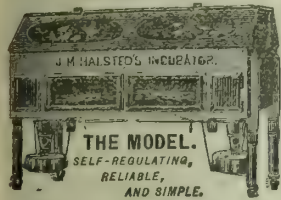
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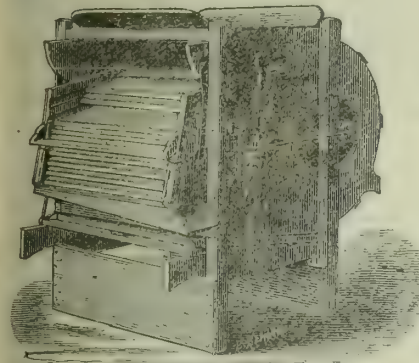
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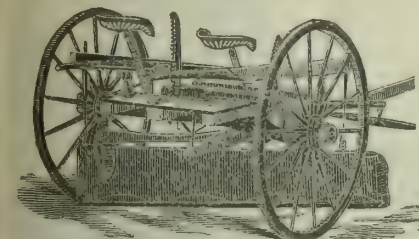


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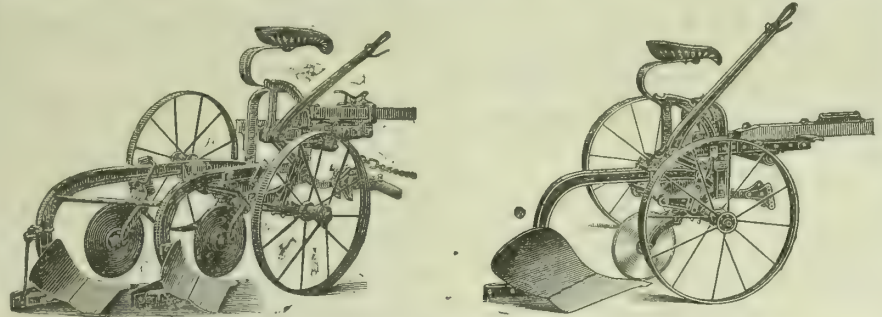
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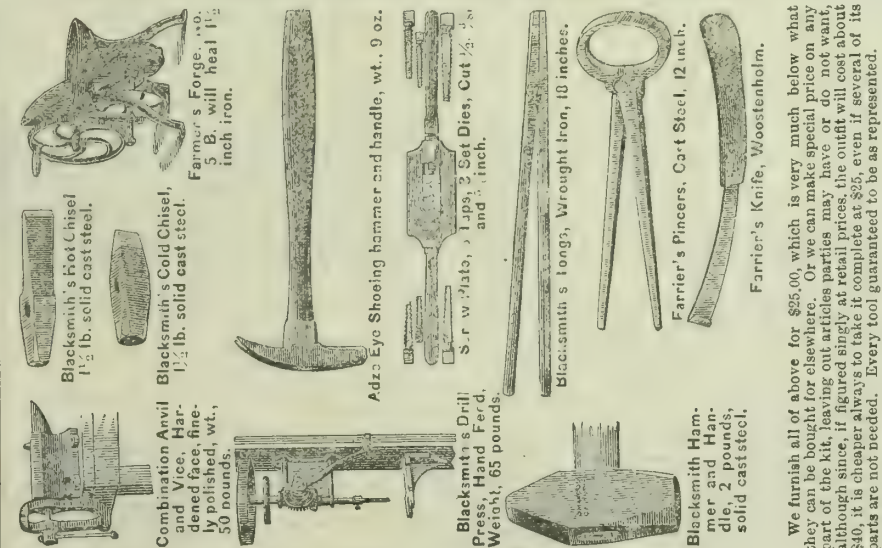
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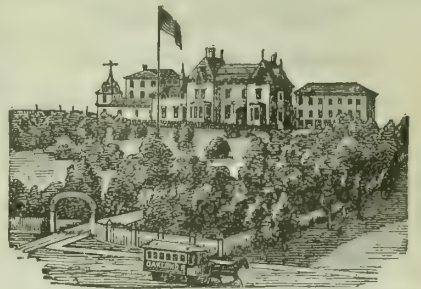
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## S. F. MARKET REPORT

NOTE.—Our quotations are for Wednesday, not Saturday, the date the paper bears.

## Weekly Market Review.

## DOMESTIC PRODUCE, ETC.

SAN FRANCISCO, Sept. 29, 1886.

The past week has shown a fair degree of activity in all kinds of produce, but as a rule, with only slight variations in prices. Full particulars are given of the condition of the several lines under appropriate headings. The past week, foreign cables have not reported any change in the price of wheat, although at times a depressed tone was reported. Dealers are closely watching the Eastern question under the belief that fighting between the Powers may follow present complications, which will directly influence wheat values. Semi-public cables received to-day are as follows:

LONDON, Sept. 29.—WHEAT—Steadily held. California spot lots, 6s 7d to 6s 10d; off coast, 34s; just shipped, 34s 6d; nearly due, 34s; cargoes off coast, quiet but steady; on passage, slow; English country markets, turn easier; French, steady; wheat and flour in Paris, rather easier; weather in England, warm for season.

## Foreign Review.

LONDON, Sept. 27.—The *Mark Lane Express* in its review of the British grain trade for the past week says: Trade was exceedingly slow, but prices were sustained. Sound English new crops of wheat were in the best demand. Sales of English wheat during the past week were 52,121 quarters at 30s 9d, against 68,588 quarters at 30s 10d during the corresponding period of last year. Flour was slow of sale, owing to large stocks and continued American arrivals. Fine malting barleys are very scarce. Trade in foreign wheat was dragging. The large and rapidly increasing visible supply in America oppresses trade. American flour is 3d lower. Prices of round corn favor buyers. Oats were in large supply and cheaper. One cargo of wheat has arrived. About 14 sailing vessels with wheat from Chilean and other Pacific ports are due, and are expected to arrive when the wind changes. Trade in forward is somewhat steadier. At to-day's market there was no improvement in the wheat trade. American and inferior English wheat were cheaper. Flour was dull, American flour in some instances being lower than on Monday. Prices of barleys had a downward tendency.

## London Wool Market.

LONDON, Sept. 27.—Following is a detailed statement of the wool sales to-day: Victoria—1300 bales, scoured, 11½d@25 1d; do locks and pieces, 1s@1s 9d; greasy, 7d@1s 3d; do locks and pieces, 7d@8½d; fleeces, 1s 4d@1s 5½d. New South Wales—800 bales, scoured, 1s@1s 1½d; do locks and pieces, 10d@1s 6½d; greasy, 9d@1s ½d. South Australia—1100 bales, scoured, 11½d@1s 7½d; do locks and pieces, 10d@1s 9½d; greasy, 7d@1s; do locks and pieces, 4@7d. New Zealand—5400 bales, scoured, 9½d@2s ½d; do locks and pieces, 7½d@1s 10d; greasy, 7½d@1s 11½d; do locks and pieces, 4@8½d. Cape of Good Hope and Natal—1300 bales, scoured, 11½d@1s 3d; greasy, 6½@10½d. There was fair competition at the wool sales to-day. Scoured does not maintain the previous high rates.

## Eastern Wool Markets.

NEW YORK, Sept. 26.—Business has shown some irregularity, buyers in some cases inclining to cautious methods when handling stock for an actual use, and there is less inclination to speculate in clothing wools, since large and comparatively cheap lots have been taken up. As a rule, however, holders appear to feel very little disturbed by the present indifference of buyers and insist that any shortage in the demand now will only have to be made up later, and thus increase the eagerness of customers when they do come and create the very buoyancy sought to be avoided. The market last week closed with a fuller record of transactions than for a long time past, while the cost in many cases shows 5@6 per cent better than a week ago. Among sales were 45,000 pounds spring California at 22@23½ cents; 75,000 pounds spring California at 20@23 cents; 5000 pounds Oregon at 24@25 cents; 60,000 pounds Montana at 30@31 cents. The Philadelphia market ruled strong. Among sales were 20,000 pounds scoured California at 56½ cents; 1000 pounds scoured California at 52 cents; 15,000 pounds scoured California at 62½ cents; 5000 pounds scoured California at 63 cents; 18,000 pounds California greasy at 21 cents; 10,000 pounds California greasy at 20½ cents. The Boston market was active and sales enormous. Among sales were 621,000 pounds California spring and Oregon at 19@24 cents; 634,200 pounds Territory at 20@29 cents.

NEW YORK, Sept. 28.—Wool is in moderate inquiry. Domestic fleeces, 30@38c ½ lb; pulled, 14@35c; Texas, 9@25c.

BOSTON, Sept. 28.—The firmness in the prices of wool continues to be maintained and the demand has been good. Ohio and Pennsylvania X, 33c ½ lb; extra, 36c; Michigan X, 32½c.

## New York Hop Market.

NEW YORK, Sept. 26.—There is very little business. New States of decent quality are held out of reach and Pacifics are above the limits which dealers consider safe. Pacific coast crop of 1886, good to choice, is quoted at 30@35 cents; coast crop of 1885, good to choice, 15@20 cents.

## New York Wheat Market.

NEW YORK, Sept. 26.—Large accumulation of stocks at Western points, liberal receipts and a slow export demand seem to have wholly demoralized the bull party, and the pressure to sell has been at times very heavy. The market ruled unsettled and weak, spot closed ½@1½c lower; options closed steady above inside; losses ranging from ½ to ¾ cent. September 84½; October 84½; November 86½; December 88½; January 90½; May 85½ cents.

## California Products at the East.

NEW YORK, Sept. 26.—Seeds—Quiet. California yellow mustard is quoted at 5@5½c.

Canned Goods—The movement, in a general way, continues rather limited. Tomatoes continue strong. Corn is in fair request and firm. Peaches are dull. Salmon, rather firmer. California canned peaches, \$2.25@2.50; pears, \$2@3.25; plums, \$1.75@2; grapes, \$2; apricots, \$2.10@2.25; salmon, Columbia River, \$1.55.

Honey—Extracted, 4½c.

## California Fruit at the East.

CHICAGO, Sept. 25.—No special fruit trains have arrived here since our last report, but some fruit was received by passenger trains, which is meeting with fair demand. The weather during all of this week has been unusually warm, and much of the time it has been damp and muddy, which was very bad for the handling of fruit. Therefore, receivers of consignments have been obliged to use every effort to dispose of them as promptly as possible, and at prices below what they would have obtained for the fruit had the weather conditions been more favorable. Tokay grapes in 40-pound crates, when in good order, brought \$2.50@3; muscats, \$2.25@2.50, with occasional sales of some fine lots a little over this price, poorer lots bringing as low as \$1@1.50. Fall pears are selling at \$2@2.25, with some of the best varieties going at \$2.50@2.75. Winter pears sell at \$2.50@2.75, and some fine lots at \$3. Quinces have shown slight improvement, but prices remain about the same, \$1.50@1.75. There were a few plums sold at \$1@1.25 per box.

NEW YORK, Sept. 26.—Green Fruit—Grapes, California Tokays and Muscats, \$2@6½ 40-lb crate.

(Telegram to the Fruit Union.)

CHICAGO, Sept. 28.—Fall varieties of pears sell at about \$2.75; plums, about gone; Muscat grapes when good, 40 lbs \$2.50; Tokay grapes when good, 40 lbs \$2.50 to \$2.75. Many grapes arrive in bad order and have to be closed out cheap. Quinces range from 75c to \$2 per box.

## Local Markets.

BAGS—The season is over, and the carryover is placed at over 20,000,000. The syndicate is reported to have lost quite heavily.

BARLEY—The market has been fairly active for bright heavy chivalier and bright heavy brewing, with prices well sustained. Feed has gone largely into consumption, causing a steady market, but at this writing it is reported that the demand is easing off. On call there has been fair trading throughout the week at steady prices, but to-day they are weaker. The closing was as follows: Spot—100 tons, 92½c. Buyer season—500 tons, \$1.03. Seller 1886—100 tons, 92c; 200, 92½c ½ ctd. Buyer season—200 tons, \$1.03 ½ ctd.

BEANS—Receipts of new are increasing, but the market stands up well, for so far as can be ascertained, no concessions have been made. The quality as a rule is above last year's.

DRIED FRUITS—Receipts are very light, causing a strong market to rule for this season's with all coming in, in good condition going into consumption.

EGGS—Four carloads of Eastern are expected the coming week, but as they cannot be classed above good, it is claimed that choice to fresh laid eggs will not be affected in prices. The receipts of California are light.

HOPS—An inactive demand is reported, although the inquiry is still brisk, but chiefly for the better grades. All received so far has either gone into consumer's hands or been shipped East on orders.

OATS—Under light receipts and a steady demand the market has been gaining in strength. Choice continues scarce.

WHEAT—The sample market continues dull, owing to the difference between buyers and sellers. It is claimed that sales are few and far between, and to substantiate the same the receipts by rail and steam here and Port Costa, which are quite light, are cited. Ships now on berth are loading mainly with wheat bought before the break. Transactions on call are only fair. The following are to-day's transactions: Morning session: Buyer season—1800 tons, \$1.41; 100, \$1.40%. Buyer 1886—300 tons, \$1.36. Seller 1886—100 tons, \$1.31½; 200, \$1.31½ ½ ctd. Afternoon session: Buyer season—400 tons, \$1.40%; 400, \$1.40%; 400, \$1.40%. Buyer 1886—100 tons, \$1.35%; 200, \$1.35%; 300, \$1.35% ½ ctd.

DAIRY PRODUCT—More pickled butter is going out to the trade, causing a stronger tone to rule for gilt-edged. Fresh roll continues in good demand if the quality is choice to gilt-edged; but ordinary qualities are slow, yet the light stock and light receipts keep the latter from falling in price.

HONEY—Receipts are light, but the demand being only fair, no advance in prices is recorded.

FEED—Ground feed is steady with a good demand ruling. Hay is firmer with a slight advance obtainable on quotations. The following is the range for hay: Barley, extra, 80c; \$8@11; wheat, \$9@13, with something extra selling slightly higher.

[COMMUNICATED.]

## Market Information.

## Cereals.

Under call board manipulation the price of wheat was battered down until on Monday last it was difficult to get a bid of over \$1.31½ to \$1.32½ for fair to good shipping; but at the lower prices there were few sales of actual wheat. The knocking of prices was done so as to buy that which farmers are compelled to part with to meet pressing wants. This theory regarding lower bids is the more plausible owing to no actual decline abroad in the price of wheat cargoes for prompt shipment; but, on the contrary, rather, there has been a decline in wheat charters—vessels can be had at fully 25 6d per ton (nearly 6 cts per cental) less than a week ago, yet wheat went down with charters instead of advancing. Yesterday the wheat market was stronger with an advance in bids of fully 1½ cts per cental, but even this advance did not bring out supplies.

A. D. Logan, President of the Grangers' Bank, and who owns quite a number of warehouses in the

Sacramento valley, reports that his warehouses are not more than one-quarter full, which is considerably less than last year. This shows a very large falling off in the yield. Mr. Rideout, senior partner in a bank at Sacramento, one at Marysville and another at Oroville, confirms Mr. Logan's report of a very short crop, and also says that the outturn on the east side of the Sacramento river is less than he has known since he has been in business.

Sonora wheat, unless choice for milling, is hard to sell, as shippers do not appear disposed to want it, owing to a reported poor market abroad for it.

Good to choice milling wheat sold yesterday at \$1.36½, and for a parcel of gilt-edged \$1.37½ was refused.

The demand for chevalier barley, bright and plump, continues strong, with heavy shipments made to Europe. The East still takes our choice bright plump brewing barley, with in some instances an advance paid on current top quotations. The exports of barley from July 1st to September 22d aggregate 24,150 tons, against 6750 tons for the like time last year. For the past few days there has been a stronger tone to oats, with it possible to obtain a slight advance on last week's prices. The improvement is due to lighter receipts and a good consumptive demand.

California corn continues scarce with full prices ruling, but Western is in liberal receipt with prices favoring buyers.

Rye is dull, with an easier tone generally reported, necessitating lower prices to effect forced sales.

## Dairy Product.

Butter is in good demand, with choice pickle given the preference, but at no advance in prices except in a small jobbing way. Fresh gilt-edged in rolls is still scarce and commands full prices, but good to choice, as also fair, is in buyers' favor and with the supply liberal. From present indications, it looks as if all the surplus packed last spring will go into consumption and the next season open with the market almost bare. The severe drought experienced at the West curtailed the production in the large creamery districts, which is no small factor in aiding our market.

Cheese is firm, with a slight advance obtained on outside quotations for the best makes. The stock is lessening, with the supply to draw from not large for the season.

Eggs have ruled very strong for the better qualities, but poor "as is" have favored buyers. It is claimed that heavy shipments of Eastern are on the way and for which buyers are waiting, by not stocking up, in expectation of lower prices on their arrival and being put on the market.

## Feedstuff.

A good demand continues to obtain for ground feed, but at unchanged prices. Oregon sends us liberal supplies of bran and middlings that tend to keep the California product steady.

Choice to extra choice hay continues scarce, with the latter wanted at top quotations afloat. Owing to light receipts, all grades of hay are firmer at a slight advance. The consumption is not only large, but increasing.

Feed carrots find a ready market, at unchanged prices; the demand is chiefly from stockmen.

## Fruits.

Immediately following last week's issue, wine grapes were shut down in prices until on Friday Zinfandels sold at \$15 to \$18, and all others in proportion. The decline is said to have been due to city wineries being full and very heavy receipts of grapes. Table grapes also sold lower. On Tuesday there was a stronger tone, which resulted in an advance to-day, with a strong closing, owing to light receipts and a good demand.

Peaches have ruled weak and slow. Figs have been in better demand, with a slight advance obtained.

Poor apples and poor pears have been very hard to sell, but choice met with a quick demand, at full prices, owing to their scarcity.

Oregon apples and Oregon pears received do not give satisfaction, consequently, full prices are not realized—only the best should be sent here to net a profit.

Huckleberries are slow of sale, with concessions in order.

Strawberries and blackberries have ruled very strong under light receipts and a good demand.

Canners are still out of the market for quinces, which causes low prices to rule.

Cantaloupes, under light receipts, have advanced. Choice plums and prunes continue in good demand, with strong prices ruling.

## Hops.

Receipts are coming in more freely. Some re-sales have been made at 32½ cents for choice, to go to the East. There is considerable inquiry, but, as yet, buyers are not operating, owing to the light offerings. It is claimed that when buying does commence, there will be strong competition for the better grades, which will be apt to send values up to still higher figures. Two carloads were shipped East yesterday. They are said to have been purchased last month for delivery this month. Samples of hops received from Rogue River valley, Oregon, are good; and if the crop averages up to sample it will, so say buyers, fetch good prices.

## Live-stock.

The market does not present any new feature worthy of special notice. Choice, well-conditioned beef-cattle are scarcer and command a slight advance, but the consumption is, as yet, light of this kind, for butchers run almost entirely on fair to good which continue to press the market. With feed scarce on the plains and in the valleys, it is claimed that prices will appreciate as soon as the rainy season sets in. In mutton sheep there is nothing new; it is thought the flocks which were driven back into the mountains will soon begin to come back on their winter range, and for a time thereafter free offerings will follow. In horses the demand is sluggish, with only the best selected meeting with quick sales at good prices. More work-horses are offering, but as the demand is only fair, buyers are virtually masters of the situation.

The following are to-day's meat prices: Beef—Stall-fed, 7@7½c ½ lb; grass-fed, extra, 6@6½c; first quality, 5½@6c; second, 5@5½c; third, 4@4½c. Calves, small, 9@10c; larger, 7@8c ½ lb. Mutton—Ewes, 4½c; wethers 5c. Lamb—Spring,

6½@7c ½ lb. Pork—Live hogs on foot, 2½@3¼ for grain and dairy fed; 2@2½c for soft; dressed, 6c for hard, and 5c for soft. Grass-fed stock sell on foot, gross weight, at one-half the price they fetch dressed; stall-fed, on foot, fetch one-third less than they sell at dressed.

## Vegetables.

It is now an admitted fact that the potato crop of this coast is below an average, with the bulk of those grown being defective, consequently a strong and good market is expected throughout the winter. Some buyers, though, claim that prices are apt to be kept from going too high by free importation from Utah. The past week the market steadily advanced up to Monday, when an easier feeling set in, causing prices to settle under free receipts and buyers asking bidding down. Oregon Burbank seedlings sold on the wharf, according to quality, at from \$1.15 to \$1.60; the latter price was commanded by a consignment of very choice. Cuffey Coves are beginning to come to hand, but as yet in small quantities.

Sweet potatoes have come to hand in more liberal quantities, causing a weaker market to rule. The quality received is generally good.

Onions have ruled steady, with a fairly firm feeling. The demand has been chiefly local, yet shippers have taken a fair quantity each day.

Canners have taken freely of tomatoes, causing a strong, steady market, with a slight advance obtained in several instances.

Cucumbers, summer squash, and green okra are firm at a slight advance for the better qualities. Receipts of each kind are light.

Egg plants are in heavy supply, with prices favoring buyers. It has been very hard to place at over 50 cts a box even for choice.

Lima beans and also string beans are in liberal supply, with the market weak, and only top prices reached by young and tender stock.

Marrowfat squash are in oversupply, with some difficulty reported in getting over \$5 on the wharf for the more choice.

Cabbages are in good supply, with, at times, some concessions necessary to effect sales.

## Wool.

The market continues very strong, with all received going into buyers' hands. The East reports a higher and stronger market, but notwithstanding which over 2200 bales of Australian, held in bond at New York, was reshipped to London, where higher prices could be realized than in either the New York, Boston or Philadelphia markets.

## Miscellaneous.

The demand for seeds is slow, owing to the absence of rains. There is a free call for yellow mustard from the East, but brown mustard is slow.

Wheat charters to Europe are again lower, with the tendency to a still lower range. The latest charter reported for Liverpool is 25s for a wooden vessel, and for an iron vessel 27s 6d. To-day shippers are bidding 1s 3d less than the above, with a fair chance of soon getting vessels at their bids.

This season's nuts continue to come in slowly, causing consignees to be backward in giving out quotations.

The tonnage movement compares with last year at this date as follows:

	1886.	1885.
On the way.....	283,430	228,806
In port, disengaged.....	67,561	99,618
In port, engaged.....	62,563	24,602

Totals.....413,554 353,026

The above gives a carrying capacity as follows: 1886, 661,684 short tons; 1885, 564,941 short tons; increase over last year, 96,743.

Tonnage on the way to Portland, Oregon, 49,012 tons; same time in 1885, 36,223.

Broom corn is offering quite freely, with buyers bidding lower. The quality of all received so far is unexceptionally good.

Provisions are weaker, with sales made at a slight slight decline in hams and bacon.

Poultry has ruled fairly steady throughout the week, with better prices looked for next week in all except ducks and geese. The demand for the two latter the past two weeks was chiefly to suit the Jewish holiday, which ends with Saturday of this week.

San Francisco, Sept. 20, 1886.

## Fruits and Vegetables.

Extra choice in good packages fetch an advance on top quotations, while very poor grades sell less than the lower quotations.

WEDNESDAY, Sept. 29, 1886.	
FRUIT MARKET.	
Apples, bx com. 35 @ 75	Apricots..... 12 @ 13
do red chinos. 1 00 @ 1 50	do evaporated 2 @ 30
Bananas, bunch. 1 00 @ 2 50	Blackberries... 2 @ 30
Blackberries, ch. 3 00 @ 5 00	(Otron)..... 2 @ 30
Cantaloupes, cr. 50 @ 75	Dates..... 9 @ 10
Cherries blk. — @ —	Figs, pressed... 8 @ 10
do Royal Ann. — @ —	Figs, loose..... 4 @ 5
Cherry plums. — @ —	— "ectarines..... — @ —
Crabapples..... — @ —	— " — @ —
Cranberries..... 7 00 @ 10 00	do pared..... 16 @ 18
Currants chest. — @ —	Pears, sliced... 5 @ —
Figs, bl..... 30 @ 75	do art..... — @ 2½
Grapes..... 30 @ 40	do evaporated 8 @ 10
do Rose Peru. 30 @ 45	Plums..... — @ —
do Muscat..... 25 @ 45	Plums pitted... — @ —
do Tokays..... 40 @ 60	— " — @ —
Wine, ton..... 12 00 @ 20 00	do French..... — @ —
Limes, Mex..... 6 00 @ 9 00	Raisins, Cal. bx 1 75 @ 2 00
do Cal. box..... — @ —	Zante Currants. 3 @ —
Lemons, Cal. bx 2 50 @ 4 50	
do Sicily, box. 8 00 @ 10 50	VEGETABLES.
do Australian. — @ —	Artichokes, doz. 10 @ 15
Nectarines, box. — @ —	Asparagus box. — @ —
Oranges, Cal. bx 1 50 @ 2 50	— " — 1 00 @ —
do Tahiti, bx. 3 35 @ 3 50	Cabbage, 100 lbs. 50 @ 75
do Mexican, M. — @ —	Carrots, sk..... 30 @ 35
do Panama..... — @ —	Cauliflower, doz. — @ 1 00
Peaches, bx..... 65 @ 75	Celery, doz..... 50 @ 60
do bak..... — @ —	Cucumbers, doz. 30 @ 40
Crawfish, bx. — @ —	Eggplants.....bx 40 @ 60
do do..... — @ —	Garlic, B new... 2½ @ 3
do do..... 75 @ 1 00	Green Corn..... — @ —
Pears, bx..... 30 @ 75	small box..... 25 @ 60
do basket..... — @ —	do large box... 80 @ 1 25
do Bartlett, bx 1 00 @ 2 25	Green Peas, sk. 1 25 @ 2 00
Persimmons..... — @ —	Lettuce, doz..... 10 @ —
Jap. bx..... — @ —	Mushrooms, lx. — @ —
Pineapples, doz. 4 00 @ 5 00	— " — @ —
Pomegranates, b. — @ —	Okra, dry, lb..... 10 @ 12½
Plums, bx..... 1 2 @ 15	do green box... 50 @ 75
Prunes, bx..... 45 @ 85	Parasols, chl. 1 50 @ —
do Figs..... 75 @ 85	Peppers, dry lb. 25 @ 40
Quinces, bx..... 40 @ 50	do green, bx. 30 @ 50
Raspberries, ch. — @ —	Rhubarb, box... 60 @ 1 00
Strawberries ch. 6 00 @ 7 00	Squash, Marrow
Watermelons 100 4 00 @ 6 00	fat, doz..... 5 00 @ 10 00
	do Summer..... 25 @ 40
	do Winter..... 25 @ 40
	DRY FRUIT.
Apples, alvated, 2½ @ 3	3 Lump Beans sk. 25 @ 30
do evaporated. 8 @ 8½	3 Turnip beans sk. 25 @ 75
do quartered... 1½ @ —	Turnips chl..... 75 @ 1 00



## PACIFIC COAST WEATHER FOR THE WEEK.

(Furnished for publication in this paper by NELSON GOROM, Sergeant Signal Service Corps, U. S. A.)

DATE.	Portland.	Red Bluff.	Sacramento.	S. Francisco.	Los Angeles.	San Diego.
Sept. 22-23.	Rain.	Rain.	Rain.	Rain.	Rain.	Rain.
Thursday.....	.20 61 S Cy.	.00 78 S Cl.	.00 73 NW Cl.	.00 68 NW Cl.	.00 72 SW Hy.	.00 70 SW Cy.
Friday.....	.00 65 S Cl.	.00 78 N Cl.	.00 76 NW Cl.	.00 71 W Cl.	.00 73 SW Cy.	.00 70 SW Cl.
Saturday.....	.17 59 NW Cy.	.00 80 N Fr.	.00 76 SW Cl.	.00 67 W Cl.	.00 71 SW Cl.	.00 70 W Fr.
Sunday.....	.00 61 NW Fr.	.00 79 N Cl.	.00 74 NW Cl.	.00 71 W Cl.	.00 66 SW Cl.	.00 — —
Monday.....	.00 68 NE Cl.	.00 83 N Fr.	.00 76 NW Hy.	.00 66 W Cl.	.00 71 W Cl.	.00 68 NW Cl.
Tuesday.....	.00 74 E Cl.	.00 69 SW Cl.	.00 78 NW Hy.	.00 58 W Cl.	.00 73 W Cl.	.00 67 NW Cl.
Wednesday.....	.00 75 NW Cl.	.00 72 E Cy.	.00 70 S Cl.	.00 64 W Fr.	.00 71 W Cl.	.00 67 NW Cl.
Total.....	.37	.00	.00	.00	.00	.00

EXPLANATION.—Cl. for clear; Cy., cloudy; Fr., fair; Fy., foggy; — indicates too small to measure. Temperature Wind and weather at 12.00 M. (Pacific Standard time), with amount of rainfall in the preceding 24 hours.

## Domestic Produce.

Extra choice in good packages fetch an advance on top quotations, while very poor grades sell less than the lower quotations.

**BEANS AND PEAS.**  
Bayo, chl. 1.40 @ 1.50  
Butter 1.25 @ 1.50  
Pea 1.75 @ 1.80  
Red 1.10 @ 1.12  
Pink 1.07 1/2 @ 1.12  
Large White 1.70 @ 1.75  
Small White 1.75 @ 1.80  
Lima 2.00 @ 2.25  
Wild Peas, blk eye 1.00 @ 1.10  
do green 1.00 @ 1.10  
do Niles 1.25 @ —

**BROOM CORN.**  
Southern per ton 50 @ 70  
Northern per ton 50 @ 70

**ORIOCOOY.**  
California 4 @ 4 1/2  
German 6 @ 7

**DAIRY PRODUCE, ETC.**  
Butter.  
Cal. fresh roll, lb. 20 @ 30  
do Fancy brands 32 1/2 @ 35  
Pickle roll 20 @ 23  
Pekin, new 15 @ 18  
Eastern — @ —

**CHEESE.**  
Oheese, Cal., lb. 8 @ 11  
Eastern style 11 @ 14

**EGGS.**  
Cal. ranch, doz. 32 1/2 @ 35  
do store 20 @ 30  
Ducks — @ —  
Oregon — @ —  
Eastern — @ —  
Utah — @ —

**FEED.**  
Bran, ton 14 50 @ 15 50  
Cornmeal 26 00 @ 27 00  
Ground Barley 21 @ 23  
Hay 7 00 @ 13 00  
Middling 16 00 @ 17 00  
Oil Cake Meal 26 50 @ 28 50  
Straw, bale 35 @ 50

**FLOUR.**  
Extra, City Mills 4 12 1/2 @ 4 50  
do Country Mills 4 00 @ 4 37 1/2  
Superfine 3 00 @ 3 50

**GRAIN, ETC.**  
Barley, feed, chl. 85 @ 97 1/2  
do Brewing 1 10 @ 1 17 1/2  
Chevalier 1 45 @ 1 55  
do Coast 1 20 @ 1 40  
Buckwheat 1 00 @ 1 10  
Corn, White 1 30 @ 1 35  
Yellow 1 30 @ 1 35  
Small Round 1 30 @ 1 35  
Nebraska 1 05 @ 1 12 1/2  
Oats, new — @ —  
Choice feed 1 27 1/2 @ 1 30  
do good 1 20 @ 1 25  
do fair 1 15 @ 1 17 1/2  
do black 1 12 1/2 @ 1 15  
do Oregon 1 25 @ 1 45  
Eye 1 10 @ 1 25

**WHEAT MILLING.**  
Gilt edged 1 40 @ —  
do choice 1 38 1/2 @ —  
do fair to good 1 36 1/2 @ 1 37 1/2  
Shipping choice 1 36 1/2 @ —  
do good 1 34 1/2 @ 1 35  
do fair 1 31 1/2 @ 1 32 1/2

**HIDES.**  
Dry — @ 16  
Wet salted 8 @ 9 1/2

**HONEY, ETC.**  
Beeswax, lb. 20 @ 22  
Honey in comb 8 @ 10  
Honey in comb, fancy 11 @ 13  
Extracted, light 4 @ 4 1/2  
do dark 3 1/2 @ 3 3/4

**HOPS.**  
Oregon — @ —  
California old 17 1/2 @ 20  
do new 27 1/2 @ 32 1/2

**PICKLING.**  
Onions 35 @ 50  
Silverskin 60 @ 65

**NUTS—JOBBER.**  
Walnuts, Cal., lb. 7 1/2 @ 9  
do Ohio 7 @ 9  
Almonds, hdshl. 6 @ —  
Soft shell 10 @ 12  
Brazil 11 @ 12 1/2

## Jeans' Sack Holder and Filler.

In our report of the State Fair in last week's RURAL we mentioned a sack holder and filler, shown by W. F. Jeans, of Woodland. We were favorably impressed with the device, and in order that our note might be more intelligible to the reader, we give on this page engravings of the sack-holder as fitted to a standard for barn or warehouse use (Fig. 1), also by itself (Fig. 2).

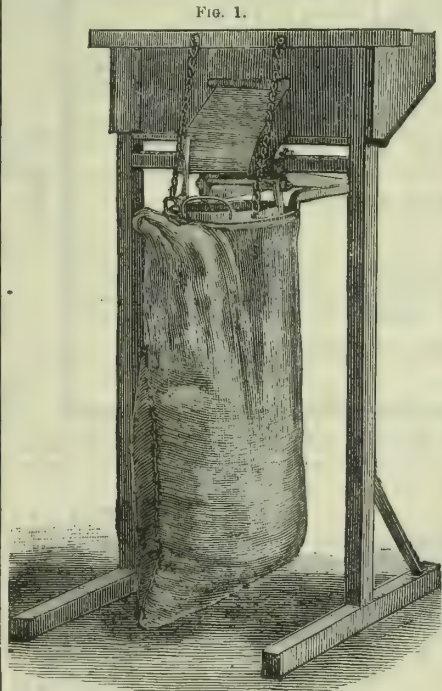


FIG. 1.

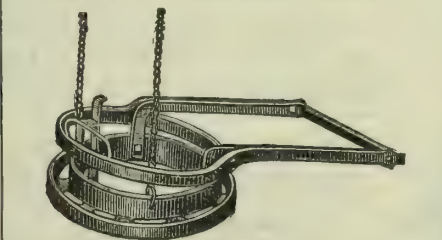


FIG. 2.

## JEAN'S SACK HOLDER AND FILLER.

ready for attachment to the separator or combined harvester (Fig. 2). We are told, as stated last week, that the sack-holder has been thoroughly tried during the last summer and given good satisfaction. By this machine the sack is suspended. The bottom never rests on the ground or floor—thus the sack is stretched to its full length, allowing it to be filled with every pound of grain it will hold without using a stick. It is especially adapted to filling old sacks, as it grips the sack all around the top, putting an equal strain on the sack, allowing it to be well filled without tearing. It is claimed that from 8 to 10 pounds more can be put in a sack than with any other sack-holder.

## Our Agents.

OUR FRIENDS can do much in aid of our paper and the cause of practical knowledge and science, by assisting Agents in their labors of canvassing, by lending their influence and encouraging favors. We intend to send none but worthy men.

JARED C. HOAG—California.  
G. W. INGALLS—Arizona.  
E. L. RICHARDS—San Diego Co.  
R. G. HUSTON—Montana.  
FRANK W. SMITH—Utah and Colorado.  
M. S. PRIME—Marin Co.  
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JEANNETTE HOUGHTON—San Mateo Co.

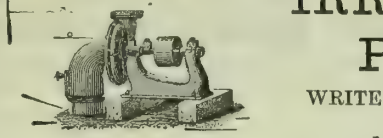
## Large Cyclone Windmills.

Our readers no doubt noticed that the advertisement last week of the Cyclone windmill, which received the prize at the Mechanics' Fair, did not give the prices for which the larger sizes would be furnished. These prizes are given in their advertisement this week. We are told that several Cyclones have recently been ordered by the S. P. R. Co., and by the Government for use at the Presidio.

## THE WHITMAN PERPETUAL HAY PRESS



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## List of U. S. Patents for Pacific Coast Inventors.

Reported by Dewey & Co., Pioneer Patent Solicitors for Pacific States.

From the official report of U. S. Patents in DEWEY & Co.'s Patent Office Library, 252 Market St., S. F.

FOR WEEK ENDING SEPT. 21, 1886.

- 349,295.—SASH-FASTENER—E. H. Alvord, Seattle, W. T.  
349,299.—SAFETY AIR CLUTCH FOR ELEVATORS—H. W. Bracken, S. F.  
349,479.—CABLE GRIP—H. Casebolt, S. F.  
349,632.—TRACE HOOK—Chas. Dudley, Stockton, Cal.  
349,489.—GAS METER—A. F. Fisher, Chico, Cal.  
349,586.—CHECK VALVE—A. D. Glace, Rocklin, Cal.  
349,498.—TRUSS—J. G. Henderson, Grizzly Flat, Cal.  
349,650.—ELECTRIC SYNCHRONIZER FOR CLOCKS—M. E. Hunter, Oakland, Cal.  
349,512.—ENGINE VALVE-GEAR—R. A. McLellan, S. F.  
349,450.—FRUIT EVAPORATOR—A. C. Penniman, San Jose, Cal.  
349,404.—MOLD-BOARD FOR PLOWS—J. W. Peters, John Adams, Cal.  
349,459.—ADDING MACHINE—Shattuck & Thorn, Jr., S. F.

NOTE.—Copies of U. S. and Foreign Patents furnished by DEWEY & Co., in the shortest time possible (by mail or telegraphic order). American and Foreign patents obtained, and general patent business for Pacific Coast inventors transacted with perfect security, at reasonable rates and in the shortest possible time.

## Stockton Soap Works.

Messrs. Williams & Moore have a large factory in Stockton that supplies largely the San Joaquin valley. Their exhibit at the San Joaquin District Fair consisted of two large pyramids, in which were embraced family, laundry and toilet soaps. Their specialties are: Le Grand Savon, Bueno soap, chemical olive soap, bleaching soap, Angora soap, laundry soap. This local industry has grown within the last few years to keep pace with the demand for these popular brands.

Their business as dealers in hides and pelts and location has given them many advantages in building up this new enterprise. They are following a rule which was adopted at the commencement, of making a good reliable brand of soap, and selling at the lowest possible cost.

## The Fruit-Growers' Convention.

Elwood Cooper, of the State Board of Horticulturists, has written to Wm. M. Boggs, of this city, also a member of the Board, suggesting that the next Annual Fruit-growers' Convention be held in Assembly hall, Sacramento, commencing Nov. 8th and ending Nov. 13th. He also outlines a program covering a large number of subjects bearing directly upon fruit culture. The place, date and program are satisfactory to Mr. Boggs, and if they prove the same to one other member of the Board yet to be consulted, the matter will be considered settled.—Napa Register.

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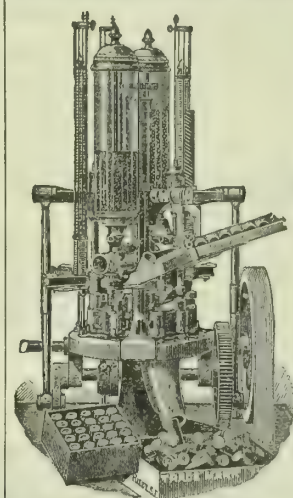
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## State School Text-Books.

MESSRS. EDITORS:—The question of State text-books for the public schools is a very important one, and every candidate for a school office should define his position on that subject.

In 1882, I publicly announced my belief that "The State should publish the text-books and furnish them to the children at cost." I voted for the amendment to the Constitution, providing for such publication, and I have been in favor of it ever since. If I am elected to the office of State Superintendent of Public Instruction, I shall cordially do everything in my power to carry out the intent and spirit of the law, regarding State text-books.

The State Board of Education has announced the prices of the State series of readers, which are less than one-half the prices heretofore paid, and it is in my opinion to suppose that the same reduction will extend to other books.

I am now of the opinion that it would be still better for the State to furnish books for every child in the public schools free of cost to their parents.

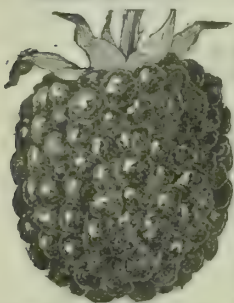
The adoption of such a plan would, in my judgment, still further and materially reduce the total cost of text-books to the people of the State. Children would be taught to care for the property of the state, under penalty of being obliged to replace books destroyed or lost by them, and the books could last much longer.

Massachusetts has adopted the "Free Text Book" plan with great success, and there is no good reason why we should not do the same in California. Very respectfully,  
IRA G. HOITT.  
San Francisco, Sept. 27, 1886.



## Seeds, Plants, Etc.

## ERIE BLACKBERRY.



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NO SCALE—I wish particularly to call the attention of Fruit-growers to this fact. I have repeatedly had my nursery examined by experts, and upon no occasion have they found any scale or any indication of scale. The nursery is isolated from orchards, both old and new, and as I take every precaution in importing new varieties to get only clean stock, I feel perfectly warranted in guaranteeing every tree sold by me free from scale and other pests that are proving so disastrous to the fruit interests of the State. SEND FOR CATALOGUE.

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Double Desks at from \$5.50 down to \$4.50.  
Single Desks at from \$4.50 down to \$3.50.

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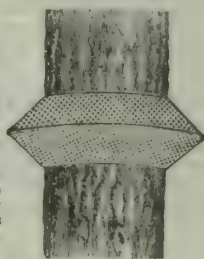
## WINDMILL.

After many years' experience in the invention and manufacture of Windmills, among which may be named the "Hercules," "Saunders," "Cyclone," "Eureka," the subscriber has perfected a mill that intrinsically no patent; will face the wind; is direct action; solid wheel; no wood screws, pivots, loose joints, flapping sections or spider legs to get out of order. Is beautiful, strong, not liable to get out of order, and in cheapness below any other. Send for pamphlet of the "Eureka Improved Windmill." Pumps of various kinds at very low rates. Address

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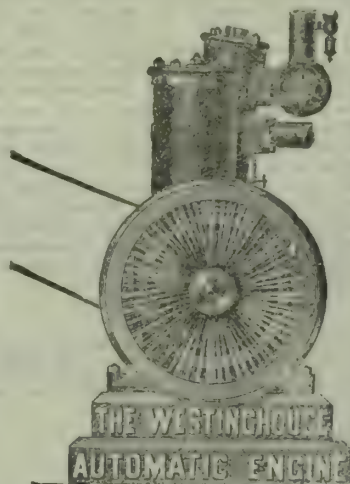
Will destroy every Codlin Moth Larva that crawls up or down the tree. The best, cheapest and simplest trap now invented. No orchardist can afford to do without this trap. It is a sure cure for the codlin moth. For further information, address G. W. THISSELL, Winters, Yolo Co., Cal.



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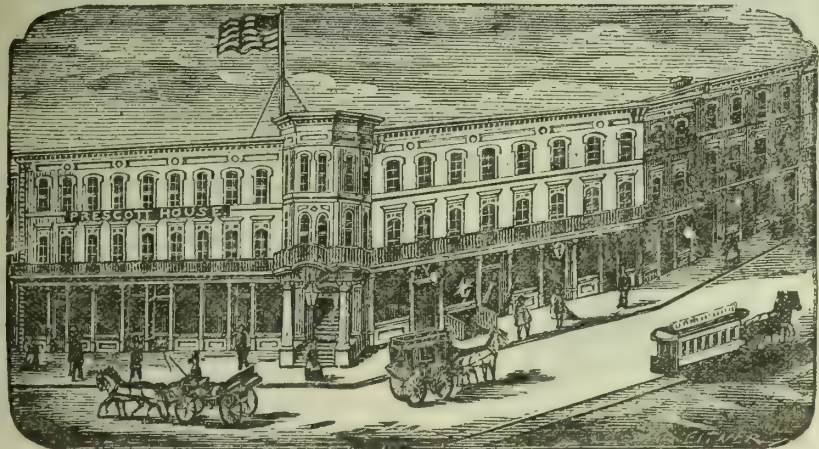
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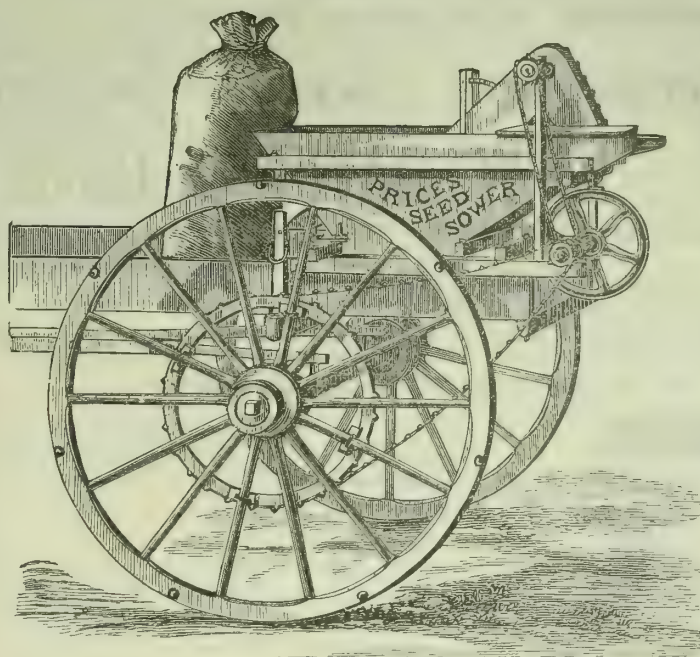


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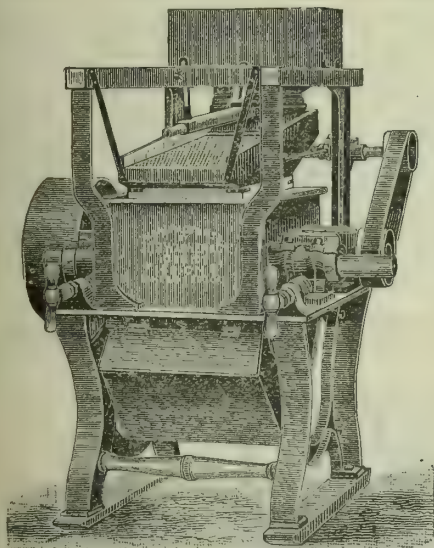
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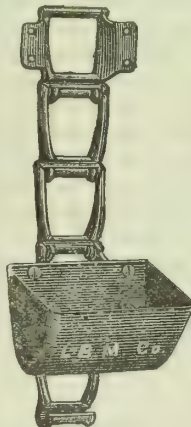
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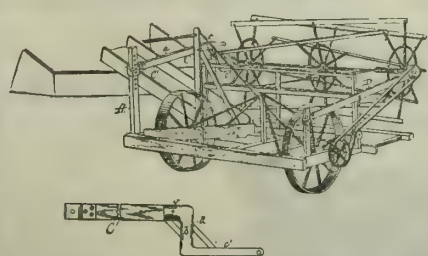
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**HARVESTERS.**



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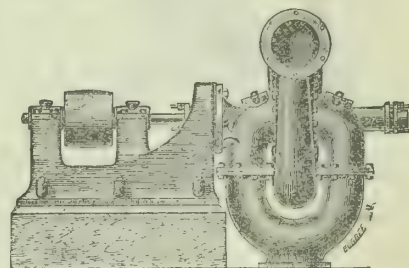
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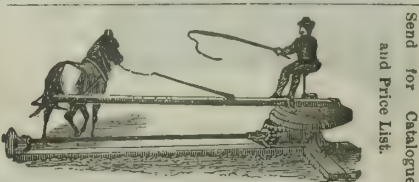
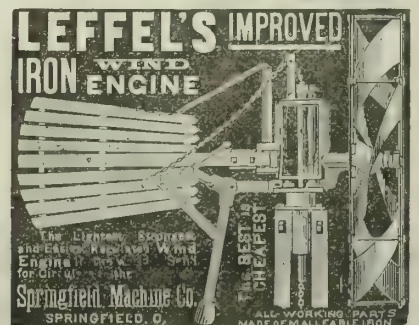
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These Buggies have been sold on this Coast for four years, and have made a fine reputation. Want of space prevents us giving as full a description as we would like. The principal points to which we call attention are:

AXLES. These are 1 inch DOUBLE COLLAR STEEL.  
SPRINGS are SWEDS STEEL, OIL TEMPERED, polished and fully warranted.  
TIRES are made of finest STEEL TIRE.  
WHEELS are SARVEN PATENT STANDARD "B" WHEEL, made from first-class timber, having screwed rims, and the ROUSE BACK FLANGE, with PATENT DROP SAND BAND. We also furnish the BROWN'S SHELL BAND WHEELS.

IRON WORK is applied and finished in a thorough workmanlike manner, it is all DROP FORGED WORK.  
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GEARINGS are choice selected HICKORY.  
For further description write us for Special Circular giving fuller information about the various styles made by this factory.

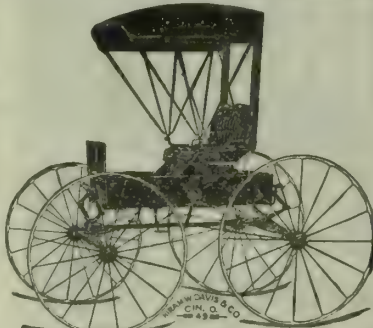
#### No. 45.—WHITE CHAPEL STYLE, WITH SHAFTS.



This Top Buggy is built in three different grades. Each grade a different price. Hung on 36-inch Berlin Head Elliptic Springs. Grade B is the cheapest. Grade B—Extra, is more expensive. Grade A is the finest.

Body, 52 inches long, 26 inches wide on the top. Seat, 34 inches wide, outside measurement, 26½ inches inside. Wheels have "screwed" felloes; Sarven have Rouse Patent Back Flange and Drop Sand Bands. Either 1 inch or ¾ inch felloe. Are 3 feet 6 inches front and 3 feet 10 inches rear in height. Axles—Best Steel, Fantail, Double Collar Axles, 1 inch or ¾ inch. Steel Tire, 1 inch or ¾ inch. Painting, a rich Black. Wide or Narrow Track. Weight, 320 lbs.

#### No. 49.—PIANO BODY STYLE, WITH SHAFTS.



This Top Buggy is built in three different grades. Each grade a different price. Hung on 36-inch Berlin Head Elliptic Springs. Grade B is the cheapest. Grade B—Extra, is more expensive. Grade A is the finest.

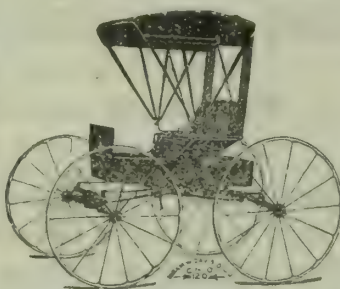
Body, 51 inches long, 26 inches wide, side panels 8½ inches deep. Seat, 34 inches wide, outside measurement, 26½ inches inside. Wheels have "screwed" felloes; Sarven have Rouse Patent Back Flange and Drop Sand Bands. Either 1 inch or ¾ inch felloe. Are 3 feet 6 inches front, and 3 feet 10 inches rear, in height. Axles, best Steel, Fantail, Double Collar Axles, 1 inch, or ¾ inch. Steel Tire, 1 inch or ¾ inch. Painting, a rich Black. Wide or Narrow Track. Weight, 320 lbs.

#### STYLE No. 81.—PHAETON, WITH SHAFTS.



This Phaeton is built in three different grades. Each grade a different price. Hung on two Swede Steel Elliptic Springs. Grade B is the cheapest. Grade B—Extra, is more expensive. Grade A is the finest. Body, on the bottom is 44 inches in length, 27½ inches wide. Seat, at bottom 31 inches wide, at top 37½ inches wide. Wheels have "screwed" felloes; Sarven have Rouse Patent Back Flange and Drop Sand Bands. Either 1 inch or ¾ inch felloe. Are 3 feet 2 inches front, and 3 feet 8 inches rear, in height. Axles, best Steel, Fantail, Double Collar Axles, 1 inch or ¾ inch. Steel Tire, 1 inch or ¾ inch. Painting, a rich Black. Wide or Narrow Track. Weight, 385 lbs. We build this job also hung on 3 Elliptic Springs.

#### No. 120.—DAVIS' CALIFORNIA BUSINESS BUGGY, WITH SHAFTS.



This Top Buggy is built in three different grades. Each grade a different price. Hung on triple Swede Steel Springs, 56 inches in length. The Side Springs are 1½ inch, 4 plate, taking the place of the ordinary wooden side bars; are attached to head-block and rear axle by shackles. The Center Spring, taking the place of the ordinary rigid perch, is of Swede Steel, 1½ inch, four plate, attached to bottom side of front and rear axles. These 3 Springs at the center are connected by 1½ inch square hickory bars supported by wrought iron braces. Body, 51 inches long, 26 inches wide. Wheels have "screwed" felloes; Sarven have Rouse Patent Back Flange and Drop Sand Bands. Are 3 feet 6 inches front, and 3 feet 10 inches rear, in height. Axles, best Steel, Fantail, Double Collar Axles, 1 inch or ¾ inch. Steel Tire, 1 inch or ¾ inch. These Springs, by their simplicity of construction and arrangement, impart a riding quality, that, for fast or slow driving over level or mountainous roads, have no equal, regardless of price. Painting, a rich Black. Wide or Narrow Track.

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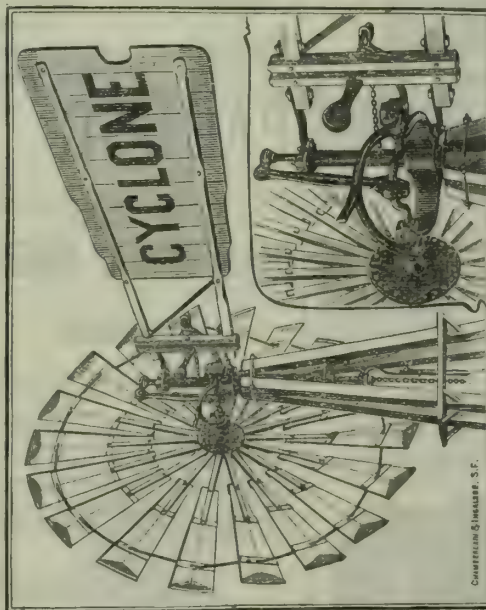
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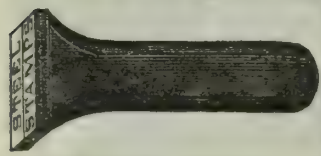
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Best accommodations for the price.  
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TWENTY-PAGE EDITION.

Vol. XXXII.—No. 15.]

SAN FRANCISCO, SATURDAY, OCTOBER 9, 1886.

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### Insolvent Farmers.

The Supreme Court of this State recently filed an opinion in relation to the exempt property of insolvent farmers that may interest our readers. An insolvent debtor, after the order adjudging him insolvent, petitioned the court to set aside to his use certain personal property as exempt from execution, and among other things a Cahoon seed-sower and a "thrashing rig," consisting of a thrashing engine, three tanks to hold water for the engine, a thrasher, a derrick and forks, a seed cleaner, a feeding machine, a feeding rack and a cookhouse. One of the creditors objected to the property being set aside, on the ground that it was not exempt from execution. From the evidence it appeared that the Cahoon seed-sower was worth about \$10, and that another one worth \$90 had been set apart to him. That the two seed-sowers, while used for the same purpose, were operated in a different manner. That the petitioner and his son jointly owned the thrashing rig, and that it required 16 men and six horses to operate it. It was further shown that all the above described implements were necessary to profitably carry on the business of farming, and that it was not unusual for two or more farmers to purchase, and use in common, thrashers, engines, derricks and forks, feeding-machines, cleaners, headers, mowers, seed-sowers, plows and other implements, for the simple reason that their cost was more than the average small farmer could stand. The court, after hearing this evidence, refused to set aside the said property as exempt, and ordered it to be turned over to the assignee. The appeal was from that order. The Code of Civil Procedure exempts from execution "the farming utensils or implements of the judgment debtor; also two oxen, or two horses, or two mules and their harness, one cart or wagon, and food for such oxen, horses or mules for one month." Now, the question is, does the Code exempt such an expensive outfit from execution, which is owned and used by two or more farmers in common? The court said:

"In our opinion the Legislature meant by the words 'the farming utensils, or implements of husbandry of the judgment debtor,' such utensils or implements as are needed and used by the farmer in conducting his own farming operations, and it was not intended that all farming machinery which a farmer may own should be exempt; because, while he uses it chiefly by renting it out, or in doing work on other's farms for hire, he still uses it to a small extent on his own land. To hold otherwise would enable the farmer who cultivates 40 acres to invest a large amount of money in expensive implements, and to hold them free and clear of his creditors, though they were used but for a day on his own land, and for all the balance of the year were rented or hired out to others. A reasonable construction should be given to the statute, and not one which would prevent its benevolent design, and enable gross frauds to be perpetrated under color of law."

The order appealed from was affirmed.

**OUR MILLING INTERESTS.**—A prominent writer holds that among the various manufacturing industries of any country, none are more valuable, interesting, or worthy of consideration and universal support than that of milling, whether it be of wheat, oats, rye, rice, or other grains.

**LAND FOR SETTLERS.**—The Klamath Indian Reservation, in the northern part of this State, is now being surveyed with a view of opening it up to settlers, but it will be some time after the survey is made before intending settlers can

**THE GREAT FLUME.**—It is announced that on the 2d inst. a contract was closed between the San Diego Flume Co. and Moore & Smith, of S. F., for the construction of a redwood flume from the headwaters of the San Diego

### Yerba Santa.

Many of our readers will recognize in the engraving on this page a very good representation of a twig of the native plant, Yerba Santa, known to the botanist as *Eriodictyon glutinosum*. This plant is well distributed over considerable areas of the State, and its healing virtues widely lauded. Dr. Vasey, botanist of the U. S. Department of Agriculture, from whose report we reproduce our illustration, gives a description of the plant, which will be read with interest.

The Yerba Santa is a low shrubby plant of California, growing from 3 to 5 feet high. The stems and twigs are smoothish and generally showing more or less of a resinous exudation, particularly on the vigorously-growing twigs. The leaves are thick and rigid, alternate, lanceolate in form, usually 3 or 6 inches long, acutish at the point, and tapering at the base into a short petiole, the margins irregularly toothed, smoothish on the upper surface, the lower surface with a prominent fine reticulation, whitened between the veins by a fine and close, woolly pubescence. The flowers terminate the branches in a panicle, and are collected in numerous small, rather crowded, cymes or clusters. The individual flowers are about half an inch long, the calyx small and deeply divided into five sepals, the corolla of one piece (monopetalous) rather trumpet-shaped, with the border five-lobed, its color varying from purple to white. Attached to the inner side of the corolla near the base are the five stamens. There are three thread-like styles nearly as long as the corolla, and at the base a roundish, two-celled pod containing the seeds. The plant belongs to the order *Hydrophyllaceae*. The upper surface of the young leaves and twigs are covered with a resinous, balsamic exudation. The under surface presents a beautiful network of veins with a fine, whitish pubescence between them. The leaves have a balsamic taste, and have long had a local reputation among the old Spanish settlers in diseases affecting the mucous membranes, as in chronic coughs, catarrhs, consumption, etc.

The engraving shows the plant in bloom, and in the small figure at the left the ripe seed-pods are represented.

**OUR BUTTER EXPORTS.**—The exports of genuine butter have fallen from 40,000,000 pounds in 1880 to 21,638,138 pounds in 1885, or nearly one-half, while the exports on butter substitutes have increased from 20,000,000 pounds in 1880 to 39,000,000 in 1885. The new law regulating the manufacture and sale of oleomargarine and other butter substitutes will, no doubt, soon restore the great industry of the country to its former status, and protect consumers from the imposition of "substitutes," or, at least, place them in a position where they will know what they are buying.

**ARBOR DAY.**—Professor E. W. Hilgard, of the State University, has written a letter to S. W. Forman, Secretary of the State Board of Forestry, giving his opinion that the 22d of February is the best time for the observance of Arbor Day. The 27th of November, at first fixed for this celebration, was only selected by Mr. Sutro, Joaquin Miller and others for beginning the work at Goat Island, but the State Board will no doubt adopt the suggestion of Professor Hilgard.



THE YERBA SANTA—A NATIVE CALIFORNIA SHRUB.

file claims. The survey will first have to be filed in the Surveyor-General's office here, then sent to Washington and approved, then sent back here and the plats made. After this is done a notice that the land is open to settlement must be posted for 30 days before claims can be filed. This notice will be posted in various places and published in the newspapers. This may not be until January, perhaps, but all will have time enough to file claims by reason of the 30 days' notice.

river to the city of San Diego, a distance of over 40 miles. The flume is to be completed and ready for use by July 4, 1887, and will supply the city and the neighboring country with about 4000 inches of fine mountain water brought from an elevation in the Julian mountains of over 5000 feet. The lumber used in the flume will aggregate between 7,000,000 and 8,000,000 feet and will make, at least, 30 schooner loads. This enterprise is another mark of progress on our southern border.



## CORRESPONDENCE.

Correspondents are alone responsible for their opinions.

## Napa Valley Notes.

EDITORS PRESS:—The busiest persons in the county at the present writing are grape-growers and wine-makers. Grape crushing commenced about ten days ago, and will continue for three or four weeks; the amount of wine to be made will be very large, the quality superior. Thus far the season has been very favorable for the vintage, and the prospects are good for its successful completion. Year by year, as the vines of the earlier planted vineyards grow older, and new vineyards come into bearing, the quantity of wine made in this county increases, and, notwithstanding the fears of quite a number of persons, expressed from time to time, that the business will be overdone and the market overstocked with wine, there is, at present, no indication of such an event. Many new wine cellars have been built this year, several of them of stone, very substantial. Prices have settled down to \$20 per ton all around, in many neighborhoods, while in others, rates for A No. 1 varieties range from \$25 to \$27. There seems to be a good and increasing demand for Napa valley wines, and new markets are opening up. Where all the wine here made goes to, puzzles many a person, for very little, comparatively, is drunk at home.

## Field Crops.

The very large hay crop raised in the county has been baled or stored loose. Prices have ruled so low, few farmers cared to sell, preferring to wait for an anticipated rise in the market; but the probabilities are that hay will rule quite low for some time to come.

## Corn Growing.

The large crop of corn in this valley is rapidly ripening, and the yield bids fair to be up to or above the average, notwithstanding no rain fell on many fields after they were planted. No fields of corn here are irrigated, and there never is a failure of a good yield. For the most part the yellow or white-dent is raised, though some farmers prefer the smaller, more rapidly-maturing varieties. One kind, lately introduced here—"Blunt's Prolific"—bears well and is appropriately named. One stalk, 10 or more feet high, we recently examined, bore five good-sized, well-developed ears, and on four stalks were counted 25 ears. This variety was planted after the middle of June, and matured rapidly in a much shorter time than the kind usually raised here.

No doubt one secret of successful corn culture is thorough, careful tillage; but of greater consequence is well-selected seed. The farmer who pays much attention to this point receives good returns for labor expended. Therefore frequent change of seed is beneficial, care being taken to select, of any kind chosen, the best ears. Years ago few farmers thought it worth while to top their corn; in fact a few years ago, comparatively, little or no corn was raised in this county—wheat, wheat, wheat being the principal, almost the only, product. Now the custom prevails almost universally of cutting the top stalks from corn while they are yet quite green, and before the corn fully matures. Some cut the corn up from the ground, letting it cure in large shocks, thus clearing the ground by once going over. Which method is preferable is a question with many farmers. There are those who contend that the latter is as quick a method, and cheaper in the end.

## The First Rain

Of the season is evidently not far distant, if numerous indications count for anything. Light showers would do no damage; on the contrary, the beneficial results accruing in laying the dust that is to be found on every thoroughfare and in purifying the atmosphere, would be great. One of the pleasantest seasons in California, if not the pleasantest, is the period succeeding the first rains. Very little land has here been summerfallowed, and the acreage that will be seeded dry will be comparatively small. The custom once prevailed of sowing corn ground (ground cultivated to corn during the current season) without plowing, but much of it is now plowed. Most of the wheat raised in the county this year was grown in Berryessa and Pope valleys. Causes heretofore cited prevented the raising of this cereal in Napa valley this year. More will be produced here another season.

## Transportation.

Considerable wheat harvested in Berryessa valley has been taken to Winters, Solano county, for storage; the balance has been brought to Napa. Earlier in the season it was given out by parties interested in the railroad now being constructed from Rutherford to Lake county that it would be finished to the lower end of Berryessa valley this fall, thus affording the farmers in that locality an opportunity of forwarding their grain, wool and other products to market by rail, thereby saving much valuable time now consumed in hauling in wagons to Napa or Winters. But no railroad has thus far brought the long-needed and much-wished-for relief, though by another fall there will probably be communication by rail with the above-named and neighboring valley.

## The Labor Question.

A large number of "blanket men" are to be found in this county at present, most of them

in the upper Napa valley, whither they drift in search of work in the vineyards. During a recent trip up the valley, the writer saw 50 or so daily, some going farther up the valley, some returning. Many found work in the vineyards; others, while hunting for work, were afraid they would find it. The "tramp" is no stranger to Napa valley. He seems to have an especial liking for the grape-producing localities at this season of the year, though this county seems to be less afflicted with this nuisance this season than Sonoma county. So large an area in this county is now devoted to grape-growing and the production of other fruits that large numbers of men are needed to care for vines and trees, especially during pruning and plowing time, and again during the summer and fall. Fewer Chinamen are thus employed this year than ever before, yet many of them find situations here and there. R.

Napa, Oct. 1, 1886.

## HORTICULTURE.

## Smyrna Figs.

EDITORS PRESS:—Some days ago, in conversation with my neighbor here, the Rev. D. H. Temple, he gave me an account of his early life in Smyrna, where his father was a missionary. This led to the subject of figs, about which I think we California fruit-growers cannot learn too much. As we parted I asked him to write an article on the subject, saying that I would gladly send it to you for publication in the RURAL PRESS. I beg to inclose herewith his very interesting little article, which I am confident you will be glad to find space for. Mr. Temple is a very kindly and scholarly old gentleman, and I am sure would be glad to do anything in his power to aid any one in search of information on the fig question.—F. H. McCULLAGH, Los Gatos.

## Figs in Smyrna.

The figs called Smyrna figs, because shipped from that port, grow several days' journey away, in a province of Asia Minor, southeast from that city. It is a special fig which is dried, and not one of those abundantly consumed in the green state by the people of those countries. The figs eaten fresh are of different colors and sizes—yellow, green, brown, light and dark purple, but the only fig dried on an extensive scale for export is a large, light yellow one. A smaller fig of the same color, with very thin skin, is that most esteemed for use green. It is not abundant, and is chiefly sold by Turks who carry them about in baskets and cover them carefully with napkins to protect them from the hot sun.

Rain is unknown in Asia Minor from April to November, the sun shines bright and hot and rarely is overcast. This sun heat is sufficient for drying the figs, and no artificial process is needed; but it goes without saying that a great deal of handling and an ample provision of clear surface are essential, besides experience and skill to insure completion as rapidly and thoroughly as possible.

Little is known about these details of the drying process outside the district where it is carried on. Turkey has no prying reporters and no readers dying with curiosity to know everything under the sun, whether it concerns them or not. To an American it is surprising how little is known in the port where the figs are packed for foreign shipment about their history before coming there.

The dried figs begin to come to the city by camel caravan early in September. The season is short, and business is lively while it lasts. The figs which arrive one day are offered for sale at daylight the next morning at the khan, where the caravans all gather. Merchants send their trusted and experienced buyers to act for them, and they tread on foot the narrow city streets, a mile and a half or more, to reach the khan. The figs are brought to the city in large haircloth sacks holding 200 to 300 pounds, each camel carrying two of the sacks, which are unloaded every night, the camel kneeling at his master's command to be loaded and unloaded. After the figs have been bought, the camels are loaded with them for the last time, and led through the narrow streets to the merchant's warehouse, where they kneel, and the sacks are taken off and their contents dumped on the warehouse floor, two to three feet deep, a brown mass of soft, moist, but thoroughly-cured figs.

## Packing the Figs.

A company of workers are immediately engaged, and early next day packing begins. The workers are of all ages and both sexes, and are ranged in long double rows, seated on the ground, facing each other, with large, flat, very shallow baskets of figs between them. The first operation is to pick out all figs with broken skins, which are not packed with whole ones, but disposed of as "damaged goods." There are not as many of them as might be expected, for the fig skin has considerable firmness, and the pressure which comes upon them when crowded into the sacks and roughly handled expends itself in squeezing them into every conceivable shape, so that the next thing to be done is to shape them by hand, one at a time, into the form they would naturally take if dried hanging on the tree. The packers, who are always experienced men, now take them, and, crowding a half dozen or more together at once, press them into the drums in circular layers, working from the outside to the center of each layer.

Pails of sea water are kept by all the workers, into which they continually dip their

hands, and a man is kept busy replenishing them. It is claimed that sea water is essential to successful fig-packing.

The wages paid these workers differ according to age and skill, but are very low. The retail price of average figs packed in drums, when the writer lived in Turkey many years ago, was the equivalent of from three to four cents a pound. The wholesale cost to merchant shippers was, of course, less. Small lots of very choice figs not packed in drums were sometimes offered and commanded a much higher price, but none of them went out of the country except perhaps as presents to friends.

## The Worms.

One circumstance connected with dried figs is singular and little known abroad. Every one of these figs, at some stage of its growth, has had a worm's egg deposited in it and is unfit for use unless the egg hatches and the worm does its work upon it. What natural necessity there is for this is not understood, but that there is such a need cannot be doubted. The worm comes from an egg deposited in every good fig by a small fly which comes from a species of fig raised for this express purpose, and good for no other. A number of them woven into a ring a little over a foot in diameter are suspended in the fig plantation early in the season. The little flies coming from them attack the growing figs and deposit in each a tiny egg. It hatches after the fig is ripe, and after it has been completely dried comes out from it, crawls away and soon dies and disappears. The maturing stage of this worm coincides closely with that of the fig's readiness to be packed, and vessels with cargoes of fresh figs aboard are overrun with these worms, cabin, fore-cabin, rigging and all, for several of the first days of their voyage. No trace of them is in the figs after reaching foreign shores.

Sometimes the fig from which these insects come is scarce and commands a high price. Has any one in California taken pains to obtain this, as well as the Smyrna fig? If so, the fact is not generally known as it should be, for the conditions of perfecting the fruit will doubtless prove the same on Pacific shores as on those of the Mediterranean sea. D. H. TEMPLE, Los Gatos.

## Peach on Myrobolan.

EDITORS PRESS:—As the myrobolan as a stock for the peach is being discussed to some extent by those interested in fruit, I would like to give my opinion in regard to the matter, as I may be able to throw some light on the subject. The question is asked, is the myrobolan a good stock for the peach? and I say it is. The plum stock that is used in United States and Europe for the peach is, viz., *Prunus Domestica*, St. Catharine, St. Julian, Columbia and Chickasaw. These varieties do not sucker much in the East, but will in California. But the myrobolan, which is the stock that should be used, does not sucker, has strong tap-roots and makes a perfect union.

It has taken years of experience to find out the true mode of propagating and transplanting the peach when on myrobolan, and by careful watchfulness I have found out why a large percentage is lost by transplanting. The reason is, the peach starts before the stock and evaporates sap from the root, and consequently the tree dies, and those that live are partly stunted or injured. This obstacle is easily overcome. The peach, when on myrobolan, must be trimmed close at the time when dug, and when they are reduced to a single cane it takes four weeks for the buds to start, and by that time the root has caught and they start to grow at the same time. They do better when planted four inches below the union, as the stock will thicken sooner, keeps softer and makes roots close to the union. This deep planting is intended only for the peach, and not the plum or prune, as they will root above the graft.

I also found that when the peach was dug with a tree-digger and left to stand a few days with limbs and branches on, the top would dry the root. The peach shows its peculiarities in this way, as I have often taken grafts from a tree when the root was dead. The peach should be dug with a spade and trimmed at the same time. I have read of different parties who have tried the peach on myrobolan without success; some say they get yellow, stunted, and outgrow the stock. This is true, but let me say to these parties that there is a big difference in myrobolan stocks now in use; the large leaf, large fruit French myrobolan does not dwarf the trees unless it is done in the nursery after the stub is cut. The peach should always be budded below the ground, and be covered with dirt after stub-cutting. Any tree can be stunted by putting it on poor stock and also by bad management. As to the peach outgrowing the stock, it seems absurd. Trees of my own and in my vicinity were examined by a number of gentlemen; among them, Mr. Klee, State inspector, and on digging down and measuring they were found to be all larger below the graft. Anybody by visiting Mr. Sidney Johnson's place, in Brooklyn, can see for himself myrobolan trees 32 years old which I budded to peach five years ago. This year they bore a fine crop of peaches. All I say is founded on experience, and is published to show that the peach is a success on the myrobolan if handled in the right manner.

I also have propagated a half-breed between the myrobolan and peach. It is a strong upright grower, resembles the peach somewhat,

and the prospect is that it may make a valuable stock for the peach. JAS. O'NEILL, Haywards, Cal.

DRIED APPLES FOR FRANCE.—The Chicago Tribune says that the American Consul at Havre, France, has written a letter to the president of the Chicago Board of Trade, inclosing invitations to send exhibits of dried apples, cider, etc., to an international exhibition to be held there next year. The letter contains some information which may be of interest to many parties in this State. Owing to a short crop of apples, as much cider was made in France in 1885 from dried apples as from fresh ones (the dried being to a large extent foreign product), and the people are so well satisfied with the result that there is promise of a large market for the dried article, which may be taken advantage of by the fruit-raisers of this part of the world. The opportunity is especially good since the ravages of the phylloxera have caused a material advance in the price of wines, and encouraged the palming off of a poor article on the wine-drinkers of that country as well as on the foreigner. As a consequence of that, the consumption of cider has much increased in France, even in the wine-growing departments where formerly no cider was used; and in Paris the increase in the consumption of late years is stated to have been as much as 15 or 20 per cent. This year the home crop of apples is a very short one, and the American apple is preferred to the native, which is selling at nearly three times the prices of a year ago. It is worthy of notice that the pared apple is subject to a duty which does not attach to the unpared fruit. This forms a powerful inducement to simply slice and desiccate it here, without taking away either the rind or the core. The presence of the latter is no objection to use in the cider-mill, while it makes a duty difference of not less than six francs per 100 kilograms. They are now worth about \$7 per 220 pounds on the market, the octroi being paid by the purchaser. There should be a very good prospect for a large market for the American product this year, as only a few hundred barrels of the old crop remain on hand.

## THE FIELD.

## Wheat Situation in California and also in the United States.

EDITORS PRESS:—It is generally conceded that by the middle of this month the grain crop of this State will be housed, after which it is not at all likely farmers will be free sellers until the character of the winter becomes settled so that a fair idea can be formed of the acreage that can be seeded to wheat. Taking this view, the question naturally presents itself regarding the outlook for or prospects of the market for wheat during the remainder of the season. That the requirements of the consumptive countries will exceed the surplus harvested this year in the supply countries, is an admitted fact; consequently the reserve stocks will be drawn on to make up the deficiency to a greater extent than for many years. This will necessarily give a less carryover stock at the end of July, 1887, in all countries, than at any time within 15 to 20 years past. But leaving the question of the world's requirements out, there is no doubt but that our market is a strong one. This position I base on the following: The wheat crop of this State is now conceded by the best informed to be not over 1,150,000 tons; to this must be added the known quantity in warehouses and the estimated quantity in farmers' granaries carried over from the season of 1885-86 into the season of 1886-87, amounting to 90,000 tons. This gives 1,240,000 tons to start with. For consumption and seed there will be required 350,000 tons, leaving a surplus of 890,000 tons. Of this latter there has been exported from July 1st to October 1st, 3,366,070 cts. wheat and 259,583 bbls. flour. The latter reduced to wheat equals 778,749 cts., which added to the wheat gives 207,240 tons; thus leaving, on October 1st, 682,760 tons surplus. The tonnage in port and at neighboring California ports, under charter to load wheat at the above date, had a carrying capacity of 117,338 short tons. Taking this from the surplus leaves 565,422 short tons. From this latter quantity the following must be taken: carryover stock at the end of the season (flour reduced to wheat), 50,000 tons. There also must be taken off the flour necessary to meet the demand to July 1, 1887, from China, Japan, Hawaiian islands and other countries which we supply outside of Europe, aggregating 600,000 barrels, which, reduced to wheat, is 90,000 short tons. In making this latter estimate I take last season's flour export as a basis, although so far this season the exports are over 7500 tons in excess for the like time last season. Taking the necessary stock (50,000 tons) to carry over from this season into the season of 1886-7, and the quantity of flour (equal to 90,000 tons of wheat) required for countries in the Pacific, and there is only left available of the wheat crop for shipping to Europe 425,422 tons from now to July 1, 1887. To take this there is in port here and at neighboring California ports, tonnage with a carrying capacity of 109,624 short tons; and to arrive within the next five months the published list gives a carrying capacity of 453,907 short tons, making a



## THE STABLE.

## The Great Percheron Show.

In our issue for September 4th we presented an engraving of the building especially erected for the grand Percheron Show at the Illinois State Fair, and gave something of the plans and anticipations of those who arranged the exhibition. The event has transpired, and the accounts which are coming to hand indicate that it was a grand success. We shall condense a report from several sources.

No more forcible illustration of the great popularity of Percheron horses in this country need be offered, says the Chicago Times, than the magnificent exhibit made by the American Percheron Horse-breeders' Association at the Illinois State Fair this year, which is conceded by all to be the greatest horse show ever made in the world. The interest shown in this breed by the three great countries—France, Canada and the United States—is unprecedented in the history of horses. They sent their most scientific and honored men in this branch of industry to compose the jury of awards in the persons of Marquis de la Motte-Rouge, inspector-general of the government studs of France; Hon. George B. Loring, ex-commissioner of agriculture of the United States; and Prof. Andrew Smith, president Ontario Veterinary College, Toronto, Canada. These three countries have acted in perfect accord in the promotion of the breed and in preserving and keeping perfect their pedigree record, which is the oldest in the world.

For the purpose of the American Percheron Horse-breeders' Association's exhibit there was erected on the State Fair grounds a building 700 feet in length, with stalls on each side, making 1400 feet of stall-room, with a large annex, which was made necessary by the great demand of this breed for space. The building was a model of taste and beauty. The main entrance to the building was massively built of baled hay, in imitation of the gateway entrance of the castle at Nogent le Rotrou, France (the center of the old district of La Perche, France, and the birthplace of the Percheron breed), built by the old counts of Rotrou in 1003, and which is now used for the headquarters of the Societe Hippique Percheronne of France, with over 400 members, which, under the authority and with the support of the French government, publishes the "Stud Book Percheronne" in the most carefully guarded manner.

The roof of the imitation castle at the fair-ground, and the handsome, lofty towers, from all of which waved countless French and American flags, were thatched with oats, indicative of the food of the breed. On entering one found himself in a reception-room 40 feet square, decorated in the style of the period above indicated.

Upward of 300 entries were made by some 50 breeders from every part of the United States and Canada. The displays of this stock created great enthusiasm at all times, and the Percheron show generally overshadowed all other features of the State Fair.

The part of the Percheron show comprehended in the merchants and manufacturers' procession is described as follows by the Chicago Herald: The merchants' parade on Washington boulevard in connection with the State Fair is a new feature, but it was found so valuable an addition to the entertainment that it will hardly be omitted hereafter. Speaking strictly, the parade was not a feature of the State Fair, but of the American Percheron Horse-breeders' Association's exhibition—nominally held in connection with the State Fair, though it is a show of sufficient interest to be run on its own merits. The Percheron breeders sent out invitations to all merchants employing grade Percherons in their business to parade their horses in the exhibition. Both the association and the merchants themselves were surprised to see 144 turnouts of two, four and six horse teams, sent out in response to the invitation. It was a sufficient token of the importance which high-grade Percheron horses have assumed in the commerce of the city. This importance, it is needless to say, was reflected upon the exhibition, from which some very important results are accordingly expected.

Shortly after noon the head of the procession, namely, an open barouche drawn by 12 splendid specimens of the famous Percheron breed, and tenanted by Senator John A. Logan, Senator Shelby, M. Cullom, and Senator Thomas W. Palmer, of Detroit, president of the association, took its position at the corner of Washington boulevard and Peoria street. The former thoroughfare for a good part of its length was thronged with expectant people, and eastward from Peoria street the roadway was effectually blocked with intending participants in the parade. Throughout the entire length Chief Marshal W. B. Dutton, of Racine, steered a spirited and highly-bedizened horse, which, no less than its rider, was fully sensible of the importance of its position. Messrs. C. B. Kimball and Edwin T. Blois, assistant marshals, flattered up and down the line.

At one o'clock the word was given to start and the 12-horse barouche headed the line, under the escort of eight policemen from the Desplaines-street station. Next came carriages conveying I. L. Elwood, the barb wire man, from De Kalb; George M. Savage, Detroit; Senator Manderson, Nebraska; Commissioner

E. M. Hudson, New Orleans; Mark W. Dunham, Wayne, Ill., and other prominent Percheron breeders and owners. After the carriages came the procession proper.

The procession, enlivened by bands of music, picked its way up the boulevard to Garfield Park and through the park to the fair-grounds. As it passed the Percheron stables it was reviewed by General Geo. B. Loring, Marquis de la Motte-Rouge and Professor Andrew Smith, of Toronto, the jury on awards. Upon its entry to the racing track the line halted a moment, and forth from the Percheron stables burst 310 horses, each led by a groom in livery and each bedecked in the highest style of equine art with ribbons and color. The grooms flitted their whips and the splendid animals arched their massive necks and went through the extravagant paces of the thoroughbred that knows he is the observed of a thousand eyes and expected to do his best. The Percherons led the way to the grand stand, where a right-about was executed and the line moved in the opposite direction around the ring. No such cavalcade had ever been seen in Chicago—perhaps never before in the world. Such, at any rate, was the verdict of several spectators who had seen the famous studs of Europe and were able to make the comparison. The line extended clear around the one-mile track and "lapped" at its ends the distance of a quarter of a mile. It drew all the attention away from the other features of the show. The line eventually broke up, and most of the wagons drove back to the city, presumably to resume business in the work-a-day world. A lunch was spread at three o'clock in the handsome headquarters of the Percheron Association. The officers of the association, T. W. Palmer, Rufus B. Kellogg and S. D. Thompson; Mr. M. W. Dunham, the famous importer; the jury of awards and the political notables above named, sat down at the table.

It was Percheron day. At four, the jury of awards established a ring in the center of the grounds and viewed the candidates for prizes. M. de la Motte-Rouge and Professor Andrew Smith, the appointees of the Ministers of Agriculture of France and Canada, respectively, took out pencil and paper and personally inspected the "points" of each candidate. Ex-Commissioner of Agriculture, Geo. B. Loring, the other member of the jury, appointed by the United States Commissioner of Agriculture, his predecessor, exercised the same office from his seat in the carriage. All three of the judges expressed their surprise and admiration at the high character of the show, and at the awarding of the prizes; General Loring, speaking, also, for his colleagues, declared that he had viewed the best field of draft horses ever seen together in any country.

GLANDERS IN FRESNO—A MAN TAKES IT.—The *Expositor* of Sept. 22d says there seems to be no doubt that H. Schell, of Temperance Colony, has the glanders. Dr. Hopkins, who attends him, is satisfied that it is the glanders, and Dr. Deardorff and others concur in this opinion. Mr. Schell says that he has lost six or seven horses with this disease lately, and has spent much time in doctoring them. He doubtless contracted the disease in this way, as it is highly contagious—so much so that it is only with extreme caution that animals infected are to be treated by veterinary surgeons themselves. It is only a few days ago that a horse was taken to a hitching post on J street that was suffering from a well-defined case of glanders, and so pronounced by a competent expert. There should be measures taken to prevent the spread of this contagious disease in such a careless and reckless way as this. We are informed that this diseased animal is still within the city limits. If so, it should be destroyed. Let every one be very careful in approaching animals diseased with glanders, as the merest trifle of the virus is liable to inoculate one with this virulent blood poison, and result in death. All infected animals should be promptly killed and buried deep.

## THE APIARY.

## Ventura Honey Notes.

We compile the following notes from recent dates of the *Free Press*: At the call of Mr. Richardson, the bee-keepers of Ventura county met at Santa Paula last month and merged themselves into the "Ventura County Beekeepers' Association." The following new members were enrolled: J. C. Gridley, T. H. Barrows, W. T. Richardson, Joseph A. Lugar, L. S. Snuffin, R. G. Sparks. Mr. Touchstone was elected president for the ensuing year, J. C. Gridley secretary, and Mr. Dudley, treasurer. The report of the inspector on foul brood was accepted, and the following was adopted:

*Resolved*, That inasmuch as the county foul-brood inspector talks of resigning his office, we, as a society, earnestly request him to withhold his resignation, as we consider his continuance in office very necessary to the bee-keeping interests of the county.

Mr. R. Wilkin was appointed to assess and collect money for suppressing foul-brood in Ventura county and vicinity. Moved and carried to adopt a trademark for the association; also to adopt four grades of honey, as follows: Off-grade, Amber, Light, Extra Light. It was resolved to appoint a grader, to be known as the Ventura County Honey Association Grader,

whose business it shall be to inspect honey and place the appropriate grade or brand of the society on each package. Mr. Shaw, of Ventura, was appointed such grader. Mr. Barrows was appointed a committee of one to arrange for raising money at a low rate of interest, on honey. Meeting adjourned, subject to call of the president.—J. C. GRIDLEY, Sec'y, Nordhoff, Cal.

## Record of a Hive of Bees.

At B. F. Warring & Co.'s apiary, on the Simi, from Feb. 15th to April 11th, the hive gained in weight 41 lbs. From the last date it rained and was cloudy until April 15th, when it gained 1½ lbs; 16th, 2 lbs; 17th, 1½ lbs; 18th, 2½ lbs; 19th, 1½ lbs; 20th, 3½ lbs; 21st, 3 lbs; 22d, ¾ lb; 23d, cloudy, lost 2 lbs; 24th, gained 5 lbs; 25th, cool and cloudy, lost 2 lbs; 26th, gained 2½ lbs; 27th, cool and cloudy, lost 2 lbs; 28th, gained 1 lb; 29th, 0; 30th, gained 2½ lbs; May 1st, gained 3 lbs; 2d, ½ lb; 3d, ¾ lb; 4th, swarmed, its weight 16 lbs, and gained 2½ lbs; 5th, ½ lb; 6th, 1½ lbs; 7th, extracted 51 lbs; 8th, 1½ lbs; 9th, 1½ lbs; 10th, 2 lbs; 11th, 2½ lbs; 12th, 3½ lbs; 13th, 4½ lbs; 14th, 4½ lbs; 15th, 4½ lbs; 16th, 6½ lbs; 17th, 7½ lbs; 18th, 4 lbs; 19th, extracted 40 lbs, and after extracting, same day, gained 3½ lbs; 20th, 10½ lbs; 21st, 11½ lbs; 22d, 8½ lbs; 23d, 6 lbs; 24th, 7½ lbs; hive had been queenless since it swarmed until 22d, when it gave a laying queen; 25th, gained 3½ lbs; 26th, 9½ lbs; 27th, 5½ lbs; 28th, 7 lbs; 29th, 2 lbs; 30th, 0, cloudy and cool; 31st, 5 lbs; June 1st, extracted 59½ lbs, gained same day, after extracting, ¾ lb; 2d, ½ lb; 3d, 4 lbs; 4th, 4 lbs; 5th, 3½ lbs; 6th, 3½ lbs; 7th, 5½ lbs; 8th, 3½ lbs; 9th, 3½ lbs; 10th, 3½ lbs; 11th, extracted 35½ lbs, and gained same day, after extracting, 2½ lbs; 12th, 2 lbs; 13th, 5 lbs; 14th, 5½ lbs; 15th, 4½ lbs; 16th, 5½ lbs; 17th, 5 lbs; 18th, 4½ lbs; 19th, extracted 32½ lbs, and gained same day, after extracting, 4½ lbs; 20th, 4½ lbs; 21st, 3½ lbs; 22d, 2½ lbs; 23d, 1½ lbs; 24th, 1 lb; 25th, 1½ lbs; 26th, 1 lb; 27th, ¾ lb; 28th, ¾ lb; 29th, ¾ lb; 30th, 1 lb. This was not an average hive of the apiary. The record was kept by J. B. Cherry, the past season of 1886.

## THE GARDEN.

## Hints for Correspondents.

EDITORS PRESS:—Will you be good enough to answer the following queries, or as many of them as you can?

1. Where and at what price can I obtain the wire netting for fencing? [The California Wire Works, San Francisco, can answer this question.]

2. Which is the customary way of planting rhubarb in this State? How often is it irrigated, and how often and how late is it pulled for market—in fact, what is the method all through, from preparing the land? Mine seems to rot off at the roots, and I should like to know the cause. How much does a box hold?

3. What is the customary method of preparing land for strawberries when irrigating?

4. At what distance apart and how close in the row are peas planted in this State as a market crop, and which are the best kinds?

I have been very much interested in your items on gardening, and should very much like to see them continued. It is getting so near the time for planting that I am sure it would be a great boon if some of your subscribers in the business would give a few hints as to the way they lay out and prepare their land for different crops; how they sow (with drill or not), and how to arrange so as to utilize the land for as many different crops as possible in the one season.

Could you put me in communication or give me the name of some one in the market-garden business, or who grows rhubarb and asparagus, especially in Oakland or Alameda county?

While apologizing for giving you so much trouble, I shall at any time be pleased to give you any information with regard to this section of San Diego county.

I am growing prickly comfrey. Have you any reports as to its success or otherwise? I have grown it for two years.

ERNEST T. ORFORD.

Moosa, San Diego Co.

[We trust our correspondents on garden topics will take courage at the appreciation of the contributions by Mr. Orford and take his queries as hints for future writing. It is just the time of the year for a general conference on gardening. Will our readers take it up? Prickly comfrey was tried by quite a number of people in different parts of the State a few years ago, but, so far as we know, it was not long grown by any of them. If our correspondents find especial value in it, let him tell us of it.—EDS. PRESS.]

LABOR COMMISSIONER ENOS has received from the United States Bureau of Labor printed copies of sets of questions to be used by him in his intended investigations into the different classes of industries in this State, and of the causes of the present strikes. These questions are very exhaustive, ranging from the age and appearance of the person examined to the number of Chinamen engaged in the industry which he is engaged in.

total available tonnage of 563,531 short tons, which is over 140,000 tons in excess of our requirements, without taking into consideration the tonnage not now on the list that will arrive before the end of the season. It is reasonable to place the latter at not less than 70,000 tons, with a carrying capacity of 112,000 short tons. From the above it will be seen that in our market the position of wheat is strong, and that of ships weak, so that further reduction in charter is not at all unlikely.

If I extend the statistical position of wheat to the United States as a whole, still the situation favors the wheat interest. Last season there was exported from the United States, with the flour shipments reduced to wheat, not quite 95,000,000 bushels of wheat, and for this season the most sanguine do not expect the exports will go above 100,000,000 bushels. To export last season's quantity, the stock carried over from 1885-86 did not exceed 75,000,000 bushels against a carryover of about 150,000,000 bushels from the season of 1884-85 into the season of 1885-86. But then, last year's wheat crop was only 357,000,000 bushels against about 425,000,000 this year. If we add the estimated carryovers to the estimated wheat crops, then this present season commenced with a less stock than did that of 1885-86. But laying that aside and accepting an estimate of 100,000,000 bushels for export, and still the position is strong, as the following official export returns show: The export returns for July and August from all ports in the United States aggregated 17,886,498 bushels of wheat and 1,952,781 barrels of flour, or with flour reduced to wheat, a total of 27,547,403 bushels, which is an increase over the like months of last year of about 15,000,000 bushels. For September last the exports from all ports in the United States, flour reduced to wheat, are estimated at 16,000,000 bushels, which, added to the July-August exports, make 43,500,000 bushels exported the first quarter of the season of 1886-87, which is very nearly one-half of the highest quantity estimated as being available for export, by allowing a less stock to be carried over at the end of the season than was carried over from the last season into the present. If the exports aggregate in three months nearly one-half the available surplus, how much will there be to spare by the time six months pass by? J. R. F. S. F., Oct. 2d.

SOLID MATTER OF THE WHEAT KERNEL.—Does the solid matter of the wheat kernel increase after cutting, when the grain is cut before ripening? This is a question oftentimes discussed by farmers. Some hold that when wheat is cut while still green the growth of the kernel is completed after cutting, in the same manner as when the wheat is allowed to stand until fully ripe. In order to get information on this point in experiments conducted by Professor Jordan on the Pennsylvania State College grounds, samples of wheat were cut at various stages of growth, in each case the kernel of a portion of the sample being removed immediately upon cutting, and the kernels of the remaining portion being allowed to dry on the stalk in the usual manner. After the wheat had become as dry as it would get in a warm, dry room, two lots of 500 kernels each were counted from each sample and then weighed. In this manner any appreciable growth on the part of the wheat dried on the stalk would be detected. A table giving the various weights of the kernel at different stages makes the increase in weight of the kernel after the wheat was cut to have been about 22 per cent in the case of the partially developed kernels taken June 24th. In all subsequent samples the kernels dried on the stalk seem to be no heavier than those removed before drying and immediately after cutting.

UNDERDRAINAGE FOR HOPS.—Some of the farmers of Puyallup are awakening to the importance of laying drainage tile in their fields. There were Ezra Meeker and Mr. Sahm talking to some hop-growers at Puyallup yesterday. "Look at the hops in that field there," said Mr. Meeker. "There are 16 acres. Do you notice their height and general appearance of thrift? I spent a good many hundreds of dollars in underlying that field with cedar-box drains; now notice the result. See how the vines are burdened with hops worth 35 cents per pound. Now look across the fence at that other field, which for want of drainage has been left as cold as the day when it was cleared of its timber. It contains hop vines, also, you see; but how different from those of the drained field. The contrast is so great as to be startling, and to show drainage will pay for itself over and over again by a single season's crop. In fact," continued Mr. Meeker, "I know of no single improvement that could be proposed to the farmers of this valley better calculated to increase their crops and advance their material welfare than drainage by tile, which does not rot and which is so much cheaper than wood."—Tacoma Ledger.

THE GREAT FLOUR CENTER, Minneapolis, is turning out something over 20,000 barrels of flour a day, or enough to supply the three largest standing armies of Europe with bread. Although the chief center of the milling industry, it has plenty of rivals. Of all the manufactures in the United States, flour mills head the list in the value of their products, and yet they do not distribute as much money in wages as many other industries, the raw materials costing three-fourths the value of the products.



## PATRONS OF HUSBANDRY.

Correspondence on Grange principles and work and reports of transactions of subordinate Granges are respectfully solicited for this department.

## The Farmers in Council.

## THE STATE GRANGE MEETING.

## Fourteenth Annual Session.

On Monday evening a large number of members of Yuba City Grange, with Patrons from other northern Granges, were at the railroad station, Marysville, on the arrival of the San Francisco, Sacramento and Stockton train, and right heartily did they welcome a large delegation of Patrons and Matrons, coming from all quarters south of the city. Past Masters I. C. Steele, B. R. Spillman and Daniel Flint, and about a hundred other good, old veteran Grange faces, were visible at the station. These annual greetings are always most cordial, and all the cheerful, happy faces seem to brighten o'er and o'er as the hand-shaking between old, as well as new, acquaintances goes round and round. Never before were so many attendants seen on hand previous to the opening of the session as on this occasion. There is also noticeable a greater preponderance of old and well-known Patrons present.

## Committees of Arrangement.

The Committees of Arrangement of Yuba City Grange seem to have done their work well, and all Patrons, on arrival, were speedily secured comfortable quarters, according to their liking, in hotels, lodging or private boarding-houses at very reasonable rates. The different committees were constituted as follows:

On Reception—Bro. and Sister Hollister, of Wheatland; Bro. and Sister O. Clark, of North Butte, and Bro. and Sister Frisbie, of Yuba.

Feast of Pomona—Bro. and Sister Ohleyer, of Yuba, Bro. and Sister Spillman, of North Butte, and Bro. and Sister Jasper, of Wheatland.

On Procuring Hall—G. W. Carpenter and H. C. Jones, of Yuba; D. Ostrom and Sister Keys, of Wheatland, and Bro. T. Lane and Sister Lane, of North Butte.

On Accommodations—Bros. Frisbie and Ohleyer, of Yuba; Frasier and Ostrom, of Wheatland, and Pattridge, of North Butte.

On Music—Bros. James and Berry, of Yuba City, and Bro. Clark, of North Butte.

The Executive Committee were in session at the Secretary's headquarters, at the Western (the leading hotel) on Monday evening, preparing their report, and for the business of the session. A large number of Patrons also stopped at the United States and Golden Eagle hotels, and some at private boarding-houses and residences, a generous welcome being generally extended.

## Tuesday Morning.

State Grange was opened in ample form, by Worthy Master Wm. Johnston, in Masonic hall, Marysville, Tuesday A. M., October 5th. The following roll of officers was called:

## Officers of the State Grange.

Master, Wm. Johnston.  
Overseer, W. L. Overhiser.  
Lecturer, Daniel Flint.  
Steward, Don Mills.  
Asst. Steward, E. W. Davis.  
Chaplain, B. F. Frisbie.  
Treasurer, I. C. Steele.  
Secretary, J. Chester.  
Gate-keeper, J. E. Beach.  
Ceres, Mrs. S. J. Cross.  
Pomona, Mrs. A. P. Roach.  
Flora, Minnie M. Plummer.  
Lady Asst. Steward, Mary J. Carter.  
Executive Committee, A. L. Chandler, J. F. Deming, H. G. Keesling.

The Steward, Assistant Steward, and Lady Assistant Steward were noted absent, and the following temporary appointments were made: Steward, Bro. Dennis; A. S., Bro. Toole; L. A. S., Sister C. A. Hull.

The names of most of the representatives present were given in our Grange list published in last week's RURAL.

## Address of Welcome.

The address of welcome to the State Grange was delivered by Bro. B. F. Walton, W. M. of Yuba City Grange:

*Worthy Master, Officers and Members of the State Grange:* In behalf of our local Grangers, the people of Marysville, Yuba and Sutter counties, I welcome you to our midst. Indeed, it is with pride and pleasure we all unite in extending to you a hearty welcome, and hope your stay with us may be of sufficient length to convince you that our attachment for the representatives of the Grange is real and lasting.

The meeting of this body in Marysville is to mark an important era in the history of our Order.

This central portion of the great Sacramento valley, away from the influence of city life, with no extensive ownership in land to prevent settlement, is a natural field in which to plant the Grange.

Divided as it is into small lots or farms, each occupied by its owner and each owner possessed of or building up a happy home, surrounded by such a wealth of nature that the magic soil has only to be stirred by the intelligent hand of industry to supply all the physical wants of man.

While the refined and cultivated taste and

skill of the fair Matrons soon adorns it with all the attractions of living nature, together with such artistic embellishments as make it a place of beauty and almost a heaven on earth.

These happy homes, with others scattered over our vast country, are the evidences of real success and prosperity, and the substantial and lasting foundations upon which our great nation rests; as our true wealth and dignity as a nation is in proportion to their numbers.

Around these quiet hearthstones the important personages who are to mold, educate and control the future destiny of this State are now playing; and it is fondly hoped the influence of our noble Order through its State and Subordinate Granges will keep pace with the rapidly developing country, and ever be strong enough to imbue each unfolding mind with a love for rural life and an overpowering attachment for home and country. So that as time and intelligent cultivation shall bring to light the latent possibilities of this fertile region, it will be no uncommon thing to hold the State Grange at Marysville, Wheatland, Auburn, Nevada, Grass Valley, Oroville, Chico, Colusa, Red Bluff and other business points, as well as at the great centers of the San Joaquin, Santa Clara and other valleys.

A thorough acquaintance with our people will reveal to you the fact that our farmers, mechanics, merchants and business men of all classes have faith in the Grange, and its extension and advancement meet with no opposition from their hands. They have long since learned that we wage no warfare against any industry or calling, but seek to benefit our members and their surroundings by a more intelligent application of their own means and energies; to give to each the combined experience and knowledge of all, and bring our neighbors into more intimate social and business relations, thus strengthening the ties that bind our communities together.

The frank, manly and outspoken expressions of the State Grange, six years ago, when we were in the midst of our struggle with the hydraulic monitor, so endeared the representatives of the Order to us that when a year ago you decided to meet in Marysville the news was hailed with delight and enthusiasm by all classes.

The fact of this being the first State organization that had the moral courage to place itself squarely on the side of right, law and justice, at that time, to be afterward sustained by the highest legal tribunal in the land, renders the Order worthy the confidence and support of our entire community.

And now, fellow-Patrons, without desiring to detain you with any extended remarks, I bespeak for you all a very pleasant and interesting week in Marysville, and a successful session of the State Grange.

## Response.

After an appropriate musical selection by the choir, the Worthy Master called upon Bro. Dunn, Master of San Jose Grange, who pleasantly responded, on short notice, as follows:

*Worthy Master and Officers of the State Grange:* On behalf of the members of the Subordinate Granges here assembled I thank the brother for his hearty words of welcome. The courteous manner in which we were received by the committee of the State Grange on our arrival here is sufficient evidence of their sincerity. I agree with the brother that the meeting of the State Grange in this agricultural center of the great Sacramento valley must be of great benefit to the Order. No doubt there are historical reminiscences connected with this city which endear it to its residents, but which I feel at present incapable of dealing with; but its improvements in agriculture and horticulture are sufficiently interesting to us from the central, fruit-growing and other parts of California.

Thanking you again for your kind welcome, I will reserve further remarks on this subject until some future occasion.

## Tuesday Afternoon.

The report of the Committee on Order of Business was received and adopted. Three sessions will be held daily, the Pomona feast occurring on Tuesday evening.

A number of committees were appointed, and other preparations made for the work of the session.

## Worthy Master Johnston's Address.

*Patrons of California:*—Another year, with its blessings and its lessons, its joys and sorrows, its doubts and fears, its successes and failures, its triumphs and regrets, its achievements and bereavements, its conquests and defeats, with all that is beneficial as well as all that is prejudicial, has passed, and we are again, according to constitutional provision, assembled in annual convention for the purpose of consulting together concerning the things that directly interest the tillers of the soil.

To erect another mile-stone on the pathway of progress, and make the necessary demands for our future welfare, Ceres, from her golden horn, has redeemed her promise of a bountiful harvest, and you seem to enjoy the fairest hope of health, happiness and good cheer. You come from your homes by the snow-fed springs of the mountains, the blooming orchards and vineyards of the foothills and the broad and fertile fields of the valleys, to spend a season with us deliberating upon those questions that immediately concern the welfare of our noble Order.

Let us as a fitting preparation for our duties render our homage of praise, adoration and thanksgiving to Him who does all things well, and has crowned the year with His goodness. Since the last meeting of the State Grange we have organized two Pomona Granges—one in Sacramento Co. and one in San Joaquin Co. Both have a large membership, and are in a prosperous condition. We have also two Subordinate Granges—one in Tulare Co. and one at Paso Robles.

When the history of the past year shall have been written, it will not contain anything of an extraordinary nature (except the extraordinary occasion); but it will be the history of a year of slow but sure and steady advancement. The general health of our people has been better than usual; there have been no epidemics of a serious nature to disturb us. Our wheat crop is not as large as it was expected, and prices are ruling low. Our fruit crop was light, but prices were good. We have an average grape crop, with remunerative prices. Our hop crop is light, but prices are good. Our wool clip is large, with fair prices. Meat is plenty and cheap. Live-stock of all kinds rules low, but, after all, we can see a steady, healthy, prosperous growth throughout the State. But there seems to be an overproduction of almost everything in manufacturing and agricultural products, consequently there is a cheapening all along the line in everything but labor. We find the mechanic and farm laborer demand and receive more wages and find employment more readily than they did 40 years ago. Yet we hear the constant cry, "The poor are getting poorer and the rich are getting richer," and upon examination we find that the declaration is true. Now if the necessities of life are as cheap as they were 40 years ago, wages as high, and labor as plentiful, then we ask the question, what is the cause of all this trouble and unrest? I must confess the question is one which I do not feel quite able to solve. There are some things, however, that present themselves to my mind as answering the query, at least in part. One of the good things that Robert Ingersoll said, in his lecture on "Hard Times," was that the way out of it was this: The economy of the rich, and the extravagance of the poor, caused more hard times than all other causes combined. Ingersoll may have put this a little strong, but there is much truth in his declaration, and the sooner we make up our minds that there are lessons of economy, that are necessary for us to learn, the better it will be for us and our posterity. The quicker we make up our minds that a 50-cent hat is a better covering for a sensible head, a better protection for a pretty face and more beneficial for mankind generally at six o'clock in the morning in the poultry yard, than a \$10-feather is at a full-dress party at two o'clock in the morning, the better it will be for us and for those who follow after us. The anxiety to appear rich when we are really poor is one of the great hindrances to prosperity. This, however, does not apply to those who live in the country so much as it does to those who live in cities and towns. It would be much better if we would try to appear as we are, feel as we appear, and act as we feel—that is to say, the rich should be honest, generous, liberal, charitable, giving employment to the unemployed, giving freely of their means to any and all movements the object of which is the elevation and improvement of mankind. The poor should be economical in the use of money, goods, or provisions of any kind, saving unnecessary expense either in money or anything else which is to be used or consumed, not profuse, prodigal, or lavish in anything, and all the intermediate stages between riches and poverty should be governed according as they approach either of the extremes. If a man's income is but one dollar a day, if he is honest, if he is true to himself, if he is true to his family, his neighbor, his country and his God, he will not allow his expenses to exceed his income. There are two great evils with which we are contending, the saloon and the credit system, and I think sometimes it is difficult to decide which is the greater curse to the poor. My advice is to shun them both as you would a pestilence, for if you follow either of them they will sooner or later destroy the peace and happiness of yourself and family; but let us pay as we go, and give the saloon the benefit of our absence. In connection with this subject I would recommend the repeal of all immigration laws between the United States and China, and advocate the passage of an iron-clad restriction law, which would forever prohibit the landing of Chinese laborers within the borders of the United States, on any pretext whatever. Those that are here, are here under a contract with the United States, and we cannot afford to violate that contract, and, if necessary, the whole power of the United States must and will be called upon to enforce obedience to that contract. The immigration and naturalization laws between the United States and China are not the only immigration and naturalization laws I would recommend being changed. I would like to see all immigration and naturalization laws so changed that all immigrants to this country be required to take the oath of allegiance to the United States as a condition of landing on American soil; that they be required to give some guarantee for their good behavior, and that they be required to make themselves sufficiently acquainted with the English language to be able to understand the principles of our government before they are honored with the elective franchise; and then only those who have been faithful to

their first obligation and those only who have been good, law-abiding citizens and worthy of the great honor conferred upon them—an honor to which many of them need not aspire in our native land. I do not wish to be understood as underrating or underestimating the value of those naturalized citizens who come here with honest intentions, who are true to their obligations, and who believe this to be a better country for the poor laborer than where they came from. The more of that kind of immigrants that come to this country the better; but there is a class of immigrants flocking to this country who will not make desirable citizens, who have nothing in common with us, but who claim the right to blow up a city with dynamite whenever things do not go to suit them, to deprive decent people of the privilege of earning a living for themselves and families, to trample our laws under foot, whenever they do not suit them, and are always ready for anything except honest labor. The sooner we put up the bars and lock the gate, and throw the key away against these outlaws from foreign countries, the better it will be for the future of the United States. Under our present immigration laws, we are receiving the paupers, outlaws, murderers, socialists, anarchists, escapes from justice and scoundrels of all kinds from all nations; and if some check is not put upon the system soon, I will not vouch for the stability of our Government; and who are more interested in this question than the farmers? Their isolated condition makes them more dependent upon the laboring class than any other. He is obliged to employ in the busy season just such labor as he can get, take them into his family, make them his companions for the time in order to save his crop from destruction. Fellow farmers, let us rise from our Rip Van Winkle condition, shake off this incubus; prepare ourselves by the acquisition of knowledge to take our stand among the men of the nations, and demand our rights. The question is sometimes asked, "Why have not farmers taken a position of influence and power in the councils of the nation and otherwise in proportion to their numbers and wealth?" Simply because they have not used their brains. The world pays homage to intelligence and intellect. The world is not partial to lawyers, ministers and doctors, but the world wants to use brains and accepts them wherever found, and uses them to promote its wishes; and if farmers want to be placed in the foremost rank of the nation and in the world, if we wish to be put into positions of trust where we can have power to aid our fellows, if we wish to have influence and make our mark in the institutions of the land, if we wish to stand where we can do something toward governing the price of our commodities, if we wish to weigh according to our size in the scale of public opinion, we must use the brains more and, if necessary, our muscle less. Our brains are as sound in quality as liberal in quantity, and if polished by constant use, refined by study and thought, are capable of measuring intellectual souls with the most learned professionals.

But I speak it in sorrow, I admit with deep and burning shame, that the farmers furnish but few men whose minds are fitted to organize great enterprises.

Look at the farmers in our Legislature. In numbers they are very small, in proportion to the population of the State, and smaller yet in the influence they have upon legislation. When they come in contact with men who are in the habit of close and logical reasoning, they, with few exceptions, prove wanting. It may and probably will be said that head work will not sow wheat or pick grapes. Granted; but prove to me that an intelligent man is disqualified from performing the duties of a farmer and you will prove to me that farming is a business which it is disgraceful to follow, and that it is grossly unjust to say ought to induce any young man of common sense to become a farmer. But this is not the case, and the Grange is proving every day that farmers, their wives, their sons and daughters are as capable as competent, and when given the same opportunity develop as much intellect and are as prolific in brain-power as the most favored sons and daughters of the land. It is also proving that our most successful farmers are those who have best improved their educational opportunities.

## In Memoriam.

*Patrons:* With every revolving year, as we come together in glad reunion, some shadow falls upon our heart; time moves on, but the past years do not live again, as in nature the flower and fruit life goes on, but not the same flower and fruit; so mankind lives, but not the same men. The race continues, but the individual dies. The cradle and the coffin, with but a few swift years between. Death is as common as birth, yet we never become reconciled to its visits. We stand round the cradle with joy and hope, but follow the casket that contains the ashes of loved ones clothed in sorrow. And yet there ought to be some solace in the thought, however sad the bereavement, that death is no blunderer, no judgment of wrath, no stupid fatality that has strayed into the world and strikes in the dark, but is a part of the same beneficent plan that marks the sea and stars and appointed under the leaf and flower its season. It becomes my painful duty to announce that, since my last, Sisters Hooper, Blackman and Ewer and Bro. Chandler have passed away.

## Miscellaneous Mention.

The music by the choir of Yuba City Grange,



supported by Bro. G. W. Hancock and other visiting Patrons, has been of the best order from the start, and adds greatly to the enjoyment of the sessions. Miss Roache, of Watsonville Grange, recited, on Tuesday morning, a rural poem so ably and so rarely appropriate as to receive great applause. The hall is one of the best and most comfortable the State Grange has ever enjoyed.

**THE FARMERS' CONVENTION TICKET.**—At a meeting of the Executive Committee, held in San Francisco, October 1st, vacancies in the list of candidates nominated by the Farmers' Convention were duly filled, and the completed ticket is as follows, viz.:

For Governor, Joel Russell; Lieutenant-Governor, J. V. Webster; Secretary of State, Frank E. Kellogg; Attorney-General, W. H. Hart; Justices Supreme Court, Jackson Temple, Jere Sullivan, Wm. H. Patterson; Controller, John P. Dunn; Treasurer, H. S. Graves; Superintendent of Public Instruction, Ira G. Hoitt; Clerk of Supreme Court, J. D. Spencer; Surveyor-General, George B. Tolman; Members of Congress—1st District, L. W. Simmons; 2d District, Geo. Ohlreyer; 3d District, W. W. Smith; 4th District (President Blackwood authorized to choose candidate); 5th District, Frank J. Sullivan; 6th District, Wm. A. Harris; Board of Equalization, C. E. Wilcoxson, John Beatty, L. D. Moorehouse, M. D. Hamilton; Railroad Commissioners, W. W. Foote, J. A. Filcher, J. W. H. Campbell. President Blackwood was also authorized to substitute the name of D. A. Mobley for that of Ira G. Hoitt, in case he deem it proper.

## AGRICULTURAL NOTES.

### CALIFORNIA.

#### Butte.

**THE ORANGE GROVE.**—Oroville Register, Sept. 30: Through the kindness of W. M. Bowers, secretary of the Oroville Citrus Association, we were enabled on Monday last to take a drive through the young orange grove on the north side of the river. Work on the land was begun late in the winter, and greatly interrupted by the heavy storms of spring; yet the soil is now in fine condition, the clods well broken up and the soil loose and finely pulverized. About 40 acres of land have been inclosed by a substantial fence, and a new barn and a small dwelling-house have been erected. Twenty-seven acres of land have been set to orange trees, including the Riverside, Navel, St. Michael, Mediterranean Sweet, Malta Blood and a few seedlings. In addition to these there are several thousand young trees, a part of which are the Florida Sour Stock. The trees have made a thrifty and vigorous growth, the new shoots being in many places from 20 to 36 inches in length. The loss has been very light, though many of the trees were not set out till late in May. They have been irrigated about once in 15 days. Should the trees winter well, they will another year begin to fruit, and the following season pay all the expense of care and cultivation.

#### Fresno.

**RAISIN CROP.**—The *Expositor* of Sept. 29th gives the following estimate of the yield of some of the larger vineyards and packers, and the total yield of Fresno county. The estimate is largely in excess of what has heretofore been claimed, but from careful inquiry and observation they are convinced it is full low enough:

Vineyard.	Boxes.
Butler vineyard.....	50,000
*Forsyth vineyard.....	40,000
†Geo. W. Meade & Co. (packers).....	40,000
J. W. Pew.....	6,000
J. P. Thomas.....	4,000
N. W. Trezevant.....	3,000
T. C. White.....	6,000
Curtis Packing Co.....	6,000
Phelps vineyard.....	12,000
Temperance and Scandinavian colonies.....	5,000
J. W. Gould.....	5,000
†Other packers.....	25,000
Total.....	202,000

\*Forsyth's pack will include the vintage of the Fresno vineyard, Miss Austin's vineyard, and several smaller places.

†Geo. W. Meade & Co.'s pack include the raisins from Goodman's vineyard, amounting to about 10,000 boxes, those from the Barton, Eggers, Braly and Cory vineyards, etc.

‡Included in the miscellaneous list are such growers as J. W. Brooks, who will pack 1000 boxes; Mr. Southworth, 1000 boxes; the Messrs. Vieu, 2000 boxes; and many others.

The raisins of the county will be principally handled this year by Wm. T. Coleman & Co., commission merchants, Geo. W. Meade & Co., dealers and packers, and A. Lusk, commission merchant.

#### LAKE.

**A NICE RANCH.**—Lakeport Democrat, Oct. 1: One of the finest farms in the county is the old Ritchie ranch, near Middletown, owned by Mr. Thos. Hopper. This year he cut 160 tons of hay, thrashed 3075 sacks of grain, had planted about 20 acres of corn which yielded 60 bushels to the acre, and out of a large wagon-load of watermelons raised on this farm and which he hauled to Middletown, not one weighed less than 40 pounds. Mr. Hopper is justly proud of his beautiful farm.

#### Modoc.

**SURPRISE VALLEY.**—Eagleville Cor. Sagebrush Stockman: Unless one is well posted in the local geography of the country he is liable to get all mixed up in regard to State and coun-

ty boundaries on first entering this valley from the southward. Within a distance of six miles the stage road passes from Washoe county, Nevada, through the northeast corner of Lassen county, California, and into Modoc county in the same State. The most productive and by far the larger part of the valley is included within the limits of the latter county, although the ranch of Mr. Wm. Coppersmith, one of the best in the valley, is in Lassen. A monster haystack on the Ward Brothers' ranch is 196 feet long, 38 feet wide and 38 feet high, and contains about 300 tons of hay. The hay crop in the valley the past season was a good one, and parties driving through to Reno for shipment can purchase this staple at \$4 per ton, which includes winter privileges, i. e., pasture and a house for the vaqueros to stop in. My next stop was at the Barber Brothers' ranch. They are horsemen chiefly, and own a thoroughbred Norman stallion which has been in service in the valley for several seasons and has done much to improve the breed of draft horses.

#### Sacramento.

**COTTON GROWING.**—Record-Union, Sept. 30: Cotton growing has been for some time successfully carried on in the San Joaquin valley, but for some reason has not received attention, nor been tried to any considerable extent in the Sacramento. Last winter S. H. Gerrish, of this city, received some cotton seed from a gentleman in New Orleans, but did not plant it until May. He then put a few seeds into the ground at the rear of his residence on G street. He irrigated the place occasionally for about a month, as it was so late when planted, but has not done so since early in June. The plants now stand nearly eight feet high, and are a wonder to those familiar with the sight of cotton fields, as the ordinary height of the cotton plant is from three to four feet. The plants are well loaded with bolls, which are large and excellently filled, indicating a heavy reliable yield and fine staple. Each succeeding season forcibly impresses the fact that the people of Central California have as yet little conception of the variety and extent of products that may be here successfully grown.

#### San Benito.

**MAKING A HOME.**—Independent, Sept. 28: One of the hardest-working men in the county is Mr. Geo. T. Elliot, the candidate of the Prohibition party for Assembly. Two years ago he bought 190 acres on the bank of the San Benito river, opposite Hollister. There was a fair-sized orchard of apricot, almond and other trees, but through neglect they were not productive. Mr. Elliot at once commenced pruning them heroically. As a consequence, there is not today a more thrifty orchard in the county or one which yields larger crops. Beside this he has planted a large number of apple, cherry and apricot trees, and they, too, look very thrifty. A vineyard which he has started has had a phenomenal growth. Last February something over 1000 settings of choice table and raisin grapes were set out. The 1st of August a second growth commenced, and now many of the vines are loaded with blossoms, and several have bunches of perfectly-developed ripe fruit, although they have been in the ground but seven months. The vineyard is on the north slope of one of the many natural terraces which distinguish the place and give it the name of Terrace Farm. One year ago this spot was a wild tangle of underbrush. With his own hands Mr. Elliot dug out the stumps, cleared the ground, and graded it. Dirt was taken from the top of the terrace, and over a considerable space the "made land" has a depth of six feet. The corn he has raised this year, although it was never irrigated, has stalks about eight feet in height. In many of the hills are from 10 to 15 perfect ears, and in no hill are there less than 5. The 10 acres will yield at least 600 bushels. Mr. Elliot is planning a 25-acre orchard of cherries, and proposes to put in 10 acres this fall. He is continually making improvements on the farm, and it is becoming famous for its neat and orderly appearance. While attending to the farm he has not neglected his home. He has adorned the yard with 100 rare and beautiful flowering plants and made a beautiful lawn, and to-day there is not a more pleasant place to visit than the home of Mr. and Mrs. George T. Elliot.

**CODLIN MOTH.**—Free Lance, Oct. 1: San Benito county has almost entirely escaped the pests which have this year proved so disastrous in many localities, and in many orchards lessened the fruit crop one-third or often one-half.

#### San Bernardino.

**MELON AND ALMONDS.**—Ontario Record, Sept. 29: A mammoth melon, labeled an "Ontario Plum," looks out complacently on the innocent tenderfoot from the office window of Morgan & Dyar. It weighs 103 pounds and was grown by Roscoe Morgan, being one of several large ones on the same vine. We were much interested in the harvesting of a crop of almonds on Mr. Lester's place at Rincon. He has six acres in almonds, the trees being five years old and grown entirely without irrigation. They are a beautiful sight, and were loaded with nuts. They average about eight pounds to the tree, which makes only a fairly remunerative crop.

#### Santa Clara.

**PILFERERS PUNISHED.**—San Jose Times, Sept. 29: C. A. Pitkin, who owns a vineyard in the vicinity of the fair grounds, drove up to the police station yesterday with two young men, apparently 18 or 20 years of age, who lay bound hand and foot in the bed of the wagon. It ap-

pears that the boys had accompanied two others on a raid on Mr. Pitkin's vineyard, and stolen about a dollar's worth of grapes. After chasing the boys for some distance Mr. Pitkin succeeded in capturing two, and forced them, at the point of a shotgun, to get into the wagon and be bound. On being examined before Justice Pfister, both pleaded guilty, and as their appearance indicated them to be professional tramps, and the names they gave were evidently fictitious, they were each fined \$15, or 15 days in the county jail. The boys said they had come to the fair.

#### Santa Cruz.

**BEANS AND SPUDS.**—Pajaronian, Sept. 30: Potato digging and bean thrashing have been in progress for a time. Beans show a fair yield, but prices are low. Potatoes also are a fair crop, and prices are higher than they have been for some time. Some of the beach-road farmers, who felt blue last spring at the continued rains, now feel thankful that the potatoes have taken an upward turn. One got over 100 sacks to the acre. With potatoes of that variety worth from \$1.30 to \$1.40 in the city, the yield in coin shows larger than any Pajaro grain-grower will have.

#### Shasta.

**NORTH COW CREEK ITEMS.**—Cor. Democrat, Sept. 29: Our farmers are generally content with the season's yield, though in some respects not so abundant as in times past. The fruit yield has been fair, both in quantity and quality. J. W. Nixon, of the Gipson Ranch, has sent for a force of Italians and proposes devoting an extensive tract to gardening, which is not only a wise move for John, but will aid materially in excluding the Chinese, who have heretofore held a monopoly of this, one of the most valuable of our resources.

#### Sonoma.

**CROPS.**—Petaluma Courier, Sept. 29: Thrashing in this county is over and we can now estimate the yield. Thrashers tell us the crop of wheat did not average over 15 bushels to the acre. The hay crop was unusually large and the yield per acre extra good. The fruit crop is good as to quantity, but nearly half the apples are wormy. The grape yield is good in this section, and this may be said of most kinds of fruits. Corn, potatoes, and vegetable crops generally, are fair. The spud crop, though not so large as in former years, promises well as to price. Potato-growers feel hopeful.

#### Stanislaus.

**HARVESTING A RATTLESNAKE.**—Modesto News: As the crew of Johnson & Grey were cutting grain about 20 miles east of Modesto, Jeff Boone, the loader, discovered a rattlesnake on the platform of the header, and it was carried into the wagon. Boone made a lunge at the reptile with the pitchfork, but the fork hit the draper slat, was wrenched out of his hand and fell out of the wagon. Al Nourse, the driver, seeing the perilous position of Boone, dispatched the snake, which proved to be very large, having 11 rattles. The grain was lodged at the place the snake was encountered, and the reptile must have been coiled on top of the lodged grain, and the knife cutting low, went under it, which landed it in the wagon without injury. The incident took place over a month ago, but as we have just learned of the occurrence, we give it publicity.

#### Tulare.

**MOUNTAIN FRUIT.**—Delta, Sept. 30: At Nanscawen's drugstore may be seen some fine looking winter apples from N. P. Dillon's place, on North Tule river. Although large, they were not especially selected for exhibition. His orchard is young but promises well, and he is satisfied that he can make a success of fruit-growing in the mountains near his sawmill, where these were grown. The crop this year amounts to 25 tons, and Mr. Dillon will build a brick cellar in which to store his winter apples. Late apples require a cooler climate than that of the warm plain and lower foothills, and we are pleased to know that orchards are being planted in the vicinity of the pine forests. Cherries, currants and raspberries, which do not produce well in the valley, leave nothing to be desired in flavor, size and yield in the cooler climate of the mountains, as has been proved by different persons this year. Mr. Dillon has had several of his young trees destroyed by bears, but his orchard is entirely free from every species of insect pest. The future of the mountain region is a bright one, and a large amount of very desirable Government land is to be had therein.

#### Yuba.

**LIVE-STOCK.**—Marysville Appeal: An examination of the assessor's books for the year 1886 shows that there are about 400 persons in this county outside of the city who own stock to the number of 10 head or more each. The list shows that there are 44,708 sheep, 10,147 hogs, 9800 cattle and 3660 horses.

#### NEVADA.

**EUREKA COUNTY NOTES.**—Palisade Cor. Stockman, Sept. 27: Eureka, though a small county, is rapidly assuming a front rank as a cattle producer, and some of the finest strains of blood in the State can be found within her borders. The principal valleys of the county are Pine, Garden, Cortez and Diamond, and it also takes in about three miles of the Humboldt river. As is the case with our sister counties, the feed is shorter than usual, and our stockmen are uneasy about the coming winter. Unless something unforeseen occurs there will be

considerable loss on the ranges in consequence. With their usual foresight and business acumen, however, most of our stockmen have prepared themselves, and will, if it should prove necessary, feed their poor stock, wean as many calves as possible, and thereby give the cows a better chance to winter. The hay crop in the valleys this year will compare favorably with those of the past few years, and as most of the ranches have a supply of old hay, they will be in a much better position to "fight the common enemy" than their brethren in other counties.

**FEED SCANT.**—Elko Cor. Stockman: In conversation with a gentleman from the southern part of the county recently, your correspondent was informed that the outlook for winter feed in that section is very discouraging, and that in localities where it is usual to find a good supply of winter feed at this season of the year, there is scarcely a sign of vegetation, and that even sheep, which require but little feed, will scarcely subsist during the coming winter.

**HUMBOLDT COUNTY FIGURES.**—Stockman: The number of stock cattle in this county, as shown by the assessment roll, is 38,837, a slight decrease from last year's estimates; the number of sheep, 69,700, an increase of nearly 6000 head. The total assessed value of property is \$3,332,232, an increase of \$38,967. These figures show that, on the whole, there is quite an improvement in our industries, the only one that retrogrades in value being mining.

### Experiments with Sorghum Sugar.

WASHINGTON, October 4.—Last year the Department of Agriculture began to experiment in a small way at Ottawa, Kansas, with the diffusion sugar process as applied to sorghum cane. Instead of crushing the cane as in the sugar-cane process, it was shaved off in minute slices and the sucrose or sugar-yielding sap extracted by streams of water. The results obtained were so encouraging that the scene of operations was removed to Fort Scott this year, and with a largely-increased plant where experiments are now in progress on a scale of some magnitude.

To-day a telegram was received from Prof. Wiley, the chemist of the department, who is in charge of the works, announcing the complete success of the experiments. The telegram states that syrup has been obtained from the sorghum cane of light color, good flavor and crystallizing well. There was a complete extraction of the sucrose in six of the cells of the battery. Commissioner Colman is very much elated at the results of the experiments, and regards them as of great value from an economic point of view. In the process now in use in the South there is a loss of nearly 50 per cent of the saccharine matter contained in the cane, while these experiments at Fort Scott show an absolute extraction of all the sugar.

### Death to Coyotes.

The Red Bluff Sentinel says that B. A. Bell, superintendent of the Gallatin ranch, has discovered an excellent plan to get rid of coyotes. He had five iron-picket pins made, then took an old ewe of little value to the range where a band of mutton sheep were herded. He tied one end of a rope about six feet long to her neck, and the other end to a picket pin, which he drove into the ground. He then planted four steel traps at equal distances from each other, in a circle, a short distance outside the circle that would be made by the sheep going round. Over the ground and traps hay was spread so that the coyotes could not see them. The plan worked like a charm, and three mornings in succession Mr. Bell had the satisfaction of finding a live coyote in one of the traps. He changed the location of the old ewe and caught two more coyotes. Since that he has not been troubled with coyotes killing his sheep.

**AMERICAN NEWSPAPER ANNUAL.**—N. W. Ayer & Son, of Philadelphia, have favored us with a copy of their "American Newspaper Annual" for 1886. It contains a carefully prepared list of all journals and periodicals published in the United States and Canada, corrected up to last July, giving their names, times of issue, general character (as political, agricultural, medical, etc.), age, size, circulation and advertising rates. These are arranged by States in geographical divisions, and by towns in alphabetical order, with a deal of other valuable information, compiled in handy form, and all made easy to refer to by table of contents and index. It makes a handsome octavo volume of over 1000 pages, and is altogether too convenient for editors and advertisers to be without.

**GALLOWAY SALES.**—Mr. Goulding, agent for Leonard Bros., of Mo., has sold Mr. H. W. Cowell, of Lathrop, two bulls and eight cows of their imported Galloway cattle. Mr. Cowell has made arrangements to supply any parties who wish to purchase either Shorthorns or Polled Angus of Leonard Bros.' importation. Mr. Goulding has also sold a bull and heifer to John Snyder, of Mountain View, Santa Clara county.

THURSDAY, OCT. 14th, is set for the general wool sales at Cloverdale. The salesday last spring was reported a great success.





### The West.

Oh ho! for the West, the boundless West,  
Where pastures and creeds are broad,  
Where the breeze is a tonic that thrills the breast,  
Blown straight from the hills of God.

The East is a land of dead men's bones,  
Laid tier on moldering tier,  
And the damp, malarial wind that moans  
Is the breath of those dead men near.

And its slow, pale people seem merely wraiths  
That have strayed away from the tomb,  
Clutching their cold, ancestral faiths  
And wrapped in the garments of gloom.

And the mountains rise up and restrict the sight,  
As its creeds restrict the soul;  
But away and over the frowning height  
Those billowy pastures roll.

And there the people are flesh and blood,  
Sinew and muscle and brain,  
And the strong life-tide is a crimson flood  
Thrilling through nerve and vein.

They ride for miles o'er meadows of green,  
They follow the trail of the kine,  
And scarcely a tomb by the way is seen,  
And the air they drink is like wine.

Brown of feature and bold of heart,  
They ride in the face of the blast;  
And Nature is dearer to them than Art,  
And the Present is more than the Past.

They do not sit down by the tombs of the dead,  
They live in the world of to-day;  
For the Present is here, and the Past has fled,  
And the Future is on the way.

Then ho! for the West-land, fair and broad—  
The land where thought is free,  
Where people live close to Nature's God,  
Oh! that is the land for me!

—Ella W. Wilcox.

### Aunt Sabrina's Teapot.

[Written for the RURAL PRESS by M. B. D.]

Lotta had been sweeping all the morning, and as the weather was clear and warm her task had been unusually tiresome. She pushed the broom before her in a rapid, irregular manner, that sent puffs of dust all about the rooms and over herself, making her feel disagreeable as well as tired, and giving her an undue amount of dusting to perform. When the whistles blew at noon, and she saw how little of her work was done, she felt discouraged and rebellious.

Placing the broom against the wall carelessly, and donning a wide-brimmed garden-hat, she hurried away from her unpleasant duties, and soon found herself in the hayfield. She sat down upon a low mossy stone, in the crevices of which grew delicate ferns, and all about her nodded the wild oats with their pendant bead-like heads drooping down among the wild flowers. Here was a cluster of poppies, yellow and bright as golden twenties; and near them bent a bunch of bluebells, ringing with gilden tongues their airy chimes, heard only by elves. The breezes came whispering over the fields and seemed to be welcomed with nods and courtesies from the verdure. While she was watching the gentle undulations, and rubbing with a soothing motion her soft palms that were nearly blistered by sweeping, she heard a voice calling in the distance, "Chick! chick! chick!" and looking up saw Mrs. Stratton scattering grain in her poultry yard for the fowls that came flocking from all directions with outspread wings.

Lotta could see her snow-white apron gleam in the sunshine, and pictured to herself the Swiss lawn cap, with its edges of lace, which that lady usually wore in the morning. She recalled the outlines of her trim-rounded figure as it appeared in her neat house dresses. Her home was as tidy and pleasant as its mistress. Lotta knitted her brows as she sat wondering how Mrs. Stratton could do so much and yet always be cheerful. Her family was particularly hard to care for. There were three brown-eyed Stratton babies, the eldest of whom had seen scarcely eight summers. These children were as dimpled and merry as their mother. Two orphan cousins, delicate as lilies, five and seven years old respectively, had come to share their home; and, with the work for so many little ones, the poultry yard and the garden, she seemed the possessor of magic to do so well. Looking from the hayfield that sloped down to the Stratton cottage, the scene appeared like a part of some play.

"What a late hour to begin such work," thought Lotta, as Mrs. Stratton increased her hands in a pair of her husband's old driving gloves and began her sweeping. She first opened the windows and sprinkled the floor with tea leaves. No little clouds of dust followed the broom as they had hers that morning; so here the furniture was comparatively

clean and the lace window curtains remained clear as frostwork. Lotta's hazel eyes opened their widest as she murmured to herself, "Oh! I know the secret now. It is tea leaves. I will call there this evening."

Hastily plucking the wild poppies and bluebells, she fastened them into the bosom of her dress and arose with alacrity. As she turned she was startled to see a young man close beside her. He had a gun on his shoulder and a gamebag full of quail. His intelligent face expressed as much surprise as her own. Evidently she had not attracted his notice before, and suddenly to see a full-grown field goddess appear, as though she had been walking invisible, startled him for a moment. He raised his hat and politely begged her pardon for having surprised her. Replying hastily and in rather a confused manner, it must be confessed, she sped along the slope and was soon hidden among the lilacs that bloomed about Mr. Hunt's home.

Lotta Delgate was an orphan, and she lived in the Hunt family as a maid-of-all-work—a position hard to fill at best, and in this instance particularly so, since Mrs. Hunt was a strict disciplinarian and very fond of engaging in public work. When they took Lotta she had described the situation.

"If I am to do any good in the world, I must be free to go and come when I please. A hired girl always takes advantage of such things, and I have had enough trouble with them. A young orphan entirely dependent upon me for everything would have to consider my wishes and share my household responsibilities. She could not turn up her nose and leave if I did not suit her."

Lotta had been selected from a number of applicants, because she seemed a cheerful, vigorous girl, who would perform her duties with resolution.

"I like to see some spunk in the people about me, and this one appears to just suit," Mrs. Hunt concluded, after she had criticised the girl to her own satisfaction.

Lotta found her new position pleasanter after several months; for her disposition was bright and amiable, and enabled her to gain the good-will of the family. Mrs. Hunt was not a methodical housekeeper, and Lotta, having had no previous experience in such matters, did her work in an irregular manner that made it harder than it ought to have been.

When the early dinner was over and the children were engaged with their lessons, she gained permission to spend part of the evening at the Stratton cottage. Lightly she tripped through the garden, bright with blooming annuals and vines, and knocking at one of the French windows, opened it herself and stood looking into the dining-room. The Strattons had just sat down to their evening meal, and formed a pleasing group. Fresh and sweet as pinks were the children, all sitting demurely in their high chairs, and eating out of little painted bowls their pudding and milk, while Mr. and Mrs. Stratton chatted together and discussed a heavier meal. Lotta was very welcome, and they invited her to a seat at the table. Before her was placed a cup of tea, so dainty in appearance, and from which arose so fragrant an aroma, that she was tempted to sip it as she talked. She avoided, half unconsciously, a little stem of the tea plant that floated about on the surface.

"That bean in your teacup reminds me of your old Aunt Sabrina," remarked Mrs. Stratton, as she noticed it. "She delighted to read fortunes from the tea-leaves, and she did it, too, with the air of a genuine sybil. Once she tried to explain to me the secret of her necromancy. I recollect little of the art, but the evening that I spent with her over the teacups I remember well. It was the last term she taught in the old Lafayette school, and I was one of her pupils. I think I was nearly as old as you are now, and Miss Delgate, having taken a fancy to me, used to invite me to her house sometimes. What a queer old place it was! I always thought of a ship's cabin when I entered it. I believe she bought it of a retired sea captain, did she not?"

While Lotta listened she recalled this old maiden aunt and associated her with the tall wallflowers about her cottage entrance that held up proudly their luxuriance of orange-colored blossoms. Aunt Sabrina moved among them with a kindred grace that seemed to mark her as one of their own sisterhood. She had always given Lotta prune sauce and cookies for refreshments, and called her "child" in a deprecating way when she visited the cottage.

"Yes," answered Lotta to Mrs. Stratton's question, "Captain Blake sold the place to Aunt Sabrina. He left there large quantities of shells, corals, and other things of the same nature, which he had brought from beyond seas. She had an old tea-chest half full of savage ornaments, walrus tusks and dried sea-mosses, and she used to let me look them over when I went there with my mother. Her patchwork and knitting she kept in the same chest, and I remember it sat in her chamber beside her writing desk."

"When she died, she gave it to me with her last words. She tried to say something more about an old Britannia teapot that was in it; but her voice failed before she could make herself understood. I have it still in the same chest, and some time when you take tea at our house I will use it, and you may tell my fortune from the tea-leaves, just as Aunt Sabrina used to tell yours."

This recalled the incident of the morning, and led to a discussion upon the art of sweeping.

It was late in the summer before Mrs. Stratton took tea with the Hunt family. She sat talking with her hostess, while Lotta prepared the meal. The hayfield had been stripped of the waving oats and wildflowers that had been so fresh that spring noontide, when Lotta had sought a refuge there from her unfinished tasks. Now, the low gray stone rose above the stubble, and she could see it from the window. She had learned the name of the stranger who had surprised her that day. He was Walter Snell, a young doctor who had come to obtain a practice in the town. And he was well known, since his father was a considerable farmer in the county. Lotta had been introduced to Dr. Snell since, and the low gray stone often recalled him to her mind, although she seldom saw him. Indeed, she was thinking of him when she took the old Britannia teapot from the chest and wondered what sort of a fortune Mrs. Stratton would tell her. She opened the lid to wash it, and was surprised to find a little roll of notes—some papers and some old-fashioned trinkets—inside.

"Poor Aunt Sabrina must have appropriated this for her strong-box," thought she. "How queer old people grow in their ways."

After making the tea she slipped out into the arbor and sat down in the children's swing to examine her treasure. First, she noticed her aunt's gold thimble, and fitted it upon her own finger. Then an old-fashioned gold buckle and a cluster of watch charms, formed of a tiny enameled heart and cross attached to a ring. The notes and two or three small coins must have been her aunt's ready spending money.

"What a queer, stiff paper this is," remarked Lotta to herself, as she unwound a piece of tape from a neatly-folded roll. Her hands trembled and her blooming cheeks lost their color when she discovered that it was her aunt's will. She and two cousins whom she had never seen were left the bulk of Miss Delgate's property. She gave it to them, she explained, because they had been poor, and yet had never asked her for anything.

This missing will had caused her relatives much wonder and disappointment. They had all supposed her rich, and when no will and but little property could be found they were exceedingly chagrined. The wise old lady had invested most of her money in Government bonds, and it had been increasing in safety ever since. Lotta's share was \$8000, a sum which was riches to her.

She folded these precious gifts in her handkerchief, and placed them carefully in her pocket; then hurrying to her duties, for she had lingered longer than she ought to have, she met Mrs. Hunt in the kitchen, and was severely reprimanded by her for her unusual carelessness.

"You heedless girl!" exclaimed her mistress, "you have burnt the toast and oversteeped the tea. This is all the worse because Mr. Hunt has invited the young doctor to dine with us."

Poor Lotta, nervous with excitement, hastened to repair the mischief. In a trice the ham and eggs were daintily prepared, the tea cakes ready and all served in a proper manner. Dr. Snell spoke to her pleasantly as he took his seat at the table, and she poured out the tea for him.

Mrs. Stratton told a splendid fortune from the leaves in Lotta's cup when the meal was over, and they lingered together after the rest were gone. She painted in glowing colors a handsome young man who would soon lay his heart and fortune at her feet; and this was done in the mysterious gipsy style. Lotta listened and waited in vain for a prophecy of her new-found treasure.

What a glorious evening that proved! The air was scented with flowers and moonlight streamed through the vines, penciling a tracery of shadows upon the veranda where they were all seated. Lotta pictured in a thousand dreams the bright future which her aunt's will made possible to her. This new hope gave her a confidence that rendered her manner and conversation far more engaging than ever before. She did not guess that her modest grace and worth had quite won the young doctor. He had noticed that she did her work with a natural tact and aptitude that gave to those homely duties a pleasing beauty. She waited upon the children graciously, as though it was a pleasure; and he imagined to himself what a delightful mistress she would make of her own home. He resolved to offer her a fairer opportunity than even she had yet deemed possible for herself. This he did without delay and in a characteristic manner. Mr. Hunt had asked him to write a prescription for one of the children who was troubled with a cough. He wrote two, and giving them both to Lotta, said, "One is for yourself."

"But I need no medicine, doctor," she replied. "Read that one and then tell me if you will take it," he returned rather anxiously.

He did not wait for an answer, but said, as he bade them good-night, that he would call to-morrow and see what effect his prescriptions had produced. When Lotta admitted him the next evening he read the promise of his happiness in the first glimpse of her fair, radiant face, and he made it known to Mr. and Mrs. Hunt as soon as Lotta consented.

"That is just my luck," fretted Mrs. Hunt, after the doctor had taken his leave. "The first girl who ever suited me must betroth herself without the least consideration for me. How can you permit it?" she asked her husband. Then, observing his amused look, she continued: "Of course I told the young fellow that he could take her myself, but I was consider-

ing only her own good, though she is well off here. However, she has been a first-rate girl and I will make her a wedding. Do you hear, Lotta, I promise you as fine a wedding as any one in town could have."

Lotta thanked her warmly for her kindness. Mrs. Hunt kept this promise, too, bestowing upon her much happiness; and as Lotta showed no undue pride in her good fortune, she won the life-long friendship of her old mistress.

Mrs. Dr. Snell often gives tea parties in her pleasant, tasteful home, and the old-fashioned Britannia teapot always appears upon these occasions. She cherishes a fondness for it because, as she once said to her husband, "If it had not kept Aunt Sabrina's secret so long we should never have met each other."

### Thoreau on Books.

Books must be read as deliberately and reservedly as they were written. To read well, that is, to read true books in a true spirit, is a noble exercise, and one that will task the reader more than any exercise which the customs of the day esteem. Most men have learned to read to serve a paltry convenience, as they have learned to cipher in order to keep accounts and not be cheated in trade; but of reading, as a noble, intellectual exercise, they know little or nothing; yet this only is reading, in a high sense; not that which lulls us as a luxury and suffices the nobler faculties to sleep the while, but what we have to stand on tiptoe to read and devote our most alert and wakeful hours to.

I think that having learned our letters we should read the best that is in literature. There is a work in several volumes in our circulating library entitled "Little Reading," which I thought referred to a town of that name which I had not been to. There are those who, like cormorants and ostriches, can digest all sorts of this. If others are the machines to provide this provender, they are the machines to read it. They read the nine-thousandth tale about Zebulon and Sephronia, and how they loved as none ever loved before, and neither did the course of their true love run smooth—at any rate, how it did run and stumble, and get up again and go on. How some poor unfortunate got up on to a steeple, who had better never have gone up as far as the belfry; and then having needlessly got him up there, the happy novelist rings the bell for all the world to come together and hear how he got down again. For my part, I think they had better metamorphose all such aspiring heroes of universal noveldom into man weathercocks, as they used to put heroes among the constellations, and let them swing around there till they are rusty, and not come down at all to bother honest men with their pranks. The next time the novelist rings the bell I will not stir though the meeting-house burn down.

"The Skip of the Tip-Toe-Hop, a romance of the middle ages, by the celebrated author of 'Tittle-Tol-Tan,' to appear in monthly parts; a great rush; don't all come together." All this they read with saucer eyes and erect and primitive curiosity. The result is dullness of sight, a stagnation of the vital circulations, and a general deliquium and sloughing off of all the intellectual faculties. This sort of gingerbread is baked daily and more sedulously than pure wheat or rye and indian in almost every oven, and finds a surer market.

How many a man has dated a new era in his life from the reading of a book. The book exists for us, perchance, which will explain our miracles and reveal new ones. The at present unutterable thing we may find somewhere uttered. These same questions that disturb and puzzle and confound us have in their turn occurred to all the wise men; not one has been omitted, and each has answered them according to his ability by his words and his life.—Thoreau's Walden.

### Not for Sale.

"A few weeks ago," said a drummer, "I told you a little story about Schumacher, the Ohio oatmeal king, who has just been ruined by a fire, sacrificing several thousand dollars rather than break his rule of refusing to employ a man who drinks liquor. Since then I have been in Akron and seen the ruins of Schumacher's great mills. A few days after the fire two men from Cincinnati called on Schumacher. They said they had heard that in the cellars of the mill was a vast quantity of grain damaged by smoke and water, and they had come with the intention of buying it. The matter was talked over and a bargain finally struck. The men drew their check for the purchase price, a sum running into the thousands, and were just about to hand it to Schumacher when one of them happened to remark that they would be able to make a good deal of good whisky out of that grain."

"Do you want this grain to make whisky of?" inquired Schumacher, stepping back a few feet.

"Yes; we are distillers in Cincinnati."

"Then, gentlemen, you cannot buy any grain of me. I have no grain to sell to be made into whisky. Good-day, sirs."

"And as the damaged grain was only good for distillers' use, Schumacher gave every bushel of it to teamsters, expressmen, draymen and poor families keeping cows to feed their stock, on condition that they would haul it away."—Chicago Herald.



## YOUNG FOLKS' COLUMN.

## A Certain Day.

[Written for the RURAL PRESS by BECCA M. SAMSON.]

It was a beautiful, sunny September morning, one of those bright days when the sky is so blue you can scarcely look at it, and the birds seem to sing as loud as all the birds of the world together. It was one of those happy mornings when little children rebel against schoolrooms and lessons, and linger till the last moment by the hedges, where the nuts are beginning to ripen and the green leaves are putting on their pretty autumn coats.

But this is not the reason the little boys and girls of Miss Porter's private school crept along the high-road with such slow, unwilling steps.

The schoolhouse, which was really a dear little cottage home, was pretty enough to tempt the laziest scholar of them all to run to get there; and Miss Porter, with her gentle face and sweet voice, was not the sort of a person children are afraid of.

If you follow the little band of boys and girls along the winding road, and steal behind them as they enter the grassy playground behind the cottage, you will soon find out what the trouble is.

"It's the end of the world to-day," whispered a little girl to a group of playmates, who stood huddled together as you may have seen little chickens huddle together when something has frightened them.

"Oh, my! oh, my!" said another, "I'm frightened half to death; I've been just as good as can be all morning, and begged mamma to let me stay home from school; but she only laughed when I told her why, and sent me off."

"Granny Bobkins says awful things are going to happen," piped a little voice from the center of the group; "she says the moon will turn red and there will be three days darkness; then there will be an awful bump, just like two cars banging together, and the whole world will burst up and all of our heads will be blown off."

"Oh! I want to go home to my mamma," cried a little tot who wore socks and high pinafores; "I don't want to be all blown up without my papa and mamma."

"You silly goose!" exclaimed Freddie Hilton, a mite of a boy just in trousers, "ain't that way at all; my big brother knows all about the end of the world, and he ain't afraid of it, neither; he says we'll just pop off quicker 'an a flash; that's how it is."

"Will it hurt?" asked timid Rosie Dalton.

"Hurt!" exclaimed the wise Freddie, in disgust at such a question; "would it hurt a worm to be blown out of a cannon? My big brother says we ain't no better than worms, and the world is bigger than 10,000,000 cannons."

"Will Miss Porter go too?" asked a pretty little maiden, with blue eyes full of tears.

"I don't mind the end of the world so much," said another little girl with a very sad face, "because then I might get to heaven where my papa and mamma are; but if my head gets blown off here will they know it's me?"

"Perhaps," said another, "when the big bump comes, this part of the world will stick fast; it must be dreadful strong because there are so many mountains in it."

"Ho, ho, ho!" yelled Tommy Teazer; "what a silly boy you are! Don't you know mountains are the very things the end of the world comes out of? I can show you a picture of one in my house, with smoke and fire coming out of it just as good as any chimney in the town; besides, I know this is just the shakiest part of the whole world; it's full of cracks down below by the river. I tell you the end of the world is going to cut awful capers about here. I've seen lots of them where I come from. There'll be noises like thunder, and fire and smoke'll come tumbling out of all the cracks in the mountains, and you'll be burnt up before you know it; but I ain't afraid, 'cause I know a place to hide where no earthquakes nor nothing can catch me."

Tommy Teazer was the biggest boy in the school, and was, besides, a very naughty one to frighten his little schoolmates by such silly tales. Nothing ever seemed to frighten him—not even the cross bull in the next field, who made such horrible eyes at the children when they were playing.

"Dear, dear!" whispered the poor children, cuddling closer together. "I wonder if it will soon be here?"

Just then the school bell rang out so loud and suddenly that the trembling little creatures gave a sharp cry of terror and ran pell-mell toward their teacher, who stood smiling down at them from the doorway.

"Don't play so roughly, little ones," she said, in her gentle way, as the frightened group rushed panting into her arms. "Come, now," she continued, turning and leading them into the cheerful parlor where they learned and recited their lessons, "take your places and let us see what wonderful things you can do this beautiful morning."

"Isn't it funny, teacher doesn't look one bit frightened?" whispered Lulu Martin to her neighbor, Blanchie Thompson.

"Perhaps she doesn't know it's to be the end of the world," Blanchie whispered back. "Oh, dear me! I wish I didn't know it."

Miss Porter was so busy arranging a pile of

copy-books that lay before her that she didn't see the children's pale faces or notice how nervously they started at every sound.

"Oh, dear! oh, dear!" said poor little Gertie Paylor, shutting her book with a deep sigh, "there's no use trying, I can't study this morning. What's the use, anyhow, if we'll all be dead before two o'clock?"

The little tot in socks and pinafores heard what Gertie said and screwed up her lips for a big cry.

Gertie thrust a handful of peppermints into the little tot's hand to keep her quiet.

"See, the sun's turning black; the end of the world is coming for sure now," said naughty Tommy Teazer to the boy next to him.

In another minute every head in school was turned and twisted for a glimpse through the open window of a little gray cloud that had sprung up from somewhere and was slowly sailing into the big yellow sun.

"Come, children, your places for geography," called Miss Porter, who had finished with the copy-books.

Up rose all the little boys and girls, and spread themselves out in a row before their teacher.

"Well, Miss Rosie, what is an island?" asked Miss Porter of the little girl who stood at the head of the class.

"I don't know, ma'am," Rosie answered in a low voice, and hanging her head.

"Why, Rosie! how does that happen?" asked Miss Porter in surprise; "are you not well this morning? It is something new for you to miss a question. Can the next little girl tell me what an island is?"

"A big thing that roars," answered the other little girl, whose eyes were far away out of the window and up in the sky, where the little gray cloud was sailing.

"Lucy, Lucy!" exclaimed Miss Porter, "what foolish things are you trying to say? I'm astonished; perhaps wee Sadie can tell us what an island is better than that."

"An island is—an island is—boo-hoo-hoo," cried Sadie; "I want my mamma."

Miss Porter laid down her book. "Come here, Sadie," she called; then, putting her arm about the little girl, she said, gently: "Don't you remember you promised your mamma to be a good child and study well? Are you not going to keep your promise?"

"I want my mamma, and I want my kittle," Sadie answered, screwing her two fat fists into her eyes.

"Well, well," said Miss Porter, kindly, "sit by me, and listen while Master Freddie tells you what an island is."

"An island," Freddie replied, in a big voice (he wasn't going to let the girls think he was afraid), "an island is—" at this moment somebody dropped a book with a bang—"Oh! oh!" yelled poor, startled Freddie, "I don't know what an island is; I want to go home."

"Freddie! I'm ashamed of you!" declared Miss Porter, gravely; "the idea of such a big boy as you are, setting so bad an example. There! you have made little Tottie cry."

Everybody was crying now; "boo-hoo-hoo," piped the girls; "boo-hoo-hoo," roared the boys. At the same time the little gray cloud got into the sun's way and made the old fellow frown in quite a gloomy fashion. At the very same moment a wagon went rumbling and creaking over the bridge that crossed the river; it was enough to send all the children screaming with fright to bury their faces in Miss Porter's lap.

"The end of the world is coming," they cried. "Teacher, dear teacher, don't let us be burned up."

"Why, you dear, foolish little children," exclaimed Miss Porter, who understood all in a moment, "who has been telling you these silly stories?"

"Everybody says so," answered Lulu Martin, lifting up a flushed, frightened face. "They say the world is coming to an end to-day before 2 o'clock, and lots of folks have packed up their trunks and gone away."

"I hope my little boys and girls have better sense than these foolish people," said Miss Porter. "Look up and see the bright sunlight trying to peep into your faces. Listen! how merrily the birds are singing; do you know what they are saying? They are saying, 'Run away, little children; put on your hats, bring your lunch baskets and come out to the woods where we can play with you.'"

The children, forgetting in an instant all their fears, ran with a shout to the cupboard, where their hats and baskets were kept. In a few minutes they were rambling and scrambling after their kind teacher, who led the way across fields to a little hollow between the hills, where there was a stream to wade in, a cave to explore and a beautiful wood full of curious things.

"Now, boys," said Miss Porter, after they had all had a nice little rest on the cool grass, "run, gather as many dry branches as you can find and we'll soon have a roaring camp-fire to cook our lunches by."

"But they're all cooked," said a little girl, with wondering eyes.

"Yours are, but mine is not," Miss Porter replied, with a wise smile.

Presently the boys came back, their arms loaded with branches and pine-cones. The girls cleared a space upon the banks of the stream, and in less than no time a great fire was crackling and roaring in the woods.

Suddenly, who should appear in the midst of them, like one of the good genii in the Arabian Nights, but Jerry, Miss Porter's man-of-all-

work, who trundled before him a wheelbarrow which held—what do you think? Miss Porter's lunch!

How the children laughed when they saw what a quantity of things she had provided for herself!

"You see, children, I have a big appetite," Miss Porter laughed, as she dragged from the wheelbarrow a sack, out of which tumbled such a quantity of big brown potatoes—enough for the whole party of 12 little people; then followed as many round, rosy apples, saying "eat me," as plainly as possible; next came a tin of crisp, spicy cookies, and a bag of last autumn's nuts; and best of all, there was a huge can of sweet milk, just warm from the old brindle cow.

"There, children!" cried Miss Porter, as she lifted the milk-can from the barrow and stood it in the tall grass, "you must all help me eat my lunch; and while the potatoes and apples are roasting you can empty all your own little baskets on the grass, and we'll see how many good things we can find among them."

Miss Porter then whispered something to old Jerry, who nodded and smiled and looked very wise as he mopped his hot forehead with a red cotton handkerchief; but the children forgot all about him before he and his wheelbarrow were well out of the wood. They had more important things to occupy them than old Jerry.

The apples and potatoes buried in the hot cinders needed constant watching. Even naughty Tommy Teazer was too busy finding the hottest place for the biggest potato to think of mischief.

And Baby Tottie, who wasn't a day over five years old, sat on the grass before the fire toasting a tiny red apple stuck on the end of a twig; and she was so busy that she never noticed three big mosquitoes sitting on her little bare legs.

When the potatoes were well baked they were poked from the cinders and piled in a great heap on the grass, and didn't a lot of hungry little people make a rush to get at them! Even fussy little Pearl Watson, who never touched potatoes unless they were whipped to a froth with cream, actually devoured two of the very biggest without salt, and then asked if she couldn't have a third one.

As to the roasted apples—well, please don't ask me about them; they didn't live long enough to know they were cooked. The cookies flew away as though they had wings, and, strange to say, nobody seemed to know where they went to; perhaps the long-legged spiders carried them off.

And oh, wasn't it fun to empty the lunch-baskets and discover what was in them?

One had a slice of lemon pie, another a piece of coconut cake; some had tarts, others buns; there was just enough of everything for a bite all around.

By-and-by, when there was nothing more to eat, and the milk was all gone, Miss Porter took the children into the woods, where they gathered flowers and collected pretty stones and mosses, and when they were tired she gathered them about her and told them the prettiest stories she knew. It seemed as though she had barely commenced when she started up suddenly, crying, "Dear me, children, I'm forgetting; it will soon be time for little boys and girls to be in bed. Now let's see who'll reach the schoolroom first."

It didn't take long for the happy, frolicsome children to scamper away across the fields and over the ditches; they were already at the schoolroom door before Miss Porter, with little Tottie, were over the last stile.

What time do you think it was by the clock in Miss Porter's hall?

I am sure nobody can ever guess.

Two o'clock?

Indeed, you are very much mistaken!

Three o'clock, then?

Wrong again!

Well, I'll have to tell you—it was six o'clock. Six o'clock in the evening, when the chickens and ducks begin to think of going to bed.

The children were so astonished that they could do nothing but stare, first at the clock, then at one another.

"I guess we were so busy roasting the potatoes we didn't notice the time," said little Lulu Martin at last, which was probably the very reason, as nobody gave any other.

"I wonder why our mammas didn't get frightened and come after us," said Gertie Paylor.

"I think Jerry can explain that better than I can," said Miss Porter, with a smile.

But Jerry didn't explain anything at all. He walked home with the children and left them one by one at their homes, where nobody was surprised to see them or scold them for coming so late. It was more than a week afterward that some little boy or girl of Miss Porter's private school was heard to say: "Why, the end of the world didn't come, after all."

Alameda, Cal., Sept. 30th.

THE KING OF SERBIA seems to have a parental care over his subjects, as witness the following edict, which, it is said, he has recently issued: "Whereas, it is irrefutably proved by science that the so-called antiseptic treatment of wounds yields more beneficial results than all other methods, we are pleased to order that henceforward the said antiseptic plan of treatment be solely employed in all the hospitals of our kingdom, and that corrosive sublimate and iodoform be used until our further disposition."

## DOMESTIC ECONOMY.

**RED CABBAGE PICKLE.**—A pickle which will keep a few weeks, and which is very appetizing, and will help to save the other more expensive pickles, is made of red cabbage. Choose firm heads, cut them into quarters, and after removing the stalk cut the cabbage across into very thin slices; spread it upon large platters, scatter salt with a liberal hand over it. The next day, drain through a colander. Then put the cabbage into a jar, and pour vinegar heated to the boiling point over it, some whole black pepper, and, if you choose, a little cayenne pepper or curry powder or ginger may be put into the vinegar and be heated with it.

**BATTER AND FRUIT PUDDING.**—Chop up one pound of apples and put them in a greased pudding basin (gooseberries, plums or any other fruit will do), and sprinkle sugar over them; now make a batter of one egg, six ounces flour and one breakfast-cupful of milk; one-half a teaspoonful of baking powder must be added to the flour; when the batter is smooth, press it over the fruit and steam gently for one hour; care must be taken that the water remains boiling and does not evaporate too much.

**TO MAKE A TOUGH FOWL TENDER.**—The French have a way of making a tough fowl tender in roasting which is worth following. It should be seasoned and tied up securely in two thicknesses of soft white or pale brown paper and put into the oven half an hour earlier than the time one would choose to assure its being done. It will steam slowly in this way, and if delicately dredged with flour when the paper is taken off at the end of the half-hour in a hot oven, it will come out brown and easily carved.

**BOILED LETTUCE.**—If the lettuce is not delicate enough for salad, cut it in pieces and boil it soft in water slightly salted; when cooked, drain every drop of water from the leaves. Put some flour in a pan with some butter on the fire, and let it cook until it is yellow; turn the lettuce in it, and let it boil once or twice. Pour some stock over the lettuce; let it boil once again, and just before serving pour in a little cream. A little nutmeg is sometimes liked.

**TOMATO CATSUP.**—Cut up and stew ripe tomatoes, but do not peel them. When sufficiently cooked, strain through a sieve. To one gallon of the tomatoes, measured after straining, add four tablespoonfuls of salt, four tablespoonfuls of ground black and white pepper, three tablespoonfuls of ground mustard, three red peppers chopped fine and one pint of vinegar. Simmer all together slowly for four hours, then bottle and cork tight.

**CALF'S LIVER.**—Try this Austrian method of cooking calf's liver: Remove the skin from the liver and cut it in pieces as thick as your finger and lay them in milk for several hours; then take them out of the milk and sprinkle them with flour; dip them in beaten egg and cover them with flour with which you have mixed a little salt. Fry them in hot drippings and serve garnished with minced parsley.

**ITALIAN CREAM.**—Rub the zest of two lemons upon three or four lumps of loaf sugar; stir these into a pint of rich cream and add enough sugar to sweeten. Whip the cream with the juice of one lemon, straining in one ounce of gelatine that has been dissolved in a little water. When thoroughly light, flavor to taste and pour into a mold and freeze. When served, garnish with preserved fruit.

**STUFFED POTATOES.**—Bake large potatoes until done; cut a "cap" from the top of each; scoop out the inside carefully and mash softly with butter and milk. Mince the giblets of your chicken fine, season with pepper and salt, stir into the potatoes, add the beaten yolk of an egg, beat in a saucepan until very hot, fill the skins, replace the tops and set in an oven for three minutes.

**STUFFED TOMATOES.**—Get them as large and firm as possible; cut a round place on the top and scrape out most of the inside and mix it with fine bread crumbs, parsley, onion, pepper and salt. Chop all fine and stuff the tomatoes carefully. Put a good lump of butter in the pan and baste while baking. Cook until brown and well done.

**COOKED CUCUMBERS.**—Peel and put into ice water for a few minutes, then slice thicker than for the table and put into salted boiling water and cook until tender. Drain and add butter, salt and pepper, with cream enough for a dressing, and pour over buttered toast. Serve quickly and eat at once. Excellent.

**APPLE MARMALADE.**—Take any kind of sour apples, pare and core them; cut them in small pieces and to every pound of apple put three-quarters of a pound of sugar; put them in a preserving pan and boil them over a slow fire until they are reduced to a fine pulp; then put in jelly jars and keep in a cool place.

**CHEESE AND EGG SANDWICHES.**—Grate the cheese, and to each cupful add the yolks of three hard-boiled eggs, minced fine; rub to a paste with a teaspoonful of butter, season to taste with salt and pepper, and spread between buttered bread or crackers. These are nice made of graham bread.





A. T. DEWEY.

W. B. EWER.

Published by DEWEY &amp; CO.

Office, 252 Market St., N. E. cor. Front St., S. F.  
Take the Elevator. No. 12 Front St.ADDRESS ALL literary and business correspondence and  
Drafts for this paper in the name of the firm.

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A. T. DEWEY. W. B. EWER. G. H. STRONG.

SAN FRANCISCO:

Saturday, Oct. 9, 1886.

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## The Week.

The question now seems to be, were the very  
light showers which came last week intended  
to constitute our "first rain" for the year?  
They seemed to be enough to produce a sensi-  
ble effect upon the air in the upper part of the  
State at least, while there was hardly enough  
reached *terra firma* to pit the dust. If this is  
all we are to get of the terrific phenomena  
which the prophets set down for California, we  
certainly have escaped very easily.

The State is still all alive with district and  
county fairs. Just behind us are the San Jose  
fairs, (elsewhere described) and that of the  
Tenth District, embracing Shasta, Siskiyou and  
Trinity, which was held at Yreka with a very  
large attendance from all parts of that region.  
This week the Nevada State Fair has opened  
at Reno with fine weather, many visitors and  
lively racing; while here in California, Lakeport,  
Salinas City, Santa Cruz, Santa Barbara, Downey  
and San Diego have fairs in progress. Next  
week the Sixth District—six counties—exhibits  
at Los Angeles; the Ukiah Park meeting takes  
place; the new Arroyo Grande Agricultural As-  
sociation holds a fair and cattle show, and Visa-

lia is making active efforts to accommodate the  
horses, cattle, sheep and swine, and those bipeds  
who are expected to show and view the four-  
footed creatures between Monday and Satur-  
day.

## Pleuro-Pneumonia.

In the RURAL of September 4th we published  
a circular from Col. Colman, Commissioner of  
Agriculture, concerning the way in which the  
U. S. Government, under the law passed by  
Congress last winter, could take part in efforts  
for the suppression of pleuro-pneumonia if the  
dread disease should break out in any part of  
the country. Readers who turn back to that  
publication will see that the General Govern-  
ment can only act as assistant to the State Gov-  
ernments when requested to do so by the State  
authorities, and can therefore act only as pro-  
vided by State laws in the matter of killing ani-  
mals necessary for stamping out the disease. It  
was designed by those who urged the establish-  
ment of the Bureau of Animal Industry that  
greater power should be given to it, but Con-  
gress thought otherwise. As will be seen by the  
circular to which we allude, the Bureau is  
authorized to determine the existence of the  
disease and establish quarantine, but can go no  
farther, apparently, except in conformance  
with State laws.

The wisdom or folly of this arrangement is  
now under test in a manner calculated to draw  
the attention of the whole country to its re-  
sults. Pleuro-pneumonia has appeared in Chi-  
cago. For the last two weeks about 2000 ani-  
mals have been under quarantine, and future  
proceedings are so entangled between the State  
laws of Illinois that there is some doubt as to  
the outcome.

An outbreak of pleuro-pneumonia is, by reas-  
on of its dread possibility, calculated to arrest  
attention, not only in this country, but where-  
ever cattle are grown all over the civilized  
world. Contagious pleuro-pneumonia, or "lung  
plague," has within two centuries spread from  
a very small area over nearly every part of the  
world. From 1769 to 1789 the disease was  
more or less limited to the Swiss mountains—the  
Jura, Daphine, the Vosges, Piedmont and  
Upper Silesia. Since the revolution its appear-  
ance has been greatly accelerated, and it has  
been carried to almost every country on the  
globe. In consequence of its insidious inva-  
sion, the subtlety of its contagion, and the  
great fatality attending it, there can be no  
doubt that it is one of the most disastrous  
plagues that can afflict a cattle-producing  
country. Fortunately it is entirely confined to  
the bovine species. No well-authenticated in-  
stances of its transmission, either accidental or  
experimental, to other species have been re-  
corded.

The appearance of the disease in Chicago  
was, as might be expected, among the swill-  
milk factories of that city. Distillery dairies  
are an abomination. Their product saps the  
strength of the city, murders the babes and ad-  
ministers a slow poison to the adults. This  
work is so insidious that only occasionally are  
the people aroused. These filthy distillery  
stables are also hotbeds of cattle disease, owing  
to their total lack of sanitary regulation and  
the nature of the feed given which predisposes  
the animals to virulent disorders.

The telegrams to the daily papers have given  
rather confused statements about the Chicago  
outbreak, and we have preferred to wait until  
mail advices brought more intelligible accounts.  
The disease was discovered on September 12th,  
by John Casewell, State Veterinarian. He was  
called to treat a sick cow, and found pleuro-  
pneumonia. An examination of the swill-milk  
establishments was then made with the follow-  
ing results:

On Monday a visit was made to the Schu-  
feldt distillery, where were kept 865 cows. A  
 cursory examination resulted in the finding of  
seven pronounced cases of the fatal malady. The  
cattle were ordered quarantined and a couple  
of officers were stationed at the distillery to see  
that no cows were permitted to enter or leave  
the place. The wisdom of the move was appar-  
ent when Thursday it was found the disease  
had made inroads on the herd.

At the Phoenix distillery, North Branch and  
Clybourn, 1100 head of cattle were housed.  
It was from that place the Quinn cows  
were removed to Harvey's farm, where they  
spread the disease. A careful examination was  
made into the condition of the animals. The  
sheds were far from being clean; in the stalls  
there was little room for the cows to do any-  
thing but give milk. After traversing half the  
distance of the large corral, the commissioners

came upon two cows that were almost dead.  
They were removed from the others, an effort  
having evidently been made to prevent their dis-  
ease, of whatever nature, from communicating  
itself to the other animals in the herd. The  
cows were unable to stand, and lay gasping in  
the filth of their stalls. They were ordered  
killed, and when their lungs were removed the  
presence of pleuro-pneumonia was observed in  
such a pronounced form that there was not  
room for even a doubt on the point.

At the Empire distillery no trace of the dis-  
ease was found, but a guard was kept on duty  
to watch for further developments.

A visit was made on Tuesday to the Harvey  
farm, where three cases of pleuro-pneumonia  
were reported. The cases were in better con-  
dition than when the veterinarian had last vi-  
sited them. Four deputy sheriffs were left to  
quarantine the place. One case was found at  
the Chicago distillery, and a quarantine was  
established there.

Something of the condition in which the cat-  
tle were found in some of the places visited may  
be learned from the following paragraph in the  
*National Live Stock Journal* of Sept. 28th, just  
at hand:

Arriving at the miserably-constructed sheds,  
wherein no fewer than 1200 head of cattle were  
quarantined, the foul odor arising from the  
premises was freely commented on in terms by  
no means complimentary to those to whose  
keeping the health and care of the animals were  
intrusted. Everywhere evidences of filth were  
visible, the poor brutes being obliged to stand  
in their own excrement to the depth of several  
inches. Bedding of any sort was nowhere to  
be found, not even one square foot of a dry  
board being visible. On entering the premises  
the first thing to be met with was the carcass of  
a cow that died that morning awaiting the ar-  
rival of the State Veterinarian and his small  
corps of experts.

The experts of the U. S. Bureau of Animal  
Industry and the State Veterinarian of Illinois  
at once undertook the repression of the disease.  
Effective quarantine was established, and is  
still maintained. The Governor of Illinois has  
given the outbreak his personal attention. The  
disposition of all concerned was at first to de-  
stroy all the animals found in infected places,  
and burn up the sheds in which they were kept.  
This would call for the slaughter of about 3000  
cattle. Where was the money to come from  
to pay for them? for, according to the Illinois  
law, all healthy animals killed must be paid  
for, and there was but \$49,000 in the fund for  
this purpose. The United States fund con-  
tained \$100,000, but the regulation is that the  
diseased animals shall be paid for if condemned  
to destruction. The Illinois law says diseased  
animals shall not be paid for, so within that  
State the United States cannot pay for cattle  
killed. The proposition then arose that the  
cattle should all be killed, and the meat of those  
pronounced healthy by the inspectors should be  
sold. This proposition brought the stockyards'  
interest and the beef-canning interest to the  
front, because to have it go out to the world  
that the meat from bands of cattle infected  
with pleuro-pneumonia was being sold in Chi-  
cago would be fatal to the meat-shipping in-  
terests of Chicago. Thus amid the conflict of  
authorities and laws, the cattle are still living  
in quarantine, the expense of which (\$150 per  
day) is being paid for by the United States.  
The latest advices by telegraph from Washing-  
ton are as follows:

Commissioner Colman, speaking of the opera-  
tions of the department at Chicago, says there  
seems to have been a total failure on the part  
of the State authorities to destroy the infected  
animals, and unless some action in that line is  
taken, a very large sum of money will have  
been expended simply in quarantining cattle,  
and the infected animals will still be on hand.

From Chicago the telegraph announces that  
the matter is still in conflict, with a probability  
that the meat of animals not showing disease  
will be allowed to go upon the market.

CHICAGO, Oct. 4.—It is learned this evening that  
at a later session of the Board, James Lynch, of the  
Shufeldt distillery, proposed to the commission that  
the owners be allowed to remove their cattle if found  
to be in perfect health. The commission then ren-  
dered a decision that will set stock-yard people by  
the horns. It was declared that if, upon an ante-  
mortem examination, the cattle were declared sound,  
the owner could take them out and slaughter them.  
Then a post-mortem examination would be held by  
the inspectors authorized by the commission, and, if  
no disease were found, the owner could do what he  
liked with the meat, sell it or destroy it as he chose.  
This is exactly what the stock-yard officials and  
business men say will ruin their business, and what  
they particularly protest against. Secretary Johnson  
is reported as saying: "There is no reason why  
the State or Government should pay for healthy cat-  
tle and destroy them. The law itself is against it.  
The stock-yard people are the only parties interest-  
ed in destroying the meat, and if they want healthy  
animals destroyed their only course is to destroy  
them."

All the Governors of States bordering on  
Illinois have issued proclamations quarantining

against Illinois cattle unless declared healthy  
by State certificates. The Range Association  
of the great interior States and Territories has  
declared itself against Chicago and the whole  
cattle interest is in an excited and apprehen-  
sive condition.

## Arbitration.

To the average mind nothing seems more  
strange and inexplicable than the conflict be-  
tween law and common sense in the law courts  
of the land. Submit any question of dispute to  
a few practical business men and they will settle  
it promptly on just and equitable business prin-  
ciples. Submit the same controversy to the  
arbitrament of a court, and common sense is  
straightway turned out of doors. The whole  
case is soon entangled in such a mesh of in-  
scrutable technicalities of pleading and evidence  
that the parties to the controversy can scarcely  
recognize their own case. It is a well-known  
fact that justice does not always insure a ver-  
dict. The whole case may go off on an absurd  
technic. Judge Edward A. Thomas, in an article  
contributed to the *North American Review*,  
says: "Justice should be meted out with cer-  
tainty, economy and promptness. Under our  
present system this cannot be done. The sys-  
tem itself is antiquated and unreliable, expen-  
sive and cumbersome. Litigation is feared and  
avoided by merchants, bankers and others  
on account of the delay, uncertainty and great  
expense which it entails."

The advantages of arbitration as a mode of  
settling disputes among business men are great  
and many. The arbitrators are the immediate  
choice of the parties and may be selected for their  
known integrity and intelligence. They hear a  
statement of the case, the evidence, and anal-  
yze and decide with the habits, instincts and  
tact of business men aiming to do what is fair  
and just between the parties. There need be  
no tedious delay, no unnecessary expense. The  
advantage of arbitration is no theory. The  
Boards of Trade in all our large cities have  
their courts of arbitration for settling disputes  
among the members. It is the rule among the  
Grangers, and the report is that troubles are  
promptly and satisfactorily settled in this way.  
A large class of cases may always have to be  
adjudicated in courts of law, but it is neverthe-  
less true that many controversies may be set-  
tled more promptly and with less delay and  
expense out of court. Litigation is too slow,  
too expensive, too vexatious, too uncertain and  
too unjust to satisfy the average business man  
of to-day, and it is a good sign of the times  
that arbitration is growing in favor.

EXPORTS AND IMPORTS.—The large balance  
of exports over imports, by which the country  
has for a long time been constantly growing  
richer year by year, is gradually decreasing.  
The figures for the 12 months ending July 31,  
1886, are as follows: Exports of merchandise,  
\$686,555,499; imports, \$641,852,273, leaving a  
balance in our favor of only \$44,703,226. The  
movements of precious metals during the same  
period were as follows: Exports of gold, \$42,-  
797,932; imports, \$20,735,009. Exports of sil-  
ver, \$28,541,554; imports, \$16,419,957. Bal-  
ance against us in precious metals, \$34,184,520,  
which reduces the balance of trade in our favor  
to the very low figure of \$10,518,706. Such  
figures do not look as though the country was  
on the road to prosperity, especially in its for-  
eign trade.

THE NEXT CITRUS FAIR AT SACRAMENTO.—At  
a meeting of the Sacramento Board of Trade, on  
Monday evening, a plan of organization of a  
permanent Central California Citrus Fair Asso-  
ciation was agreed upon and a constitution  
unanimously adopted. It provides for a board  
of directors of nine from Sacramento county,  
with two from each of the other counties in the  
citrus fair belt of Central California. The fol-  
lowing were unanimously chosen from Sacra-  
mento: Newton Booth, Albert Gallatin, L. L.  
Lewis, P. E. Platt, Joseph Steffens, E. J.  
Gregory, E. K. Alsip, A. S. Hopkins and C. H.  
Hubbard. Another meeting for the selection  
of directors from the other counties, and to  
make arrangements for the approaching citrus  
fair, will be held.

BRITISH COLUMBIA PLANKS.—One plank 9 feet  
wide and 20 feet long, without knot or blemish  
of any kind, and another 12 feet wide, are  
among the contributions of British Columbia to  
the Liverpool Exhibition.



### The Wreckers' Light.

There used to be certain wild shores infested by bands of land-pirates called wreckers, who had it for a business to watch along their dangerous coast for the purpose of seizing whatever property might float within their reach from wrecked vessels. To increase their chances for plunder they would often go deliberately to work to decoy ships on the rocks by false-lights and beacons. The reader can easily picture the scene. It is a dark, tempestuous night upon the sea, and the fierce winds are howling like wolves among the fatal reefs. Far away in the thick darkness may be heard, above the surge and roar of the sea, the faint boom of the signal gun. It announces that a vessel is in distress. The wreckers are always alert when the night is stormy. They watch; they listen! In a moment more that signal of distress is heard again, and they catch a glimpse of the ship-lights as they glance from the crest of a billow. There are wails of despair on board of that ill-fated ship. There are voices along the shore, but not of pity and help. Beacons flash from the cliffs above, but they are false-lights to lure upon the rocks. In hope of finding a haven of safety, the ship strikes upon the black, jagged reef, careens and spills its treasure upon the sea. There are shrieks of the lost upon every wave; there are rejoicings on the shore. The business of the wreckers has prospered; they have received a rich harvest of booty for their cruel treachery.

The advance of civilization, the development of commerce and the love of law and order have swept the pirates from the sea and the wreckers from the land; but a more evil shape of mischief and destruction still exists among us under the protection of law and with the approval of social customs. In this age of boasted progress, in the high noon of a Christian civilization, 200,000 licensed saloons in this country alone are open day and night and using all the false lights of the free lunch, the charms of music, the splendor of mirrors and pictures, reading-tables and sumptuous furniture, and the bewitching smiles of beauty to decoy the unwary and unsophisticated upon the black rocks of dissipation. Around the gin-mill stands its foul progeny of dives, deadfalls, gambling dens, the parlors of lust and shame with all the magnetic fascinations of boon companionship, the merry, light-hearted charms of perfumed lewdness to lure our bright boys and blithe girls, our young men and maidens, to certain ruin. Is it any marvel that so many of them fall into bad ways? Rather is it not a wonder so many of them escape?

Not far away the "strictly confidential" medical vulture waits to rob and fleece the lame and diseased as they come from this hell-dance of vice, lechery and dissipation. Around his spider-parlor is a showy display of forged diplomas from the leading medical schools of the Old World. His pardoned face may be seen in most of the newspapers of the land announcing to the unfortunate that he has discovered an infallible rejuvenator for youthful indiscretions or the excesses of maturer years. Almost every week we hear of some fragile and trusting one who loved not wisely literally murdered by these harpies of the Barbary Coast, and only the light of eternity can disclose the full extent of the woe, misery, despair and premature death they have caused. In nearly all our great metropolitan Sunday papers, under the head of "Personals," we have the advertisements of seemingly love-sick maids and pretty young widows, bachelors and widowers, who appear to be anxious to find some one upon whom they can direct the overflow of their affections. They usually begin by modestly setting forth their own merits and stock in trade for the matrimonial journey and the qualities they desire in a life-partner. All this looks very plausible, but only fools and nincompoops will take these matrimonial advertisements for anything more than a sly, subtle way of seeking to form illicit acquaintances.

But space would fail to enumerate all the various and numerous forms of false-lights along the social breakers. There are hundreds of men and women who have it for a business to entrap honor and virtue of the young as hunters would hunt for game. They are drilled experts in all the arts of leading a fellow-creature to destruction by perverting habits, slinging youthful thoughts and desires, feeding erotic imaginations by means of obscene pic-

tures and literature, salacious novels and many other crafty ways. They are the scale bugs of thought, the codlin moth of virtuous impulse. And yet, strange to say, while our wine-growers are all in arms against the phylloxera, the fruit-raisers are carefully spraying their trees with lye, and we are all nervously afraid of wormy apples, foul water and diseased meat, the majority of the community seems oblivious to the ravages of these social pests, and the Government actually goes into partnership with the arch-wrecker and pockets its share of the money coined from the woe, agony and despair of millions.

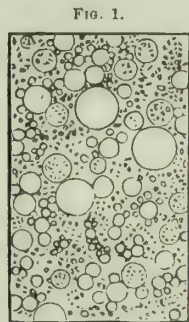
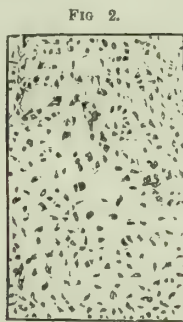
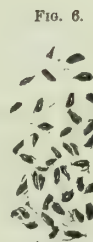
### Foul Brood Under the Microscope.

Several times during the last few years we have published articles from our correspondents treating upon this fatal bee disease, and this time we will not attempt to add anything to what has been said.

The illustrations here shown are from drawings made by Mr. Frank Cheshire, of whom the *American Bee Journal* says, "there is not a more progressive and scientific apiarist in England," and it might have added in the world. Mr. Cheshire has spent much time in studying

no material; but soon I obtained a comb from a suffering colony, and then had the opportunity of expressing the juices from the death stricken larvae. These, when examined under a power of 600 diameters and carefully illuminated, were seen, to my great delight, to be full of active rods, swimming backward and forward, and worming their way between the degenerate blood disks and fat globules, as represented in Fig. 4, while here and there were long strings of them, the leptothrix form. Three questions now required answers: 1. Was this undoubted bacillus always associated with foul brood? 2. If so, was it cause or effect? 3. If the cause, what was its life history? It would weary one to explain how these answers were obtained, as the work involved many days of incessant application at the microscope, the preparation and comparison of about 200 microscopic slides, and the rough or somewhat careful dissection of at least 100 grubs, taken from various colonies, in different conditions of disease, and at sundry periods after their removal.

I found in every instance that the beginning of the attack was marked by the appearance of bacilli in the blood; that these bacilli were, in many cases, at first long, thin, and marked by the presence of bead-like points;

FIG. 1.  
Healthy Juices.FIG. 2.  
Foul Brood—last stage.FIG. 4.  
Foul Brood—early stage.FIG. 5.  
The Bacilli.FIG. 6.  
Spore Formation.

### FOUL BROOD AND ITS CAUSE, AS SHOWN BY THE MICROSCOPE.

the cause and cure of this disease, and from his observations and experiments he will, we hope, discover a satisfactory cure for it. His pamphlet on the subject is a masterly treatise, and from it we make a few brief extracts.

Taking a small quantity of the juices of a healthy grub, and spreading it out under a thin glass under the microscope, one is presented with such an appearance as is seen in Fig. 1. Fat globules are numerous, while blood disks abound, and everywhere may be noticed tiny particles which are constantly slowly dancing with what are called Brownian movements, but if a speck of coffee-colored foul-broody matter be similarly treated we find neither fat globules, blood disks nor molecular base, but observe the field crowded with very small ovoid bodies, as represented in Fig. 2. These are the micrococci of Schonfeld, but if this substance be stained according to the modern plan of Weigert and Koch, and then carefully examined, in all probability we shall discover, associated with the ovoid bodies, a very few other organisms longer and rod-shaped, while we notice that the so-called micrococci are neither round nor dumb-bell like, but oval or boat-shaped. This led me at once to suspect an error, and further searching showed me if, instead of coffee-colored matter, such as that usually sent for microscopic examination, the body of a grub, dead, but in a fresher condition, were taken, the number of rod-like bodies very considerably increased, while that of the ovoid ones diminished, as seen in Fig. 3.

My own inoculated colony—inoculated for experimental purposes—was cured and gave me

that as this form disappeared, the bacilli, pure and simple, multiplied by repeated division; that this bacillus, when magnified about 1300 diameters, presented the appearance seen in Fig. 5; that these were active, swimming rapidly either backward or forward, and that when an end-view could be obtained of one of them, it was seen to be describing a small circle; that when the disease was in rapid progress leptothrix forms were common, some of them reaching even to .01 of an inch in length; and that as the fluids of the grub failed by loss of fats and albuminoids, the bacilli put on the spore condition. They widened and drew up their protoplasm or mycoprotein from their extremities, as we see indicated in Fig. 6, and thus became what Schonfeld in error called micrococci. After the death of the grub, and during the assumption of the viscid, putrid condition, this alteration of bacilli into spores continues.

As a remedy for the cure of this bee scourge the author recommends the use of absolute phenol.

**LOUR MILLING IN RUSSIA.**—In Russia it has been determined to push the flour export trade, the estimate being that the milling capacity of the empire as it is at present may furnish for export, if need be, 5,000,000 half bags of flour of 82 kilograms, the export of Russia mills having so far more exclusively been limited to rye instead of wheat flour, the export of the latter to Turkey and Italy being light, and of the former heavy to Norway. Russia wheat flour, it is believed, can compete to advantage in England and elsewhere with American.

## FRUIT MARKETING.

### The Eastern Market for California Green Fruits.

A Field for Vast Quantities of First-Class California Table Grapes.

[Special Correspondence RURAL PRESS.]

In his last letter, dated at Saugatuck, Michigan, the writer promised your readers the result of his observations and inquiries on the sale of California green fruits east of Chicago.

He has since visited Washington, Pittsburg, Baltimore and New York.

In the city of Washington, which boasts of a population of nearly 200,000, he found that, up to date, less than 50 crates of California grapes had been received.

On interviewing the leading retail fruit dealers, it was learned that what few California grapes had been sent to Washington had retailed at from 25 to 40 cents a pound, and at these prices the trade of Washington could use from 15 to 20 crates per day. For two weeks past, however, no California grapes had been offered in Washington; and when the writer informed a number of retailers that a shipment might be looked for within a day or two, they expressed great eagerness to secure some. One of the leading wholesale fruit dealers, who for many years past had handled California fruits, said that he had not touched any this season because Porter Bros. Co., the agents for the California Fruit Union, were not prepared to allow more than five per cent commission, which, he claimed, does not pay for the cost of handling and for the risk in carrying customers' accounts. It was his opinion, however, based upon his experience and thorough knowledge of the fruit market of Washington, that, if arrangements could be made whereby first-class California grapes could be delivered in Washington every day or every other day, at a cost to the retailer not to exceed 10 cents a pound, so that he might retail them with a fair profit at 15 cents a pound, the consumption could be increased from its present average of 10 crates a week to at least half a carload a week. In other words, the quantities of California grapes sold in Washington City alone could be easily increased from an average of a crate and a half to an average of 60 crates a day. Regarding other green fruits, Washington, like all other Eastern markets at this season of the year, is filled with an abundant supply of native peaches, plums and pears, which are sold at prices that California fruits can never hope to compete with.

The city of Baltimore has a population of nearly 400,000, and is regarded as a most excellent market for all kinds of fruit. As many as 40,000 boxes of peaches have been sold there in one day. Its large number of wealthy and well-to-do families liberally support many extensive and magnificent markets, as well as a great number of very fine retail fruit stores. Some idea may be formed of the importance of Baltimore as a market for fruits when it is stated that Malaga grapes to the amount of 125 tons were sold in Baltimore from last October to March.

The Malaga is a grape which, while resembling the Muscat, is much inferior in flavor, smaller in size, and is retailed at from 20 to 25 cents a pound. One of the reasons for the large consumption of the Malaga grape in Baltimore and elsewhere is because those who are interested in its sale thoroughly understand how to distribute it, and as a result it is found in the hands of nearly every Eastern fruit dealer of any consequence; whereas the California grape—outside of the city of Chicago—is seen, if at all, in the hands of but few dealers, and no matter how little these few dealers may pay, they can thus successfully maintain fancy retail prices.

Notwithstanding the importance of Baltimore as a fruit market, your correspondent was surprised to find, after a most thorough canvass among the leading wholesale and retail fruit dealers, that thus far this year less than 70 crates of California grapes had been received in Baltimore. The wholesale dealer representing the California Fruit Union had received but 20 crates out of this number, and the most of these were so poor and reached him in such bad condition that more than half of them realized but a nominal price. The few grapes that reached Baltimore in good condition met with ready sale, realizing at wholesale from \$2 to \$2.50 a single crate and at retail 25 to 30 cents a pound. At one of the leading fruit stores the writer found some grapes raised in his own vineyard at Mayhew's Station, Sacramento Co., Cal. Though picked 12 days before, they were in excellent condition, and, according to the statement of the dealer, were good for another week.

After paying 30 cents for a single pound, from which, as the grower, he will get back from two and a half to three cents, he engaged the dealer in conversation on the prospects for California fruits in Baltimore.

It would seem that this particular retailer had been more fortunate than some of his neighbors in getting sound fruit this season. He accordingly expressed himself well pleased with the products of California in general, but did not take kindly to the idea of selling California grapes at 15 cents a pound, though he admitted



that if this was done the consumption would be greatly increased; yet, from the standpoint of a narrow self-interest, he was opposed to low retail prices, on the ground that he would be obliged to sell much more fruit to make his present *fancy profits*. A number of other first-class fruit dealers were interviewed, and nearly all expressed themselves thoroughly disgusted with this season's experience in California grapes.

Not being able to find any California grapes in Baltimore, they had ordered small lots from New York and Chicago, and, as a rule, were charged high prices and received stuff that proved almost worthless.

They had repeated this experiment several times, with the same poor results, until they had finally resolved *not to bother* with California grapes again. Some of these grapes, which had been received but a day or two before, were shown the writer, and on examination he found them in a state of rapid decay; the stems withered and dried and the berries ready to drop at the slightest touch.

A tour through the extensive and magnificent markets that supply the tens of thousands of Baltimore families with table fruits, failed to bring to light a single pound of California grapes. A large number of prominent wholesale and retail fruit dealers, including those doing business in the markets, were asked to estimate the quantity of California grapes Baltimore would consume if retailed at 15 cents a pound. Some estimated as low as half a carload, others as high as five carloads per week. In the opinion of the writer, provided, however, that the fruit be thoroughly distributed and placed in the greatest possible number of retail hands, the consumption for the city of Baltimore would be at least one and a half carloads a week, and with proper management this amount could in time be increased to a carload a day. On inquiry it was learned that California wines were meeting with much favor in Baltimore, that there has been a large increase in the demand during the past year, and that it was only a matter of a short time when California wines would become one of the staple articles in the wine trade of that city.

The state of affairs in the city of New York was found to be but little better than that of other places east of Chicago. Proportionately, New York has consumed little more California green fruit than Baltimore or Washington or the dozen other larger cities on the Atlantic Slope. New York City with its population of a million, and with nearly an equal population surrounding it, should be, and in fact is, the largest and best market on this continent for domestic and foreign fruits. And yet there are those who, from self-interest, dare to claim that not to exceed a carload a week of California fruit can be sold to advantage in the city and vicinity of New York. This in face of the fact that New York received 1500 tons of Malaga grapes last season from ports in Spain. If by "selling to advantage" is meant that California fruits shall retail at 25 and 30 cents a pound, then a carload a week is likely to be as much as New York can use for many years to come. But there is no more sense in charging 30 cents a pound for California grapes in the city of New York than there would be to ask 15 cents a pound in San Francisco. Grapes—the finest kinds—are retailed in San Francisco at five cents a pound, with profit to all concerned. And California grapes—the finest kinds—can and should be retailed in New York at not over 15 cents a pound, with profit to all concerned.

It seems in the interest of a few wholesale and retail fruit dealers here to keep the New York market as barren of California fruits as possible, in order to maintain *fancy prices*. While this policy may be well enough so far as the few are concerned, it certainly is against the interest of the many; more especially is it against the interest of the California fruit-growers whose acreage has become so great and whose yield so vast that they must either develop a broad and expansive market or dig up trees and vines. It will, however, prove as futile for a few to attempt to stem the tide of California fruits entering the far-East as was the attempt on the part of a few to control the Chicago market. California, with its generous and abundant fruit crops, must and will find an outlet for its products throughout the East. Its fruits possess merit, can be sold at reasonable prices, and should become as much an article of every day food in every city of the Union as they have become in the city of Chicago.

If the East continues to consume so little California fruit, it will not be because the people of the East do not want our early cherries, peaches, pears, plums and apricots, or our choice table grapes, nor because they are not willing to pay reasonable prices, but it will be because the growers and shippers of California lack the push, the energy, the enterprise and the ability to properly develop the best markets.

It seems absurd to think that a market like New York, which does not stagger under such receipts as 500 carloads of peaches a week, and 1500 tons of Malaga grapes a season, with prospective receipts of 2500 tons of Malaga grapes the coming season, should not be able to use more than a carload a week of our choicest California fruits.

Your correspondent has under consideration a plan to develop the Eastern market for California green fruits. It will be based on the results of the information acquired and the observations made on his tour through the East,

and he hopes to present it for the consideration of your readers in his next letter.

A. WEINSTOCK.

New York, Sept. 27.

### State Fair—Additional Premiums.

Beside those which we gave last week, the following awards were made at the State Fair for exhibits directly or indirectly agricultural:

#### Gold Medals.

(For most meritorious display in each department.) Live-stock—R. J. Merkley, Sacramento, horses, and Leland Stanford, San Francisco, herd of Holstein cattle. Display of agricultural machinery and implements—Benicia Agricultural Works. Display of agricultural products, etc.—Bell Conservatory, Sacramento. Display of fruits—Mrs. R. S. Lockett, Brighton. For the most attractive display in the pavilion, the gold medal was awarded to the Glass & Crockery Co.

#### County Exhibits.

First premium, Placer Co.; 2d, Sacramento Co.; 3d, San Joaquin Co.; 4th, Nevada Co.; special mention, Shasta Co. Not entered for premium, but display very creditable and gold medal awarded. [No resident of Sacramento Co. nor San Joaquin was upon the committee of awards, and that committee was unanimous in its decisions.]

#### Horses.

Roadsters—Stallions—Best four-year-old, Juno, C. S. Crittenden, S. F.; 2d, W. Ober, Sacramento, Jolly; best three-year-old, M. W. Hicks, Sacramento, Brilliant; 2d, L. Whitmore, Woodland, Darkness; best two-year-old, Henry Klomp, Pleasant Grove, Prompter, Jr.; 2d, Chris. Sieber, Woodland, Prince; best one-year-old, same, Cleveland; 2d, same, Hendricks; best sucking colt, Henry Klomp, Pleasant Grove, Prompter, Jr.; 2d, A. D. Miller, Walsh's Station, Garland; best gelding, J. R. Hodson, Sacramento, Illustration; 2d, J. L. McCord, Sacramento, Gues's Mares—Best four-year-old, M. W. Hicks, Sacramento, Empress; 2d, G. W. Griffin, Woodland, Lucy; best three-year-old, J. H. Martin, Woodland, Dolly B; 2d, L. Whitmore, Woodland, Dell; best two-year-old, W. Ober, Sacramento, Katydid; 2d, L. Whitmore, Lute; best one-year-old, Ben E. Harris; 2d, C. Kirby, Sacramento, Rosebud; best sucking colt, J. H. Costello, Elk Grove, Lady Sterling; 2d, E. K. Alsip, Sacramento, Birdie.

Carriage horses—Best matched span, James McNasser, Geo. Morgan and Gray Chief; 2d, same, King and Bob.

Roadster teams—Best double team, C. S. Crittenden, San Francisco, Allie Whipple and Dawn; 2d, Geo. Dickinson, Roseville, Little Nell and Dinah.

Saddle horses—Best mare or gelding, Ben E. Harris, San Francisco, Dandy; 2d, J. A. McCloud, Stockton, Judge P.

#### Sweepstakes.

Best stallion, C. S. Crittenden, San Francisco, Juno; best mare, C. Halverson, Routiers' Maggie S.

#### Agricultural Products.

Flowers—The Bell Conservatory, Sacramento, was granted all premiums in this class, as follows: Best collection flowering plants in bloom, collection ornamental foliage plants, cut flowers, collection new and rare plants, display colors of distinct varieties, varied exhibit dahlias, roses in bloom, fuchsias in bloom, tuberose, pinks, ferns, bouquets, best collection, suitable for greenhouse, window and arbor culture, display hanging baskets containing plants.

#### Agricultural Machinery, etc.

Machinery, engines, etc.—Best portable steam engine, Benicia Agricultural Works; Westinghouse engines, 40 and 35 horse power, Park & Lacy, premium recommended; apparatus for raising water for irrigation or mining purposes, San Francisco Tool Co.; display machinery from one shop, same; apparatus for raising water for irrigation purposes, Stanton, Thomson & Co., honorable mention; well pump, H. H. Linnell, Sacramento; quartz crusher, William Gutenberg, Sacramento; fence-making machinery, John Lambert, Sacramento; machinery for same purpose, T. D. Poole, Alameda, honorable mention; best engine California manufacture, San Francisco Tool Co.

#### Agricultural Machines.

Best thrashing machine, Baker & Hamilton, Sacramento; horse hay-rake, same; bean thrasher, same; Power corn-sheller and lawn-mower, same; best display agricultural machinery, California manufacture, Benicia Agricultural Works; cider mill and press, A. & A. Heilbron, Sacramento; lawn-sprinkler, John Bean, Los Gatos; hay-press, J. S. H. Miller, Sacramento; sweep horse power, H. H. Linnell, Sacramento; hay and straw cutter, G. G. Wickson, San Francisco; grain broadcast sowing machine, Baker & Hamilton, Sacramento, special mention; self-raking reaping machine, same; combined reaper and mower, same; machine knives, hand corn-planter, same; potato planter, same; one-horse elevator, same; horse hoe, same; header, Benicia Agricultural Works; field roller and crusher, William Gutenberg, Sacramento; wheat drill, Holman, Stanton & Co.; hay-pitching machine, same; corn-planter, horse power, same; cultivator, same; self-binding harvester, A. & A. Heilbron, Sacramento; pulverizing harvester, same, premium recommended; harrow, same; double-shovel plow, same; mowing machine, Farmers' Union, San Jose; broadcast sowing machine, J. Price, San Leandro; best grain-cleaning attachment for thrashing machine, Baker & Hamilton; farm feed-mill, Benicia Agricultural Works; fanning mill, D. Best, Oakland; beehive without bees, H. H. Linnell, Sacramento; refrigerator, same; windmill, same.

#### Tools and Household Implements.

Best display haying and harvesting tools, Baker & Hamilton; garden seed-drill, same; Acme steam fruit-drier, F. Batchelor, San Francisco; churn, A. S. Hopkins & Bro., Sacramento; butter-worker, same; clothes-horse to occupy least space, same; clothes wringer, E. W. Melvin, Sacramento; farm road-scraper, Wm. Zartman, Petaluma.

Plows—Best stubble plows, Baker & Hamilton; cast-iron plow, same; chilled plows, same; subsoil plow, Benicia Agricultural Works; gang plow, same; one-horse plow, same; side-hill plow, same; sod plow, same; dynamometer, Stanton, Thomson & Co.; plow for all purposes, same; sulky plow, A. &

A. Heilbron, Sacramento; steel plow, same; sulky gang plow, Matteson & Williamson, Stockton, special mention.

#### Vehicles.

Best farm wagon for general purposes, Baker & Hamilton, Sacramento; breaking cart, Myron F. Tarble, Los Angeles; track sulky, same; open buggy, C. Neilsen, Sacramento; business wagon, same; trotting wagon, same; pleasure cart, Knox & Baker, Woodland; top buggy, J. F. Hill, Sacramento; display carriage-wheel hubs, same; exhibit California-grown woods, same; closed family carriage, Studebaker Bros., Sacramento; spring market-wagon, same; wagon or carriage brake, same; two-seated open wagon, E. Meister, Sacramento; open family carriage, same; lady's phaeton, same.

#### Mechanical Products.

Geo. Muddox, Sacramento, water pipe and water lime, drain tile, roofing tile, flooring tile.

### Stockton Fair Premiums.

Following are awards at the late San Joaquin Valley District Fair for products of agricultural and allied industries. Unless otherwise stated, exhibitors live in Stockton.

#### Horses.

Thoroughbred—Best stallion three years old, Joe Daniels, owned by H. S. Sargent; best stallion one-year-old, Joe Douglass, by L. U. Shippee.

Roadsters—Best stallion four years old, Hawthorne, owned by L. U. Shippee; best stallion two years old, Electric, by L. A. Richards; second, Reliable, by C. W. Turner; best stallion one-year-old, Moses S., by L. U. Shippee; best mare or gelding four years old, Arthena, by J. H. Tennent, Pinole; second, Maud F., by L. U. Shippee; best mare or gelding three years old, Geo. W., by J. W. Dougherty, Lodi; best mare or gelding two years old, Flora M., by L. A. Richards, Grayson; second, Clara S., by Joshua Steves; best yearling filly, Carrie Vernon, by J. A. McCloud; second, Bess, by H. Eberhart; best trotting sucking colt, Ed, by L. U. Shippee; second, Ed, by W. R. Bailey, Linden; best trotting sucking filly, Dora, by L. U. Shippee; second, Minnie Vernon, by D. McCoy; best span matched roadsters, Geo. and Lady Washington, by R. C. Sargent, Lodi.

Horses for all purposes—Best three-year-old, Tasso, by A. Starkweather, Farmington; second, Comet, by S. Acker, Linden; best one-year-old, Dexter, by J. Crist; second, Burwood, by L. L. Huntley, Burwood; best sucking colt, Nephew, Jr., by N. Nevin; second, Jody, by J. C. Bowden; best mare three-year-old, Molly, by D. McCoy; second, Flora, by N. Nevin; best mare one-year-old, Daisy Vernon, by Ed Gross; second, Maud W., by C. F. Bunch; best sucking filly, Black Swan, by Lucy P. Goff; best mare other than thoroughbred with four colts, Mack, by L. U. Shippee.

Draft horses—Best stallion, three-year-old, Eureka, by C. K. Bailey, Linden; 2d, Young Duke de Chartres, by D. S. Matthews; best stallion, two-year-old, —, by C. K. Bailey, Linden; stallion, two-year-old, Jesse, by Uriah Martin. Committee recommended special premium 2d best stallion, two-year-old, Granger, by W. L. Overhiser; best sucking colt, Sampson, by McCormick Bros.; best mare, three-year-old, Dolly, by McCormick Bros.; 2d, Susie, by E. Hildreth; best mare, two-year-old, Moss Rose, by C. K. Bailey, Linden; best sucking filly, Fannie, by L. U. Shippee; best matched draft team, Susie and Mary, by E. Hildreth.

Carriage animals—Best carriage team, 15 hands high, Chieftain and Belle, by Dan McCoy; 2d, Maid and Mabel, by W. A. French; best single carriage animal, owned and used by exhibitor, Blucher, by Maggie Cunningham.

Mules—Best span mules, owned by exhibitor, Molly and Coley, by L. U. Shippee; 2d, Joe and Johnny, by John S. Ladd.

Jacks and jennets—Best jack, three-year-old, Logan, by L. U. Shippee; 2d, King Philip, by H. W. Childs; best jack, two-year-old, Jeff, by L. U. Shippee; 2d, W. F., by Stowe Bros.; best jack, one-year-old, Ben, by L. U. Shippee; best sucking jack, Washington Eclipse, Jr., by Levi Carter; best jennet, three-year-old, Lummyx; 2d, Betsy, and best jennet, one-year-old, Susie, all three by L. U. Shippee.

#### Cattle.

Durham—All awards to C. Younger, San Jose, except for 2d best bull, three-year-old, Pharaoh, owned by Andrew Smith, Redwood City.

Jerseys and Alderneys—All awards to H. S. Sargent, except 2d bull, three-year-old, Tempest, by W. L. Overhiser; best bull, one-year-old, Jersey King, and best calf under one year, Shippee, by W. A. French.

Ayrshires—All awards to Tyler Beach, San Jose. Herefords—All awards to Williams & Saxe, San Francisco.

Holstein—Best bull, three-year-old, Duke, by G. C. Clark; best bull, two-year-old, Sedro; and best bull one-year-old, Kingsbury, by F. H. Burke, San Jose. Best cow, three-year-old, Lena Wit, by F. H. Burke, San Jose; best cow, two-year-old, Teakja, by G. C. Clark; 2d, Kentucky Gem; and best cow, one-year-old, Edna, of Troy, by F. H. Burke, San Jose; best heifer calf under one year, Frederica, by G. C. Clark.

Galloways—All awards to Leonard Bros., Mt. Leonard, Mo.

Graded cattle—Best cow, three-year-old, Tin Pail, by A. Smith, Redwood City; 2d, Big; and best cow, two-year-old, Rooney, both by C. Grups, Linden; 2d, cow, two-year-old, Rose, by L. Carter, Ceres.

Herds of cattle—Durham—Forest King, Red Dolly 2d, Red Dolly 8th, Red Dolly 14th, and Oxford Rose, by Col. C. Younger, San Jose.

Jersey or Alderney—Earl Marmaduke, Daisy W., Faithful May, Hattie Carter, H. Wenneke and May Day, by H. S. Sargent.

Holstein—Sedro, Lena Wit, Wenneke, Kentucky Gem, Edna of Troy, by F. H. Burke, San Jose.

Ayrshire—Narragansett Chief, Mamie Pierce, Fannie 2d, Etta Brown and Pussie, by Tyler Beach, San Jose.

Galloway—Bull, Hopeful of Lyons; cows, Davina, Nancy Lee of Mt. Leonard, Blossom of Newton and Crocus of Minydom, Leonard Bros., Mt. Leonard, Mo.

#### Poultry.

Best pairs Langshans, Brahmas, Plymouth Rocks, White Leghorns, Brown Leghorns, White-faced Black Spanish, Houdans, Silver-spangled Ham-

burgs, Silver-penciled Hamburgs, Polish, Dorkings, Javas, Wyandottes, Black Sumatras and best trio game "sweepstake," Cutting & Robinson; 2d pair Brown Leghorns, W. A. French.

Ducks—Black Cayuga—Best pair and best trio ducks, sweepstake, Cutting & Robinson.

Turkeys—Best trio Narragansett turkeys, sweepstake, Cutting & Robinson.

#### Sheep.

Best South-down ram, Long John; best pen South-down ewes, R. H. Crane, Petaluma.

#### Swine.

Best Berkshire boar, Redwood Duke, sow, Redwood Sally, and sow and pigs by A. Smith, Redwood City; best Essex sow and pigs, William Christopher.

#### Agricultural Implements.

Best header, H. C. Shaw; self-raking reaper, S. S. Burge; mowing machine, "Victor," Hudson & Cabney; steel plow, "Morrison," entered by H. C. Shaw; gang plow, Grangers' Union; cast plow, to Imperial chilled plow, entered by S. S. Burge; grain sower, to Gem seed-sower, entered by H. C. Shaw; harrow, to iron frame harrow, entered by H. C. Shaw; seed drill, to Havana press drills, Hudson & T. C. Cabney; farm gate, Max Muller, San Francisco; grain cleaner, D. Best, San Francisco; wine press, H. C. Shaw; derrick fork, to Jackson fork, entered by Grangers' Union; windmill, "The Davis," entered by Smith & Wilson, sweepstake.

#### Wheelwright Work.

Best display imported carriages, S. S. Burge; two-horse wagon and one-horse wagon, Studebaker's, entered by M. P. Henderson & Son; single buggies, Mitchell top and Mitchell open, entered by S. S. Burge; four-wheeled truck, by M. P. Henderson & Son.

#### Miscellaneous.

Lift pump, force suction pump, John Jackson; horseshoe nails, best display, Byrd & Morgan.

#### At the Pavilion.

(Unless otherwise stated in the list, the exhibitors live in Stockton and the premiums are first prizes.) Corn: T. J. Chaloner.

Hops, baled: Joseph Putnam, Clements.

Vegetables: Largest and best variety and best raised on one farm, G. S. Locke, Lockeford. Special mention.

Apples: Best and largest collection, Joseph Putnam, Clements; 2d, L. U. Shippee.

Pears: Best and largest collection, L. U. Shippee; 2d, Joseph Putnam.

Figs: Best collection, Miss Lulu Reid; 2d, Hugh Quinn, Chinese Camp.

Quinces: L. U. Shippee; 2d, George S. Locke, Lockeford.

Peaches: Largest and best collection, L. U. Shippee; 2d, Hugh Quinn, Chinese Camp; best 12 of any variety, L. U. Shippee.

Plums: Best 12 of any variety, L. U. Shippee; 2d, Hugh Quinn, Chinese Camp.

Grapes: Best collection, George West; 2d, L. U. Shippee; best five varieties, Hugh Quinn, Chinese Camp; 2d, L. U. Shippee; best single variety, Geo. West; best eight bunches raisin grapes, Hugh Quinn, Chinese Camp.

Fruit: Largest and best exhibit, L. U. Shippee. Pomegranates: Best collection, Hugh Quinn, Chinese Camp.

Fruit: Largest and best exhibit raised in district by one person, Joseph Putnam, Clements.

Dried Fruit: Best box plums; peaches, pears and apricots, Mrs. Jos. Hale.

Preserved fruits in sugar: Mrs. J. C. Reid.

Preserved fruits in spirits: Mrs. Jos. Hale.

Jellies: Mrs. J. C. Reid.

Figs: Best box, Hugh Quinn, Chinese Camp.

Butter: Packed before July 5th last, Wm. Christopher; five rolls pickled, same.

Cheese: J. F. Gibson.

Wines: Madera and red, Geo. West & Co.; white, C. Von Detten; best display, Geo. West & Co.

Silk cocoons: Best display, Mrs. J. D. Utt; 2d, Mrs. L. M. Fairbanks.

Reeled silk: Best display, Mrs. J. D. Utt.

Incubators: F. Fiven.

Green corn, wheat and barley: Hugh Quinn; special mention.

Buhach, fruits, etc.: Buhach Co.; special mention.

Potatoes: Arthur Thornton; special mention.

Pampas grasses: Jos. Goodell; special mention.

The county exhibit made by Pomona Grange received the first premium.

### Complimentary Samples.

Persons receiving this paper marked are requested to examine its contents, terms of subscription, and give it their own patronage, and, as far as practicable, aid in circulating the journal, and making its value more widely known to others, and extending its influence in the cause it faithfully serves. Subscription rate, \$3 a year. Extra copies mailed for 10 cents, if ordered soon enough. If already a subscriber, please show the paper to others.

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Should this paper be received by any subscriber who does not want it, or beyond the time he intends to pay for it, let him not fail to write us direct to stop it. A postal card (costing one cent only) will suffice. We will not knowingly send the paper to anyone who does not wish it, but if it is continued, through the failure of the subscriber to notify us to discontinue it, or some irresponsible party requested to stop it, we shall positively demand payment for the time it is sent. LOOK CAREFULLY AT THE LABEL ON YOUR PAPER.

"HOLSTEIN AND JERSEY"—ERRATUM.—In C. D. Stuart's article in our last issue (page 279), half-way down the column, in paragraph beginning "A German chemist," "35 pounds" should have been "3½ pounds," so that the corrected sentence will read: "While a breeder of Jerseys claims for a cow of this breed that 3½ pounds of her milk made a pound of butter," etc.

### Cheap Money for Farmers.

Farmers in this State will be glad to learn that they can borrow on mortgage any amount, from \$5000 to \$500,000, from S. D. Hovey, 330 Pine St., San Francisco, at 6 to 7 per cent and taxes.



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IMPORTERS, MANUFACTURERS, AND DEALERS IN

## Hardware and Agricultural Implements.

### STODDARD, AND CLIMAX, DISC HARROWS.

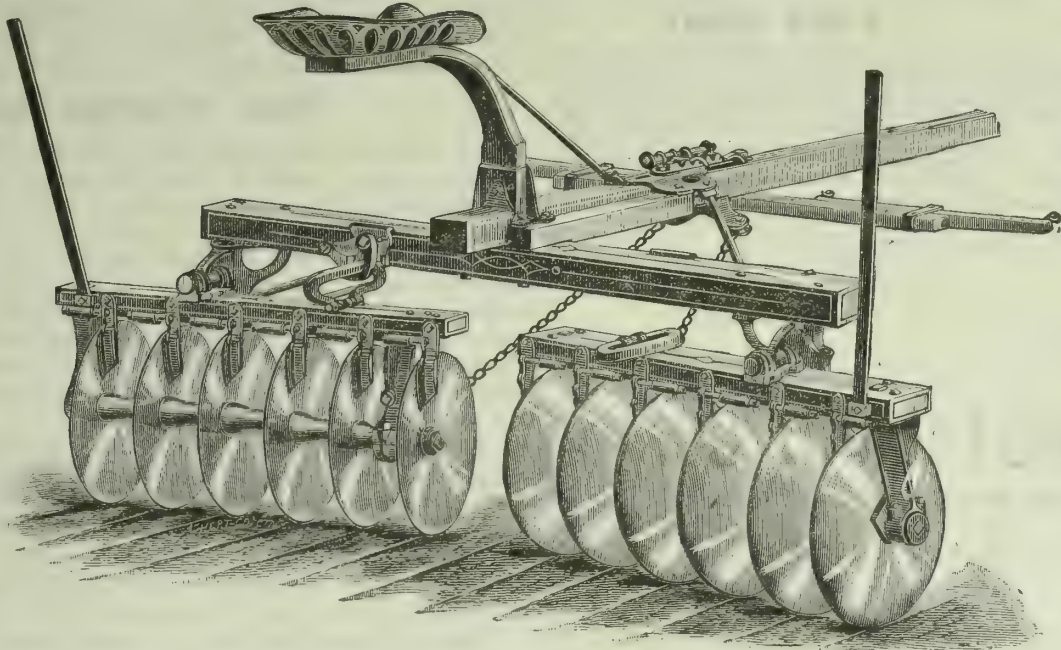
WHAT THEY WILL  
DO:

THEY WILL

- SAVE TIME,
- SAVE LABOR,
- SAVE MONEY,
- SAVE SEED GRAIN.

THEY WILL

- Thoroughly Pulverize the Soil,
- Thoroughly cover up your seed grain,
- Thoroughly cover up your surface manure,
- Thoroughly satisfy you in every respect.



OUT OF THE STODDARD HARROW.

The Stoddard and the Climax Pulverizing Disc Harrows are the most convenient, effective, durable and reliable. They economize time, save labor and money, and secure the greatest yield of crops by the most perfect tillage. They are unrivaled for power, and incomparable for rapidity and effectiveness, for surface tillage of all tenacious and tough soils. Are often a substitute for the Plow. Positively the lightest draft Harrows of their kind.

The concave plate wheels are BEST QUALITY STEEL and are SELF-SHARPENING BY USE.

Each steel wheel or disc makes a groove for its passage through the soil, by clearing, crushing, and lifting FROM THE GROOVE ALL THE SOIL, and rolling it in a furrow one side.

All rootlets are cut off or torn from the groove and exposed to the air and sun, or buried below the surface.

Instead of a DEAD DRAFT BY IMPACT against heavy and inert soil, they cut it like a knife and split it like a wedge.

They loosen, crumble, and lighten the soil, but do not harden it.

They roll and cover seed grain deeply and uniformly beneath the surface, and insure germination and growth by preparing a perfect seed-bed.

They cover broadcast grain so effectually and perfectly as to save from a tenth to a fifth part of seed commonly lost when scratched in with a tooth drag.

They take the soil from BELOW, and roll it upward to the surface, pulverizing and exposing it to the enriching sun and air. Good tillage requires this, and this is what no other Harrows can accomplish so effectively and speedily as the Stoddard and Climax Pulverizing Harrows with their double solid gang of steel wheels.

THEY WILL  
INCREASE YOUR CROPS,  
INCREASE YOUR PURSE,  
INCREASE YOUR HAPPINESS,  
INCREASE THE VALUE OF YOUR LAND.

THE STODDARD HARROW in Field Work can be turned about as readily as a cart.

Descriptive Price List of the Different Sizes :

No. 7, width of cut, 6 feet, 12 Discs, size of Discs, 16 inches, Price, \$60.

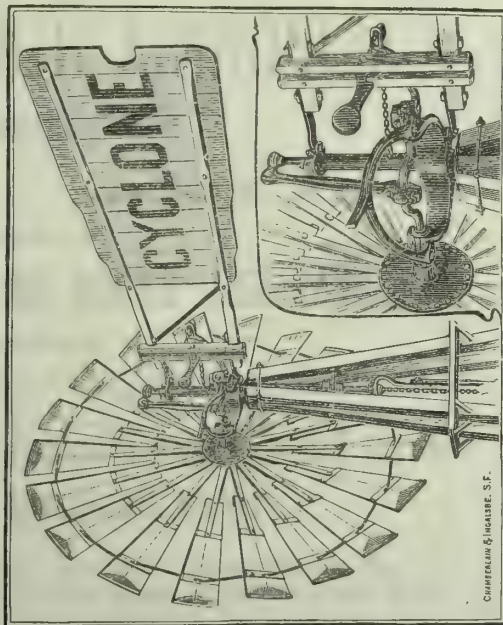
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WHAT AT?

Well, because we sold SIX MILLS TO SIX LEADING MEN IN ONE TOWN IN ONE DAY Last Week.

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12-Foot Mills,	\$65 00
14-Foot Mills,	75 00
16-Foot A Mills,	90 00
16-Foot B Mills,	110 00
18-Foot Mills,	125 00
20-Foot Mills,	150 00
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The BEST, STRONGEST, LIGHTEST MILL, and a Complete SELF-REGULATOR.

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Has re-assumed the entire management of the

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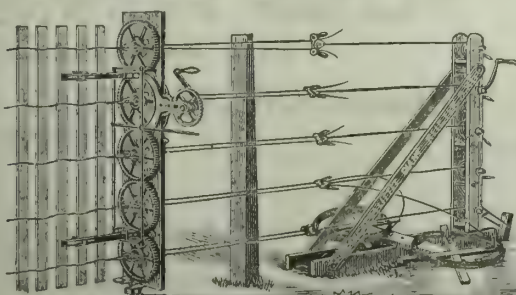
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NURSEYRMEN, ATTENTION!

WANTED, a man well up in the propagation of Evergreens and Ornamental Shrubbery, to put his time against land and material for a nursery in a good location. Address, Box 88, PASADENA, CAL.

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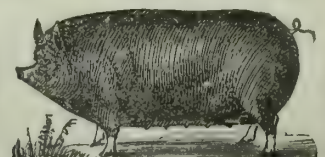
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The only machine securely covered by patents.

It Fences Against Rabbits, Dogs, Wolves, and stock of all kinds.

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ERKSHIRE PIGS.



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From imported stock direct from England, bred by Russell Swanwick, President Royal Agricultural College Farm, England, from the Celebrated STUMPY and SALLIE FAMILIES. Young stock always for sale at lowest possible rates. Address ANDREW SMITH, Redwood, or 218 California St., S. F.

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### FOR LEASE AND FOR SALE, 40,000 ACRES

Of good land in Fresno, near the County Seat. Some of this land is already irrigated, and all can be easily irrigated. It is adapted not only to grain, but also to Alfalfa, Fruit and Vines.

#### 1000 ACRES

Of the above land for sale at the low price of \$20 per acre. Apply to

E. B. PERRIN,  
402 Kearny St., San Francisco.

### \$10.00 PER ACRE.

On the C. P. R. R., in Placer county; one half mile from Applegate; one-half hour from Auburn; fine climate; plenty of water; school, postoffice and telegraph near; easy terms; title perfect. Apply to

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Applegate, Placer Co., Cal.

## CHEAP LANDS FOR SALE.

**5680 Acres** of rolling adobe hills, situated in Tehama County. Well watered by numerous springs, etc. Several thousand acres suitable for cultivation. Good two-story House, Barn and other out-buildings. Seven miles of fine wire fence.

**FIRST-CLASS CATTLE OR SHEEP RANGE.** The Cheapest tract of land in Tehama County. Price, \$8.00 per acre. Fair time and interest.

Also, a tract of 20,000 acres adjoining, can be bought at a great bargain. Title, U. S. Patent.

For terms, etc., apply to

J. E. CROOKS, Benicia, Cal.

N. B.—Upon timely notice, intending purchasers will be taken from Cottonwood to the land and returned free.

## A NEW COLONY

On the new extension of Southern Pacific Railroads, on the lands belonging to R. T. BUELL, Esq., near Los Alamos, Santa Barbara county, Cal. Parties desiring to visit the property now, can go via San Luis Obispo and take the cars from thence to Los Alamos, thence by stage to the Colony. **20,000 acres** of the best lands in California, subdivided into 20, 40 and 80-acre farms; \$20 to \$30 per acre. **INTERNATIONAL IMMIGRANT UNION**, 401 California St., San Francisco.

## FRESNO COUNTY.

## BRIGGS' SELMA TRACT.

This most desirable tract, comprising 1280 acres of first-class gray ash and sandy loam land (situated one and one-half miles from the fast-growing town of Selma, the second in the county, and two miles from Fowler, both being S. P. R. R. towns), has been subdivided and will be sold in 20, 40, 60 or 80-acre farms. The distributing ditches are now being constructed, and convenient roads are laid off. The main canal is 60 feet in the bottom.

### THE WATER RIGHTS

Consist of stock in the canals and entitle the owner to one-eighth of 2 feet 6 inches of water, being  $2\frac{1}{2}$  times the usual amount supplied to colonies. The owner of the water stock has a pro rata vote in the management of the canal, and the expense per year is about \$3.50 on a 20-acre lot.

A school-house is to be erected on the land this year, and it has two within two miles of it at present. Fresno, Selma, Fowler and Kingsburg are good local markets for produce. Opportunities to labor with or without terms are abundant, and land can be rented for wheat-growing in the neighborhood. The health of this region is perfection, and, in common with the plains generally, is an excellent sanitarium for persons affected with pulmonary and rheumatic complaints.

The best raisins in the world, wines unsurpassed, the finest grapes, the best peaches, apricots, plums, prunes, nectarines, figs and olives, and in fact all the choicest fruits and vegetables of the world are grown in this favored region. Raisin vines three to six years old yield per acre from four to seven tons, and increase to eleven. Wine grapes three to six years old yield from four to eleven tons per acre. Alfalfa is cut from four to six times a year, and yields from one to two tons per acre at each cutting.

Two good cows and 100 hens furnish more than half the living for a family, and can be kept, with a team, on three acres of alfalfa, the growth of which is incredible in this favorable combination of soil and climate.

A comfortable house for a small family can be built for \$150.

The low price, taking into consideration water and transport facilities, should especially recommend this to seekers of homesteads.

Price, \$25 to \$37.50 per acre, on very easy terms to actual settlers.

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SAN LUIS OBISPO, CAL.

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### THE PASO ROBLES, SANTA YSABEL, and EUREKA RANCHES,

Recently purchased by the West Coast Land Company, are now offered for sale in subdivisions.

This immense body of land, including 12,000 acres unsold of the Huer Huero ranch, belonging to C. H. Phillips, comprises 64,000 acres of rich, virgin soil. It lies in a compact body, in the center of San Luis Obispo county, and is within from 9 to 20 miles of the sea coast. It is covered with white and live oak timber, is one of the most picturesque bodies of land in the State, and requires

### NO IRRIGATION.

It has an abundance of living water, and where not sufficient for domestic use, good water can be had at a depth of from 10 to 40 feet. It has an average annual rainfall of 21 inches, exceeding by six inches that of Santa Clara county, one of the most prosperous counties in the State.

The extension of the Southern Pacific Railway from Soledad southward traverses these lands for 15 miles throughout their entire length, placing the property within eight hours of San Francisco.

These lands are offered at from \$10 to \$30 an acre, and are all susceptible of the highest cultivation. In salubrity of climate, productiveness of soil and location as to market, they are equal to lands in Los Angeles and other counties, which readily bring from \$100 to \$200 and upward; and as to price and terms, offer the best inducements to those seeking homes on any part of the Pacific Coast. The survey of the

### PASO ROBLES RANCH

Has been completed. The maps and catalogues are now ready, and will be sent free on application.

This ranch, containing 20,400 acres, has been subdivided into 230 lots. It is 12 miles from the sea coast, and is 20 miles north and west from San Luis Obispo city.

This ranch was one of the earliest granted by the Mexican Government and having been held by the same party for over 30 years, has never before been offered for sale. It consists exclusively of land of the choicest character, and is second to none in the State for the production of wheat, wine, fruits, raisins and olives.

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### TERMS OF SALE.

One-third cash; balance in 4 equal payments at 2, 3, 4 and 5 years; interest, 6 per cent per annum. The mortgage tax paid by the mortgagee makes the interest about 4 per cent net to the purchaser. A deposit of \$25 will be required in all cases to cover expenses of sale.

C. H. PHILLIPS, Manager,

West Coast Land Co., San Luis Obispo, Cal.

Send for Catalogue and Map.

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Scientific Press



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INVENTORS on the Pacific Coast will find it greatly to their advantage to consult this old, experienced, first-class Agency. We have able and trustworthy Associates and Agents in Washington and the capital cities of the principal nations of the world. In connection with our editorial, scientific and Patent Law Library, and record of original cases in our office, we have other advantages far beyond those which can be offered home inventors by other agencies. The information accumulated through long and careful practice before the Office, and the frequent examination of Patents already granted, for the purpose of determining the patentability of inventions brought before us, enabled us often to give advice which will save inventors the expense of applying for Patents upon inventions which are not few. Circulars of advice sent free on receipt of postage. Address DEWEY & CO., Patent Agents, 252 Market St., S. F.

A. T. DEWEY.

W. B. EWER.

GEO. H. STRONG.

460 ACRES.

INCORPORATED 1884.

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NILES, ALAMEDA CO., CAL.

JOHN ROCK, Manager.

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### The San Jose Fairs.

Two fairs were held at San Jose last week—one at the Park, where stock, vehicles, machinery and implements were exhibited under the auspices of the Santa Clara Valley Agricultural Society; the other, that of the Fifth District Agricultural Association, at Horticultural hall, devoted to products of field, garden, orchard and vineyard, and arts useful and ornamental.

#### At the Park,

On the day of opening, President Edwards said: "There are 50 more stalls, either occupied or engaged, than last year, and we haven't enough for the applications that are still coming in. Our hope is that some who have made entries will fail to bring their stock, because we really don't see how we are to accommodate all."

The stock parade was claimed to be at once the largest and most valuable ever seen in the county. Over 250 horses passed the judge's stand, any one of which would have done credit to any stable. Fully 50 were stallions of various breeds, some of them magnificently proportioned. The thoroughbreds made an especially handsome showing. The display of carriage teams has rarely been equaled in California, and there were 100 or more very fine roadsters. A graded draft stallion sucking colt, six months old, weighing 830 pounds, was shown by Simon Mathews, who also had a Norman mare, Flora Adolph, in the four-year-old class.

E. T. Turner, of Hollister, exhibited his stallion Milo, seven years old, weight, 2100 lbs., and Vanguer, dark bay, seven years old, weight, 1800 lbs. They were Dunham's importation, and are considered among the best of their class in the State. There were on exhibition a number of superior young horses, including grades of this stock. It has become a settled opinion among horsemen and farmers that for horses of all work and roadsters for pulling heavy loads, there has been a marked improvement effected in our stock, by a crossing with the Norman Percheron.

Of cattle there were cows and bulls that had been exhibited in Europe and all over the United States. Leonard Bros. had about three dozen Galloways; Saxo & Williams a large herd of Herefords, imported stock and progeny; Tyler Beach a score of remarkable Ayrshires, and Quinn's Durhams were deemed the peers of any on the grounds. Wm. Farrington made a good display of Holsteins, and C. P. Polhemus of Jerseys. Robert Ashburner's Shorthorns were there, and Younger's herd of 26 head. There were beside these other meritorious exhibits, which we have not room to specify.

Southdown sheep were displayed by R. H. Orane; Cotswolds by C. Younger; and there was a noticeable show of swine—Berkshire, Essex, Poland-China and Chester white—the exhibitors being Andrew Smith, J. S. Connors, Tyler Beach, W. D. Rucker and W. B. Rogers. Mr. Rucker's herd of Poland-Chinas was considered by judges one of the best. The boar, 20 months old, and sow were imported from Shepherd Alexander's choice stock. This pair with five pigs took the sweepstakes over any and all herds, of which there were a number.

The chief contributors to the poultry show were E. H. Freeman, D. H. Murphy and W. Fisher. We understand that the first-named has lately received from Sid Conger a trio of Plymouth Rocks bred from the famous "Old True Blue."

We print in another column the awards of live-stock, which will give a better notion of the extent and relative merit of the exhibits.

#### The Pavilion at the Park

Contained a fine display of carriages, machinery and farm-tools. The San Jose Agricultural Works' exhibit embraced farm and fruit-wagons, the San Jose haypress, cultivators, plows, harrows and other implements. The Standard fruit-wagon attracted special notice by reason of its convenience, solidity and beauty of construction and easy draft.

A new mowing machine, patented by C. A. Greene and W. E. Bidwell, of Stockton, has a double eccentric upon a single shaft by which means it drives two sickles, that act like a pair of shears. With this arrangement the knives need be run at only one-half the usual speed, the knives cutting upon each other and upon the guards above and below, saving fully one-third the power. The patentees claim that it is not a "horse-killer," and is less liable to choke than old-style machines.

E. C. Morrell, of Boulder creek, exhibited the Moughie riding-harrow pulverizer clod-crusher and leveler. He has bought the right to manufacture for the Pacific Coast, and from previous testimonials and interviewing several practical farmers who have operated it, our representative formed a very favorable opinion of this implement, as especially adapted to the needs of Californians.

The American fruit evaporator (H. C. Bristol, S. F., general agent) has an inclined trunk over a hot-air furnace, so as to give the highest heat to fresh-cut fruit, with currents unobstructed by trays. The U. S. Cook-stove drier can be applied to any cooking stove.

#### In Horticultural Hall,

The decorations put up by the Native Sons had been allowed to remain, adding greatly to the beauty of the scene. Music, both vocal and instrumental, was provided evenings, and the attendance here, as well as at the park, was increasingly large as the week lengthened.

One of the most interesting and important

displays was D. C. Feeley's, of Patchen, consisting of about 40 varieties of grapes, grown in the Santa Cruz mountains, 1200 feet above sea level. About 15 varieties were wine, the remainder table grapes; and neither the State Fair nor Mechanics' Institute had anything superior. It was grapes and fruit from Mr. Feeley's vineyard that took the premium at the New Orleans Exposition.

John Rock, the veteran nurseryman, had two tables of cut flowers, evergreens, nuts, apples, pears, pomegranates, also fruit in glass. On his ornamental table were 65 varieties of gladiolus, 150 of roses and a large number of dahlias.

A. Damonte showed a fine assortment of many different kinds of crystallized fruit.

Emile Bourguignon presented over 100 varieties of dahlias, and about 200 of roses, handsomely arranged. Interspersed with these were hothouse and garden flowers, perfume shrubs, maiden-hair, ferns and mosses in countless profusion. Among his pieces were three marvels of the florist's art, the most prominent of which was a large full-rigged ship. The hull was made of the finest hothouse plants, including some rare orchids, and the rigging of smilax decked with balls of milk-weed flower. The second piece was a floral cradle from which peeped a flaxen-haired doll. In this, only the daintiest and rarest hothouse flowers were used, and the whole was arranged with exquisite art. The third piece was a white swan, made of gilly-flowers and pompon chrysanthemums resting in a nest of choice exotics.

O. J. Albee made a varied exhibit of grain, vegetables, fruits—green, dried and in glass—nuts, plants, flowers and dairy products.

The display of silk by the Pacific Silk Factory was a notable feature. Mr. Van de Castele, the manufacturer, says: "Silk fabrics can be made in California in successful competition with Eastern manufacturers. All statements to the contrary are erroneous. A loom is a loom the world over. If we get weavers from Lyons, and give them the same quality of material to work with, we shall, of course, make the same silk as is produced in Lyons. I find that the supply of native silk produced in California is not sufficient. This I attribute to the discouragement of those who began to raise silkworms some years ago, and who did not proceed systematically. They raised cocoons, but had secured no market for them. Now, I raised 100,000 last season, and found a ready market for what I wanted to sell." The mills at San Jose now employ eight experienced weavers.

Messrs. Hartman & Normandin exhibited a line of carriages, both of their own make and from leading Eastern manufacturers, that was worthy of special notice. In no part of the State are more elegant turnouts seen than in San Jose. To supply the demand this firm has imported the finest carriages of celebrated makers, among whom are T. H. Briggs & Co., of Amesbury, Mass.

The baby-show, Friday night, drew the greatest crowd of the week. Seventeen entries were made. The committee, consisting of Mrs. Dr. Pratt, Miss Alice Younger and Miss Nora Farnsworth, after making their tour of inspection, decided that the prettiest boy was Albert Herold, 12 months; the fattest boy, Alphonse Salbrooke, 13 months, 28 pounds; the prettiest girl-baby, Etta Levy; the fattest girl-baby, Mattie Lulu McDonald, six months, 28 pounds. An additional or special prize was given to Carrie Hamilton, four months old, 21 pounds.

The Horticultural Exhibition was continued two evenings this week, to afford those who had been engaged at the Park further opportunity to attend.

Excepting some complaint as to the inadequate lighting of the hall, the praise accorded the arrangements and management of both fairs has been unstinted, and the directors have been warmly congratulated on the success of their endeavors.

#### Premium List.

Next week we will give the list of premiums awarded at the San Jose Fair.

"A THING OF BEAUTY."—"Wm. T. Coleman & Co.'s exhibit of California products, showing location of industries," bound in brilliantly illuminated, flexible covers, makes a volume of 30 pages, 14x10 1/2 inches. It is a collection of cards and announcements respecting the various branches and connections of the vast business of this famous firm. They are very elaborate in design, and handsomely printed in colors, embracing many beautiful pictures of Pacific Coast scenery—shore, valley and mountain, field, orchard and factory, as well as fruit and fish—interspersed with a number of maps.

MORGAN HORSES.—There has been regret expressed that the notable stock of "Morgan" horses was, in a measure, becoming extinct. Our representative at the Stockton Fair noticed the celebrated Morgan horse, Comet, imported by Smith Acker, of Oakdale, with his family of colts, which attracted a great deal of attention and favorable comments among horsemen. Comet is a dapple bay, weighs 1250 lbs., and is a fine stepper. He was imported by Mr. Acker, three years ago. It is generally conceded that as horses of all work and roadsters no stock surpasses the Morgan.

#### Mohair.

C. P. Bailey, San Jose, Cal., has this year raised more mohair and it has sold for more money than the combined product of any other four goat-raisers in the U. S. A. He has bucks for sale now.

### PACIFIC COAST WEATHER FOR THE WEEK.

(Furnished for publication in this paper by NELSON GOROM, Sergeant Signal Service Corps, U. S. A.)

DATE.	Portland.				Red Bluff.				Sacramento.				S. Francisco.				Los Angeles.				San Diego.			
	Rain.	Temp.	Wind.	Weather.	Rain.	Temp.	Wind.	Weather.	Rain.	Temp.	Wind.	Weather.	Rain.	Temp.	Wind.	Weather.	Rain.	Temp.	Wind.	Weather.	Rain.	Temp.	Wind.	Weather.
Sept. 23-Oct. 6.																								
Thursday.....	.01	56	S	Cy.	.00	67	S	Fr.	.00	67	S	Fr.	.00	68	N	Fr.	.00	70	S	Cl.	.00	67	SW	Cl.
Friday.....	.00	60	S	Cy.	.00	71	S	Cl.	.00	70	SW	Cl.	.00	60	N	Fr.	.00	73	SW	Fr.	.00	66	W	Cl.
Saturday.....	.00	66	N	Cl.	.00	82	S	Cl.	.00	71	NW	Cl.	.00	69	SW	Cl.	.00	74	SW	Cl.	.00	67	SW	Cy.
Sunday.....	.00	66	NW	Cl.	.00	87	NW	Cl.	.00	77	SW	Cl.	.00	68	NE	Cl.	.00	72	W	Cl.	.00	67	SW	Cy.
Monday.....	.00	65	SE	Cl.	.00	79	S	Cl.	.00	63	SE	Cl.	.00	57	SW	Fy.	.00	68	SW	Cl.	.00	67	NW	Cl.
Tuesday.....	.00	60	N	Fr.	.00	74	NW	Cl.	.00	67	NW	Cl.	.00	65	SW	Cl.	.00	66	SW	Fr.	.00	65	NW	Cl.
Wednesday.....	.00	60	SE	Cy.	.00	78	N	Cl.	.00	75	NW	Cl.	.00	69	W	Cl.	.00	70	W	Cl.	.00	65	SW	Cl.
Total.....	.01				.00				.00				.00				.00				.00			

EXPLANATION.—Cl. for clear; Cy., cloudy; Fr., fair; Fy., foggy; — indicates too small to measure. Temperature Wind and weather at 12:00 M. (Pacific Standard time), with amount of rainfall in the preceding 24 hours.

### The Rohnerville Fair.

(Written for the RURAL PRESS by W. J. TULLIS.)

The Seventh Annual Fair of the Ninth District Agricultural Association, comprising the counties of Humboldt and Del Norte, opened at Rohnerville, Sept. 21st, and continued four days. As the exhibits were confined to these two counties, it could arouse only a local interest.

The display of live-stock was very fine, when you take into consideration that 10 years ago the two counties could hardly boast of a single thoroughbred. Now you will see as fine a collection of cattle as any of the middle counties possess, the Durham predominating, with a very good showing of Herefords, Alderneys, Jerseys and Holsteins. A great interest is taken in the dairy, and the display of butter and cheese, though small, was good.

Quite a curiosity was shown in the shape of a pair of French pigs. They were purchased from the captain of a French vessel and resemble the guinea pig in formation of head and body, but are larger. These are believed to be the only ones of this variety on the coast.

The display of poultry was very small, only about a dozen exhibits being made.

The horses were very fine, 84 being in the "stock parade." Deserving of special mention in this class was a yearling colt, shown by Mr. W. H. E. Smith, of Rohnerville. He was sired by a Percheron stallion also owned in this county, stands 15 hands 2 1/2 inches high, and is estimated to weigh 1300 pounds. The racing stock was all owned in the counties of Humboldt and Del Norte, and most of the races were very good, no jockeying being allowed, and the owners themselves driving in some cases.

The display of fruit was fine, the apples especially, with a good show of pears, grapes and peaches; the Japanese persimmon and Osage orange were also shown. Nearly all the varieties of vegetables were on exhibition, the cabbages and potatoes being very fine. The prize pumpkin, weighing 112 pounds, was raised near Camp Grant, I believe. Much complaint was made on account of the dust, the grounds not having been watered at all.

Financially the fair was a success, and the association is sound and growing.

#### Our Agents.

OUR FRIENDS can do much in aid of our paper and the cause of practical knowledge and science, by assisting Agents in their labors of canvassing, by lending their influence and encouraging favors. We intend to send none but worthy men.

JARED C. HOAG—California.  
G. W. INGALLS—Arizona.  
E. L. RICHARDS—San Diego Co.  
R. G. HUSTON—Montana.  
FRANK W. SMITH—Nevada and California.  
GEO. McDOWELL—Fresno and Tulare Cos.  
O. F. BERGMAN—Tehama and Colusa Cos.  
S. S. LANYON—Nevada, Sierra and Plumas Cos.  
JEANNETTE HOUGHTON—San Mateo Co.

NAPA VALLEY NURSERIES.—Leonard Coates announces that he has purchased the interest of his partner, Mr. Tool, and will carry on under his own name the business formerly owned by Coates & Tool. Mr. Coates has always managed the nursery himself, so that there will be no change in the conduct of the business because of the change of ownership. We understand that the nursery is well stocked and equipped for an active and extensive business this winter.

#### The Cyclone Windmill.

The advertisement of the Cyclone again appears in this week's issue. We are assured by the company that the statement of sales which is made by them is absolutely true. There is every reason to think so, as the mill has been given high rank by its premium secured at the Mechanics' Fair; and the prices are very low, both of which facts are calculated to arrest public attention.

#### TO OWNERS OF HORSES, COWS, ETC.

Convince yourself by trial that the most speedy and effective cures are made by the use of Homeopathic Medicines, and that this is by far the CHEAPEST treatment. Horse-car companies in New York who have adopted this treatment have found their losses by sickness and death very materially diminished. We can give the highest references in this State to prove the superiority of this treatment over any other. Send for our "Guide" and "Veterinary Index," pamphlets of 64 and 42 pages, respectively, containing most valuable information. Sent FREE by mail upon application to

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234 Sutter St., San Francisco, Cal.

### List of U. S. Patents for Pacific Coast Inventors.

From the official report of U. S. Patents in Dewey & Co.'s Patent Office Library, 252 Market St., S. F.

FOR WEEK ENDING SEPT. 28, 1886.

349,831.—MOVABLE ICE CHAMBER—I. Allegretti, West Berkeley, Cal.  
349,835.—PRESERVING PILES—Jas. Cass, Cayucos, Cal.  
349,700.—EXPANSION DRILL—J. F. Dye, Santa Paula, Cal.  
349,712.—OVERFLOW GATE FOR RESEVOIRS—Halley, Wilkinson & Bissett, Auburn, Cal.  
350,002.—SUBMERGED FORCE-PUMP—L. A. Kelly, East Oakland Cal.  
350,070.—SHIRT—S. Mendelsohn, S. F.  
349,902.—CUFF-HOLDER—Richardson & Barkeley, Jr., Los Angeles.  
349,750.—PLOW—F. Rothmund, S. F.  
349,815.—MOLDING MACHINE—Richard Savage, S. F.  
349,817.—ANTI-FRICTION THILL TIP—R. W. Simpson, S. F.  
350,008.—CASTRATING INSTRUMENT—J. Trullinger, Silverton, Ogn.

NOTE.—Copies of U. S. and Foreign patents furnished by Dewey & Co., in the shortest time possible (by mail or telegraphic order). American and Foreign patents obtained, and general patent business for Pacific Coast inventors transacted with perfect security, at reasonable rates, and in the shortest possible time.

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A quarter section—160 acres—of very fertile grain land, can be secured for one year for one-sixth of the crop, without sacks, in one of the most prolific grain-growing sections of California. Location, about 8 miles S. W. of Tulare City, a large and thriving place. The land is very smooth and level. If the season is an average wet one there will be no need of irrigating. Forty to fifty acres was summer-fallowed in the spring of 1885, and has not been seeded. The rest is unbroken, but not difficult of cultivation.

Also, one section of non-irrigable land, very level and easy of cultivation, to be had FREE, if thoroughly cultivated. Soil productive. About four miles westerly from Pixley S. P. railroad station. (Or a part of the section.) (This offer will not stand long.)

Enquire at this office, or call on or address E. M. DEWEY, Tulare City, Cal. (Residence, seven miles S. W. of Tulare.)

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Cures all Diseases originating from a disordered state of the BLOOD or LIVER. Rheumatism, Neuralgia, Boils, Blotches, Pimples, Scrofula, Tumors, Salt Rheum and Mercurial Pains readily yield to its purifying properties. It leaves the Blood pure, the Liver and Kidneys healthy and the Complexion bright and clear.

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This small truthfully engravings exhibits the Grandest Medical Electro-Appliance of the age. By means of this BELT the human body is supplied with a constant current of Electricity. It positively relieves and cures, without medicine, all diseases and weaknesses of male or female, that can possibly be relieved or cured by Electricity and Magnetism. Dr. Pierce's Belt is the only one which will produce electricity with or without acids; giving when charged a current of high tension, which can be instantly felt by the wearer. Contains all the latest improvements, including an improved Electric Suspensory for Men. In fact it is warranted to be the only complete and durable GALVANIC BODY-BATTERY ever invented. Satisfaction guaranteed. Prices very reasonable. 25¢ Avoid inferior imitations. Call or write for our FREE descriptive pamphlet, No. 2. **MAGNETIC ELASTIC TRUSS, CO.** 304 N. SIXTH ST., COR. OLIVE ST. ST. LOUIS, MO., AND 704 SACRAMENTO STREET, SAN FRANCISCO, CAL. AGENTS:—PETER VAN SCHAEK & SONS, 158 & 140 Lake Street, Chicago, Ill.; M. W. ALEXANDER, Druggist, Fifth & Olive sts., St. Louis Mo.; J. H. WIDBER, Druggist, 3d & Market sts., San Francisco. Quickly cured! If ruptured send for our Pamphlet No. 1.

J. R. ROSE, Lakeville, Sonoma Co., Cal., breeder of Thoroughbred Devons, Roadsters and Draft Horses.



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Six lines or less in this Directory at 50c per line per month.

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**E. H. FREEMAN**, Santa Clara, Cal., importer and breeder of Wyandottes, Langshans, L. Brahmas, P. Cochins, B. and W. Leghorns, Bl. Br. R. G. Bantams.

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**AKFORD INCUBATOR**—Best in the world; never beaten in competition; from \$35.00 to \$45.00. Pekin and Rouen Ducks; best in the State; \$7.50 per trio, or \$2.00 each per doz. Eggs, \$3.00 per doz. For particulars address L. P. Clark, Mayfield, Cal.

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**T. D. MORRIS**, Sonoma, Cal. Tuolouse and Embden Geese, Bronze and W. Holland Turkeys, and all leading varieties of Thoroughbred Poultry.

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**COTATE RANCH BREEDING FARM**, Pages Station, S. F. & N. P. R. F. O., Penn's Grove, Sonoma Co., Cal. Wilfred Page, Manager. Breeders of Short Horn Cattle, English Draft Horses, Spanish Merino Sheep and Berkshire Swine.

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**STINSON & MARSH**, Dayton, Nevada. Registered Shorthorns of choice breeding strains.

**T. P. A. WILLIAMS**, Columbia, Boone Co., Mo., breeder and importer of Thoroughbred Herefords.

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**H. S. SARGENT**, Stockton. Thoroughbred Jersey Cattle, and Poland-China Hogs from imported stock.

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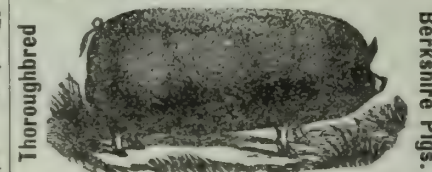
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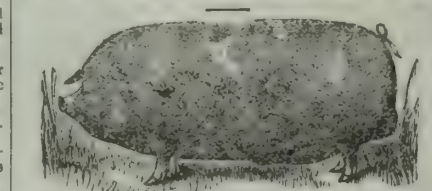


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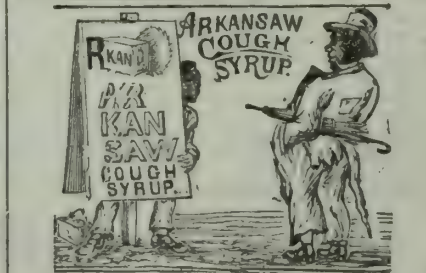
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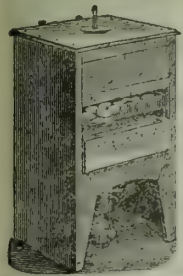
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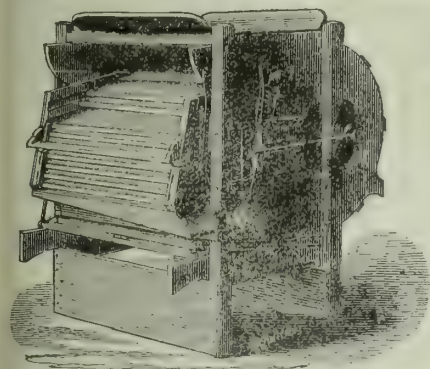
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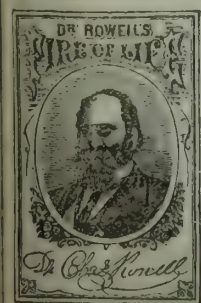
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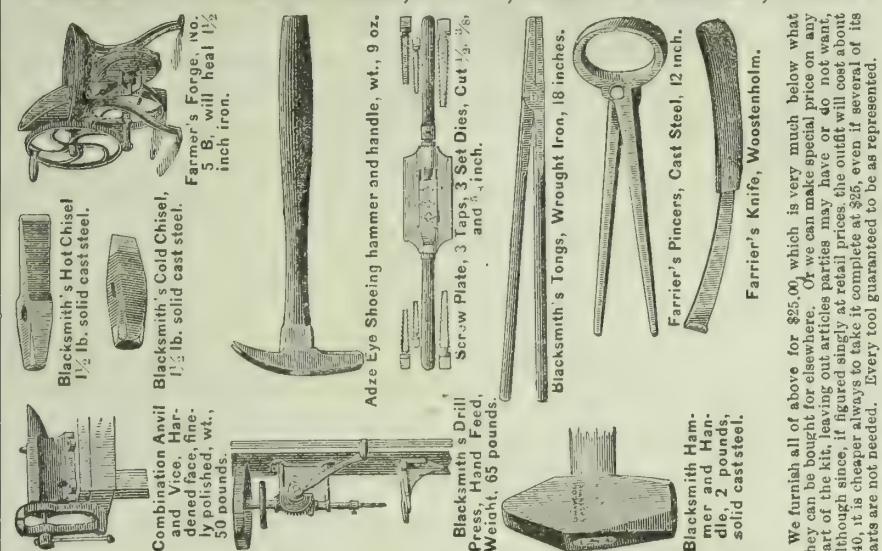
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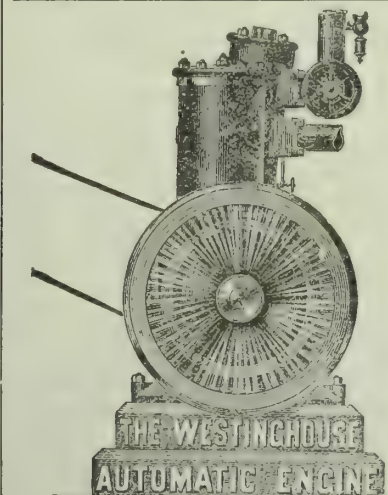
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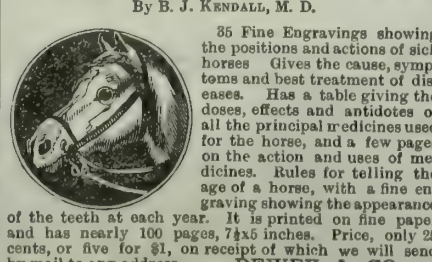
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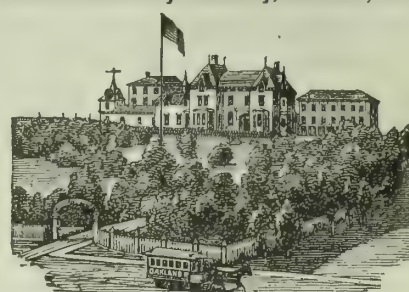
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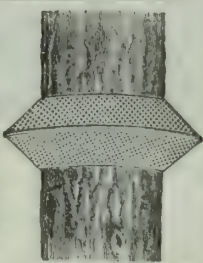
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SAN PEDRO, SMYRNA, and ENDRICH FIGS.

Praparturiens, Macrocampa, Mayette, and Chaberte Walnuts, Chestnuts, Persimmons, Mulberries, Olives,  
Oranges, Lemons, Pears, Apples, Peaches, Apricots, Cherries, etc. Plums and Prunes on Myrobalan Stock, Grape-  
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NO SCALE—I wish particularly to call the attention of Fruit-growers to this fact. I have repeatedly had  
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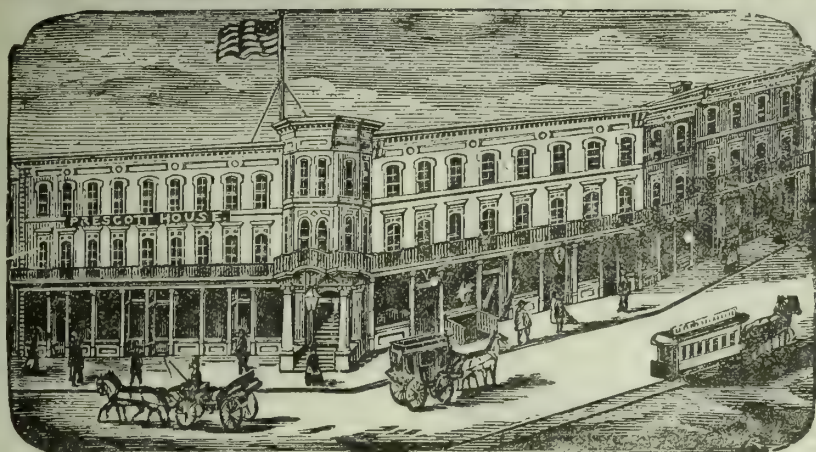
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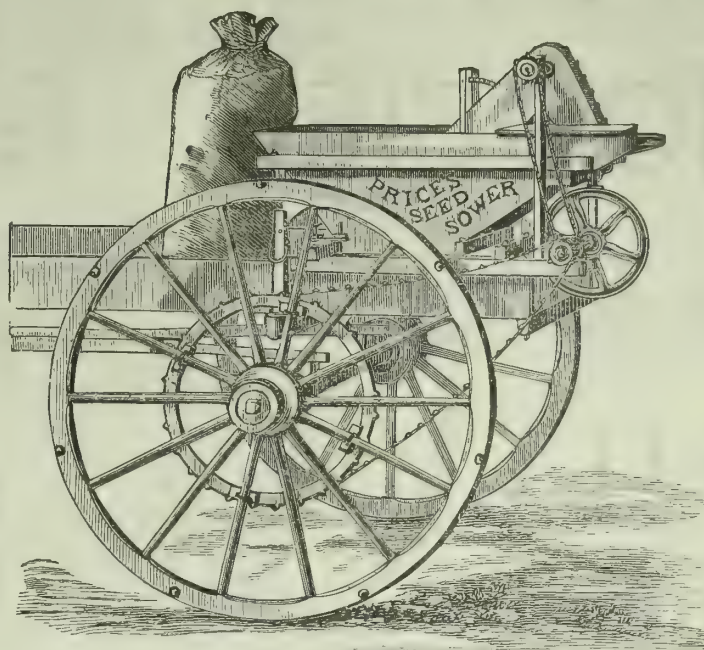


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Sows a strip 100 feet wide at each passage (working width in wheat, 80 feet). Sows as evenly as a Force-feed Drill.

The supply of grain to the distributor is governed by the speed of the team, feeding rapidly when the team walks fast, and slowly when they walk slowly. Will sow an acre of ground as thoroughly with 80 pounds of seed as any other machine of its class will with 100 pounds. Sows 20 acres per hour with ease. Saves its cost in seed grain over any other machine every 200 acres sown. Warranted as above. Order on Trial. Price on board cars, \$40. Send for large, illustrated circular.

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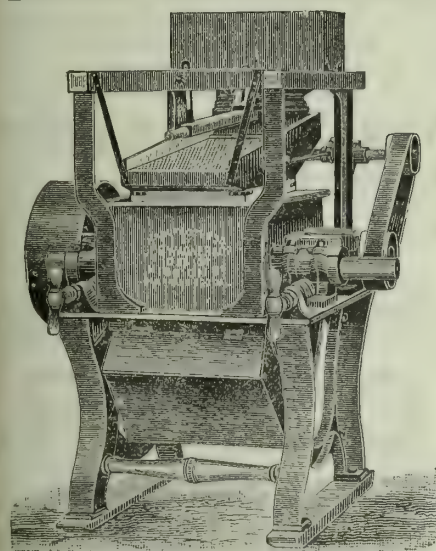
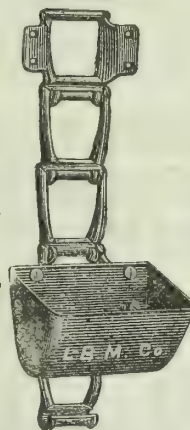
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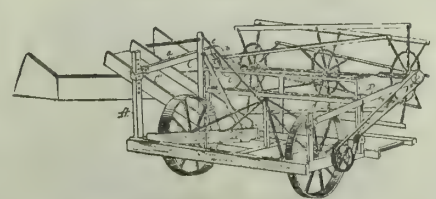
These Mills are constructed in the least complicated and most substantial manner possible, with rigid iron frame, long bearings, adjustable boxes, with coil springs to allow any chance obstruction, such as nails, screws, etc., to pass through without injury to the rolls. This feature is found on no other roll made on this Coast. Send for prices to

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—FOR—  
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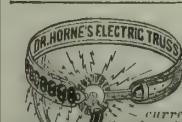


ALL PERSONS ARE HEREBY NOTIFIED THAT THE device shown in the above engraving is covered by Letters Patent awarded to me by the U. S. Government, and are warned against making and using the same without my consent.

All those desiring the Angular Supporting Arms or in information about them, will be furnished therewith by addressing

**JOHN B. GEMMILL,**

Red Bluff, or Tehama, Cal.



## RUPTURE

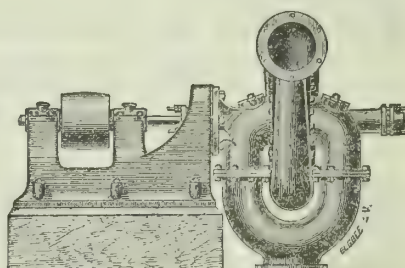
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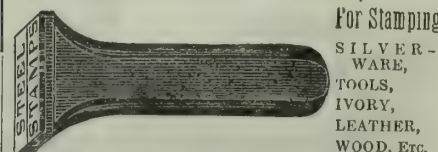
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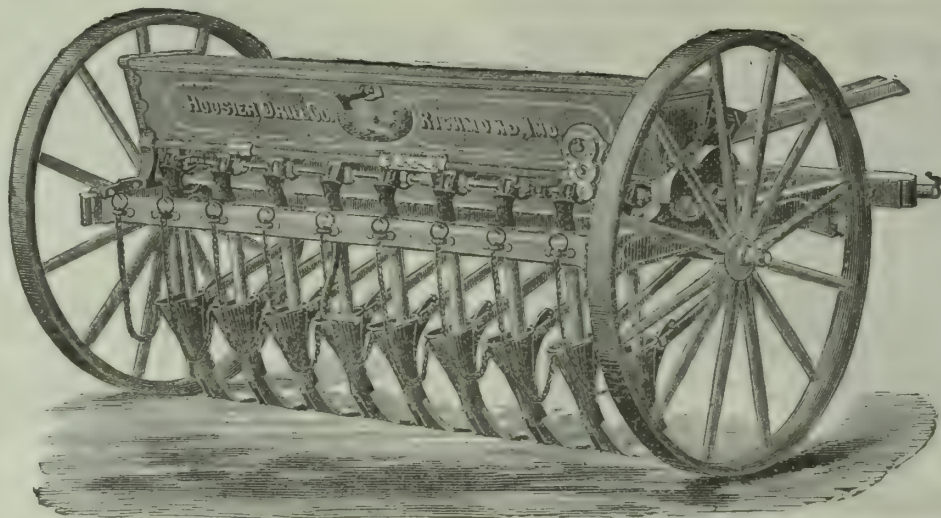


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# HOOSIER GRAIN DRILL.

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The HOOSIER Force-Feed Grain Drill is universally acknowledged to have no superior. It is strongly built, handsomely finished, and has many improvements which no other Drill possesses. A positive Force-Feed, regulated without change of gear wheels or stoppage of Drill.

Every Drill has a Force-Feed Grass Seeder Attachment, constructed and regulated on the same principle as the Grain Feed.

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Also Agents for the JOHN DEERE MOLINE GANG, NEW DEAL, SULKY and SINGLE PLOWS, South Bend Chilled Plows, Schuttler Farm and Spring Wagons, Perkins' Windmills, Keystone Disc Harrows, ALL KINDS OF LARGE AND SMALL FARMING IMPLEMENTS, HOWE SCALES, ETC.

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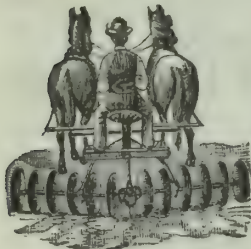
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SUPERIOR TO ALL OTHERS, BECAUSE IT IS

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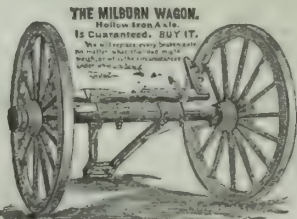
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It is much easier for the team.  
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It has a lever to change the angle.  
It is not heavy on the horses' necks.  
It has no side-draft.  
It leaves no ridge at the center.  
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Its chilled bearings cause it to wear longer and work easier.  
It is easy to ride.  
It conforms to uneven surfaces perfectly.  
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BUY THE BEST:

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WHEELS  
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Junior, \$25. Medium, \$30. Senior, \$40.  
MOST EASILY WORKED.

Built Stronger and will Last Longer

Than any other Cider Mill manufactured.

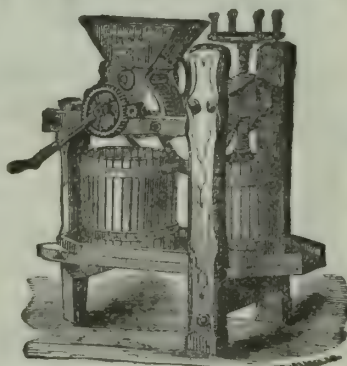
THEY HAVE AN ADJUSTABLE THROAT,

Which adapts them to all kinds and sizes of fruit.

The Grinding Rollers are Adjustable.

They Grind Finer than Other Mills.

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BEST DRILL IN THE MARKET.

Does Better Work and Takes Less Seed per acre than any other kind of Drill.

Can be worked in trashy and on ground where other kinds will not. Has the best Adjustable Force-Feed in the market, a feed especially adapted to drilling

OATS and BARLEY. WHEAT and RYE, FLAX and MILLET.

IT IS THE CHEAPEST DRILL, Because it saves and returns more on the investment.

The ONLY Drill in the world that DOES NOT Crack the Grain.

## SHERWOOD NOVELTY STEEL HARNESS

This is the Greatest Novelty ever offered, and a boon to Farmers. Traces and Doubletrees done away with.



Collar \$3.50  
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EXTRA.  
PRICE \$17.50 ONLY  
Sent C.O.D. by Exp's.

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4. In all farm work you can change from plow to wagon quick.
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10. There is no weight on plow beam.
11. Team works one third easier.
12. There is no chafing, crowding or fretting of team.
13. For man and team it has no equal. Do not hesitate, but order at once from your nearest agent.



# PACIFIC RURAL PRESS

TWENTY-PAGE EDITION.

Vol. XXXII.—No. 16.]

SAN FRANCISCO, SATURDAY, OCTOBER 16, 1886.

{ \$3 a Year, in Advance  
SINGLE COPIES, 10 CTS.

Hon. Wm. Johnston.

The meeting of the State Grange at Marysville last week was harmonious, energetic and effective for good to all who were present and for the Order generally. The welcome accorded by the Patrons resident in the district was warm and sincere; the visit to an important region never before the scene of a State Grange meeting was very interesting and gratifying to all who participated in it. On other pages of this issue may be found some of the proceedings of the meeting, and there will be more to follow until the full report, which we give each year, is attained.

We have desired to adorn this issue of the PRESS, which is especially given to the Order, with an appropriate engraving, and we have chosen as the artist's theme a portraiture of the official head of the organization—Bro. Wm. Johnston, of Sacramento county, Worthy Master of the State Grange. Bro. Johnston was elected at the meeting in Oakland last year, and consequently this was the first State Grange wholly under his guidance and leadership. We think our judgment will be that of all who attended, that Bro. Johnston's course was marked throughout by ability, impartiality, courtesy, and was highly gratifying to all who took part in the meeting. The sight of his face upon our first page will no doubt be pleasing to all who sat under his presidency and to the many others who were not so privileged. Though not as perfect as we would like, it is a striking likeness, and is produced by a new process directly from a photograph. The use of his portrait will be a greater surprise to Bro. Johnston than to any one else, unless it be his wife, for we take the liberty of presenting it at this time without the knowledge or consent of either of them. In a compliment to Bro. Johnston for his course at the State Grange, Sister Johnston should be included. She is an accomplished and noble woman, thoroughly in earnest in Grange work.

Brother Johnston is one of the leading farmers of the river district of Sacramento county. He came in early, has worked energetically and enterprisingly, has made a fine home for his excellent family and won the esteem and goodwill, first, of his neighbors, and then, by a widening circle of honorable acquaintance and esteem, has come to be prominent throughout the State. He has served with distinction in the State Senate and while there exerted a marked influence in the promotion of legislation in the interest of agriculture as well as for the general good. He has frequently been mentioned as worthy the highest gifts bestowed by the commonwealth. Of Bro. Johnston's special service to the Grange we cannot do better than to quote a paragraph from the *California Patron* of a year ago:

Hon. Wm. Johnston, Worthy Overseer of the California State Grange, is one of the largest of the farmers of Sacramento county, whose thorough acceptance of the theory of co-operation has been shown in all his relations to the Order, and has been practically carried out in his connection with the Grangers' Co-operative Business Association of Sacramento. As a presiding officer he has few equals, and he has acquired no inconsiderable celebrity as an eloquent public speaker. His recent address before the members of the Grange at Santa Rosa was spoken of as one of the best ever delivered upon the important questions treated by him. At the last election of officers of the State Grange he was defeated by only one vote for Master, which result he accepted in excellent submission, and received the offer of the inferior service of Overseer in the kindest spirit.

Such officers give character and bestow honor upon the Order everywhere.

Brother and Sister Johnston will soon take their journey eastward to represent California in the National Grange. Their presence at the meeting in Boston last year was very creditable to our State. We have learned from several sources that the impression they produced by their wisdom in deliberation and agreeable social qualities was most excellent. We are glad that California's greeting to the National Council is to be borne again by representatives so able as Brother and Sister Wm. Johnston.

EXPORTS AND IMPORTS.—The large balance of exports over imports, by which the country

Inspector of Fruit Pests.

W. G. Klee, State Inspector of Fruit Pests, returned a few days ago from an official tour through the southern counties of more than a month's duration. He visited the various places where injurious insects have secured a foothold and thoroughly examined into the character and extent of the infection and the various measures which are being adopted to cope with the pests. Before going south Mr. Klee visited most of the fruit regions of the central part of the State, and has thus, since his term of office began in June, seen most of the State except the foothills and northern counties.

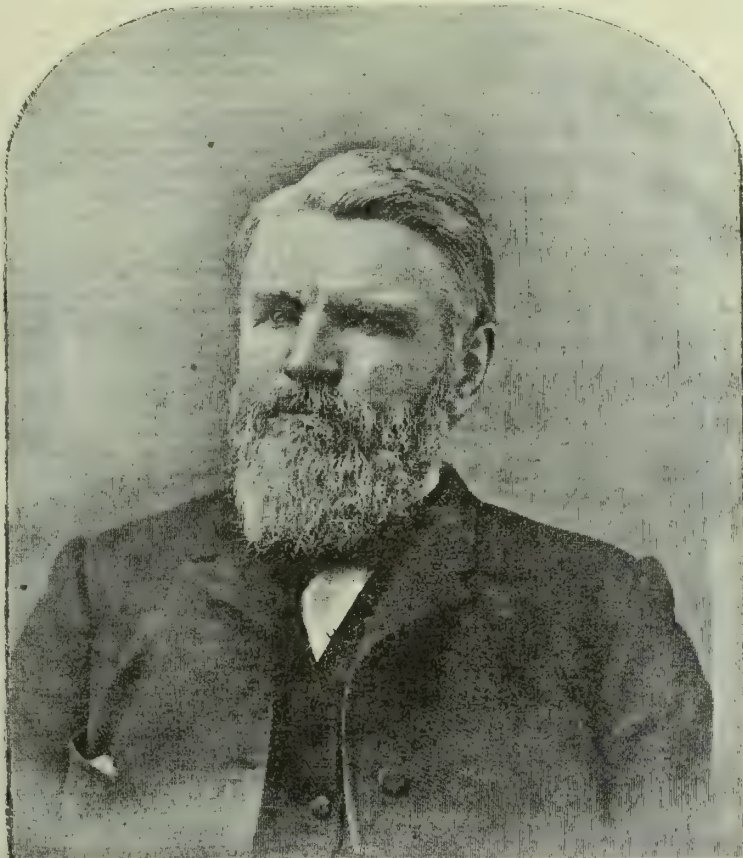
plish the results for which they were intended. He thinks the growers by full consultation may arrive at a better understanding of the matter, and take steps which will lead to more general and effective co-operation in coping with the dangers which now threaten.

Luxury and Moral Decay.

It has become a trite observation that the prevalence of luxury and expensive habits leads to national corruption and decay. The usual explanation of the fact is said to exist in the evil of excess, idle habits and physical enervation into which the wealthy classes are liable to fall. But, while these influences should not be overlooked, the whole philosophy of the case cannot be thoroughly understood till we contemplate the effect of the spectacle of high living upon the poor. As it passes every day under the eyes of a man of small means, it naturally inspires him with an undue appreciation of the value of money, and with an inordinate desire for its possession. He sees men no smarter, no better born or bred than himself, suddenly assume the highest social rank by the sheer force of money. He finds all at once that a great gulf has opened between himself and those who were once his associates. What is the consequence? He jumps straight to the conclusion that social distinction is nothing but the "guinea's stamp." If his passions are strong, his ambition eager, he will begin at once to lend all his energies to the accumulation of wealth.

Now this would be beneficial if it did no more than induce thrift and industry, but it does more. It produces a thirst for gold that leads men to take short cuts to riches. The haste to become rich lures them out of the regular channels of business. Gambling takes the place of trade. The line is so fine between fair operations and ventures and illegitimate speculation that it is easily overlooked. The gambler in stocks, grain and merchandise, like all other gamblers, grows desperate with his losses, overreaches himself, uses what is not his own, and lives in constant dread of exposure. It is an every-day story. But he who writes the great American novel, and would come nearest the dominant passions of the age, must make it his leading theme. American literature waits for some Balzac or M. Daudet, who will tell the story of the poor and ambitious young man thrown suddenly into the whirlpool of a rushing, dazzling metropolitan life, dazed and fascinated by the glare and glitter of its upper circles, seduced by the sirens of pleasure who are ever ready to smile upon those who have the power to purchase, is at last tempted beyond his means and plunges headlong to ruin.

FRUIT-MARKETING.—We have received another letter from Mr. Weinstock, presenting most interesting results gained by his study of the marketing of California fruit at the East. The length of the letter prevents its use entire this week, and its parts are knit too closely for separation. We therefore reserve it for printing in our next issue. We can assure our readers that the statements by Mr. Weinstock will be found full of interest and importance. He is taking great pains to secure an understanding of the matters involved, and all growers will be interested in his conclusions.



HON. WM. JOHNSTON, W. M. CALIFORNIA STATE GRANGE.

has for a long time been constantly growing richer year by year, is gradually decreasing. The figures for the 12 months ending July 31, 1886, are as follows: Exports of merchandise, \$686,555,499; imports, \$641,852,273, leaving a balance in our favor of only \$44,703,226. The movements of precious metals during the same period were as follows: Exports of gold, \$42,797,932; imports, \$20,735,009. Exports of silver, \$28,541,554; imports, \$16,419,957. Balance against us in precious metals, \$34,184,520, which reduces the balance of trade in our favor to the very low figure of \$10,518,706. Such figures do not look as though the country was on the road to prosperity, especially in its foreign trade.

THE OLEOMARGARINE BILL, recently passed by Congress, provides that manufacturers of all sorts of the stuff, which has almost superseded butter in many parts of the country, shall pay an annual Government tax of \$600; all who sell the stuff in packages must pay a tax of \$480, and retailers are required to pay \$48 per year.

These regions will be visited as soon as possible. Mr. Klee will be engaged during the next month in experiments to test several important things, and in preparation of his report to the board at their meeting in November. He will also be at the Fruit-growers' Convention, in Sacramento, beginning November 15th. During the afternoon of each day, until the holding of the Sacramento meeting, Mr. Klee may be found in the office of the State Board of Horticulture, at No. 40 California street, and will be glad to confer with any one who desires information on the matters pertaining to his office.

Mr. Klee returns from his examination of the different parts of the State more convinced than ever that the menace to our fruit industry by insect pests is most serious, and the distribution of the insects is continuing at an alarming rate. He believes it incumbent upon all growers to attend the Sacramento convention if possible, and determine by conference whether something more effective cannot be done toward checking the spread of pests. The laws as they now exist are inadequate to accom-



## CORRESPONDENCE.

Correspondents are alone responsible for their opinions.

## From Santa Maria.

EDITORS PRESS:—I at last fulfill my promise of giving you my impressions of this part of California. I arrived here in harvest time, the busiest portion of the year. A tourist, or one who travels for pleasure alone, would, I think, be very much disappointed, for the hills are brown and the dust dense and active; but a true Californian recognizes that these things must needs be, and that these heavy wagons laden with brown sacks foretell both pleasure and profit in the future. This is emphatically a grain region. The soil is a sandy loam, capable of producing all kinds of grain, vegetables, as well as fruit; apples, peaches, apricots, plums, and prunes thrive well here, but the great trouble is that there is not enough water. If artesian wells could be dug or the water of the Santa Maria river utilized, a longfelt want would be realized, and treble the amount of produce raised. This water which now sinks into the sand is capable of irrigating 500 acres, to say the least. It would cost some capital, of course, to construct proper canals, but the results would certainly repay the farmer.

There are several large ranches here, notably the Suay and Nipomo, the former of which contains over 28,000 acres, 3200 of which were sown in grain this year, of which over 2000 acres were cut for grain, balance for hay, averaging 15 cents of barley, 10 cents of wheat and 3 tons of hay per acre. The remainder of the land is used for stock. Nipomo ranch contains about 38,000 acres; one-third is used for farming, the remainder for stock.

Santa Maria has grown greatly since I saw it last. It is a town now of about 600 inhabitants, and boasts a good school, the principal of which is Miss Ida Twitchell, who was nominated on the Republican ticket for county superintendent. Another lady—Mrs. Wheelock—was nominated on the Prohibition ticket for the same office, and each has many friends; but if Miss Twitchell be elected the town will lose a good teacher.

The people of Santa Maria are quite enterprising. They have a reading-room, a town hall, a photograph gallery, several dry goods, drug, millinery and shoe stores, and three churches—Methodist, Presbyterian and Christian—all with good buildings and a fair membership. The Woman's Christian Temperance Union is also very active and determined to carry on the war against liquor to such purpose that the saloon will soon be a thing of the past. The ladies need courage, for there are eight saloons in the town at present.

The valley of Santa Maria is about 8 miles wide and 30 long; the town itself, called Central City in 1875, was laid out in that year by four settlers on their government claims, each laying out 40 acres in the town plot; and since the narrow gauge road was built from Port Harford the town has continued to grow rapidly.

Los Alamos and Guadalupe are also small places about 10 miles distant, both the center of a good dairy country. One of these three places is destined to prove of considerable importance in the future. The railroad will decide that all-important question. Los Alamos, I think, has the prettiest location, being in a rolling valley, surrounded by green hills covered with large live-oak trees. The people, many of them, are turning their attention to a good paying industry—that of raising hogs for the market, and a great abundance of pumpkins are raised as food for them. I think farmers occasionally make a mistake in trying to farm land only fit for stock. Rolling land, covered with trees, is certainly better adapted to stock than grain. Chicken-raising is a very paying industry.

Going from Santa Maria to Los Alamos we passed a small, solitary farmhouse, surrounded by about 20 chicken-coops. The land looked very dry and barren, but the grass abounded in insects. The fowls looked fine and the owner is making it pay. There are many dairy farms in this locality; I visited one, and the butter and cheese made there I found to be of particularly fine quality. A man who comes with enough capital to buy a home and has a determination to work will find the land respond liberally to his efforts.

A. D.

Santa Maria, Sept. 28, 1886.

## Points to be Noted in Buying a Wagon.

EDITORS PRESS:—When purchasing a wagon, see that the brake is either exactly on the center or a little above on the wheel, and never below. In this way you will readily feel that your wagon runs with an even motion and free from all jarring and shaking. On the other hand, if you have the brake below the center, you have not the purchase and cannot so easily block the wheels. Your brake is easily broken, as the weight of the wagon is greatly brought to bear on it. If you will observe, half the wagons of the day have their brakes set in the wrong manner. I have tried and experimented on this for years.

AN OLD SUBSCRIBER.

Red Bluff, Oct. 5, 1886.

## THE FIELD.

## Home-Grown Sugar.

The following is the report of the Committee on Sugar at the meeting of the State Grange held last week in Marysville:

Worthy Master, Officers and Members of California State Grange, P. of H.:

Your committee appointed at the last annual session of this body, in pursuance of Resolution No. 53, of that session (P. 93, Journal of 1885), "to derive information and report on the adaptability of the soils and climate of California to the production of sorghum, sugar-cane, sugar-beets and melons, for the manufacture of sugar; also, the best methods of manufacturing sugar from the above named productions," begs leave respectfully to offer the following:

Your committee, on an examination of the subject, finds its own inequality to a task involving questions of such gigantic and momentous importance. The sugar consumed in the United States during the fiscal year ending June 30, 1884, amounted to the enormous quantity of 2,720,894,684 pounds.

This amount was divided as follows:

Foreign product.....	Lbs.	2,442,357,448
Domestic cane and sorghum.....		121,492,963
Domestic maple.....		55,000,000
Domestic beet.....		2,134,273
Total.....		2,720,894,684

The amount of sugar and molasses imported into the United States during the fiscal year ending June 30, 1884, as shown by the report on Commerce and Navigation, 1884, is as follows:

DUTY FREE.	Quantity.	Value.
Molasses, galls.....	163,347	\$ 22,963
Raw sugar.....	125,158,677	7,108,293
Total.....		\$7,131,256

DUTYABLE.	Quantity.	Value.
Molasses, galls.....	38,965,293	\$ 5,577,722
Sugar, not above Dutch Standard No. 13.....	2,430,952,807	91,050,958
Above 13 and not above No. 20.....	768,832	61,111
Above No. 20.....	136,280	12,251
Candy and confectionery.....		20,982
Total.....		\$96,758,019

Total value of sugar, molasses and confectionery imported.....\$103,884,760

The domestic productions of sugar and molasses for the same year were as follows:

CANE SUGAR AT 5 CTS. PER LB. AND MOLASSES AT 30 CTS. PER GAL.	Quantity.	Value.
Louisiana.....	Lbs. 247,712,230	\$14,356,611 50
Other States (estimated).....	Lbs. 14,000,000	700,000 00
Molasses (Louisiana).....	Gals. 15,277,316	4,583,194 80
Other States (estimated).....	Gals. 750,000	225,000 00
Total.....		\$19,868,805 30

MAPLE SUGAR AT 10 CTS. PER LB. AND MOLASSES AT 75 CTS. PER GAL.

	Quantity.	Value.
Sugar (estimated).....	Lbs. 36,576,061	\$3,657,606 10
Molasses (estimated).....	Gals. 1,796,048	1,347,036 00
Total.....		\$5,004,642 10

SORGHUM SUGAR AT 5 CTS. PER LB. AND MOLASSES AT 30 CTS. PER GAL.

	Quantity.	Value.
Sugar.....	Lbs. 726,711	\$ 36,335 55
Molasses (estimated).....	Gals. 30,000,000	9,000,000 00
Total.....		\$9,036,335 55

BET SUGAR AT 8 CTS. PER LB.

	Quantity.	Value.
Sugar.....	Lbs. 1,277,826	\$102,630 80
SUMMARY OF THE VALUE OF DOMESTIC SUGAR AND MOLASSES PRODUCED IN THE FISCAL YEAR ENDING JUNE 30, 1884.		
Cane.....		\$19,868,805 30
Maple.....		5,004,642 10
Sorghum.....		9,036,335 55
Beet.....		102,630 80
Total.....		\$34,912,413 75

To which by adding the estimated product of glucose or starch sugar at 3 cents per pound.....Lbs. 300,000,000 9,000,000 00

We have a total domestic product of...\$43,937,409 03

RECAPITULATION.	Value.
Value of imported sugar, confectionery and molasses.....	\$103,884,760 00
Value of domestic product.....	43,937,409 03
Total.....	\$146,822,169 03

Owing to the variation in the retail price in different parts of our country, occasioned by the cost of transportation and other causes, it would be impossible for your committee to give the exact cost to the consumers of these commodities, but it is probable that it amounts to not less than 33½ per cent above the first cost.

When we reflect that less than one-third of this vast quantity of sweetness is produced in our own country, we are impressed with the propriety of instituting an inquiry as to the adaptability of our soils and climate to their production.

And when we consider the rapid increase of our population, and are reminded by statistics that our consumption of these commodities is increasing even more rapidly than the number of our population, the importance of such an inquiry becomes doubly manifest. In 1867 the amount consumed was 36.2 pounds per capita; in 1869, 38.3; in 1871, 41.2; in 1873, 45.7; in 1875, 51.4.

These figures show an enormous increase in the consumption per capita in our country and admonish us of the necessity of making provision for increasing the supply.

The attention of your committee was directed by the resolution to "Sorghum, sugar-cane, sugar-beets and melons," which are the

only vegetables from which sugar has been successfully obtained, if, indeed, it may be said to have been successfully obtained from all of these.

So far as your committee can learn, no experiment of sufficient magnitude has been made in California to determine the reliability of either of them for the successful production of sugar, except the sugar-beet.

This is a demonstrated success. It is true some failures have been made, but we believe that it can be shown that every failure has been justly attributable to other causes than unfitness of soil or climate, and that no more inviting field is open to capital and industry and enterprise in California than in the production of sugar from beets, in almost any part of the State.

Sufficient investigation has been made to demonstrate that we have vast areas of soil peculiarly adapted to the production of sugar-beets, rich in cane-sugar, and as free from deleterious chemical ingredients as can be produced in any part of the world. And our climate is such that they may be manufactured more conveniently and at less expense than in almost any other country.

While we have an abiding confidence in this source of supply, we are not unmindful of the other sugar-producing plants to which our attention was directed by your resolution. We are impressed with the belief that in the southern and central portions of California there are localities in which the sugar-cane of the South could be successfully grown and profitably manufactured.

As for the production of sugar from melons, which was included in the subjects presented to your committee by the resolution, we can only say that, so far as we know, the melon is not promising as a source of sugar. Professor Hilgard, in his report for 1879, gives a full account of his analysis of two varieties of watermelon grown at Lodi, San Joaquin county. We quote from his conclusions as follows: There was in the juice but 2.66 per cent of cane-sugar, which he says "is far too little, in proportion to the other substances, to be made available for the manufacture of cane-sugar; and the proposition to use the watermelon for this purpose is thus effectually disposed of in the negative." He further says that a sweet and pleasant flavored syrup can be made by evaporating the melon juice, but it is of too dark color to be accepted in the market, and there is so far no way known to remove this color except by filtration through bone charcoal, as is done in sugar refineries; but this is not available for home use, because it is too troublesome, long and costly when employed on a small scale.

Many localities have soil and climate which seem well adapted to the growth of sorghum; and yet, so far as your committee is advised, no experiment worthy of mention has been made in California to determine its merits as a sugar-producing plant, except some small experiments at the University, in a climate, perhaps, less likely than any other that could be found to give satisfactory results. All these sources of supply ought to be developed, and among them, we feel confident, can be found not only a sufficiency to meet our constantly increasing demands, but also to supply, in a large measure, the wants of other countries less favorably circumstanced for the production of sugar than we believe our country to be.

The investigation necessary to test the possibilities in this direction must be attended with expense beyond what individual enterprise may be expected to incur, and it is a proper thing to be done at public cost. You have sought, in the past, to procure the establishment of experimental stations by the Federal Government at different points on our coast. We believe that your efforts in this behalf should be prosecuted with renewed vigor, and when successful, the first experiments instituted at such stations should be directed to the determination of the possibilities of this coast in the line of sugar production. The importance of pushing these investigations may not be apparent to those who are unfamiliar with the causes which have conspired during the past few years, in the face of a constantly increasing consumption, to cause a constant depression in the price of sugar.

Among these causes may be mentioned, first, the stimulation given by European governments to the sugar-beet industry, to aid it, in its efforts to challenge sugar-cane for the supremacy in the sugar markets of the world, and second, the peculiarly favorable seasons in most of the cane-sugar producing countries, which have enabled them to compete with the artificial, and we may suppose, temporary stimulus which so animated the sugar-beet industry, and enabled it to put its product on the market at prices below what had been known in the past.

The indications now are that the price of sugar will advance from this time forward with the increase of population and consumption.

If you desire to consider the subject in an economic light, we would suggest that, in view of the great excess of imports over domestic product and the fact that these commodities are of universal consumption, and are regarded by everybody as necessities and not as luxuries, it is desirable to have the price at so low a figure that they will be within the reach of the poorest and humblest of our people.

It appears to be better that governmental aid and encouragement to this industry should be in the form of experiments designed to lessen the cost of producing these commodities, rather than by taxation, which increases their cost to the consumer.

During the fiscal year ending June 30, 1884,

as shown by the report of the Secretary of the Treasury, the duty collected on sugar, molasses, confections, etc., was as follows:

Duty paid on sugar.....	\$47,500,749 79
" " confections.....	10,432 25
" " molasses.....	1,412,283 16
" " sugar-cane.....	63 28
" " sugar-drainings.....	6,133 30

Total duty.....\$48,922,668 28  
Add first cost of imports.....103,884,760 00  
And the value of domestic product.....43,937,409 00

Total first cost of sugars.....\$195,451,837 28

It is fair to say that of this sum, \$69,200,360.96 has been paid by the consumers of sugar as a bounty on the domestic production, in order to foster and encourage that industry.

It is true that of this sum \$48,922,668.28 went into the treasury of the nation. But as it is admitted that the revenues are greatly above the requirements, the question naturally suggests itself, whether it would not be better to spend \$20,270,692.68 as a direct bounty on the domestic production of sugar, or in efforts to devise means by which our sugar producers can so cheapen the cost of its production as to enable them to compete with the foreign producer, than to require the consumers to pay into the treasury, where it is not needed, more than twice that amount to effect the same purpose.

It has never been the practice of our Government to foster this industry, except by the application of a protective tariff. But it has enabled our refineries to put high-grade sugars on the markets of Liverpool and London in competition with the bounty-fed sugars of European production, by refunding as drawback more than the amount of duty paid on the raw sugar represented by the refined sugar exported.

And we are led to institute the inquiry whether it would not be wiser and better if our Government, now that its revenues are so greatly above its requirements, would adopt the policy of European nations, which has made them such formidable competitors in this industry, of giving it direct rather than indirect encouragement and assistance. Or, if the policy of indirect aid is to be pursued, whether cheapening the cost of production would not be better than increasing the cost of consumption.

Through the courtesy of Prof. E. W. Hilgard, of the State University, your committee has been permitted to examine the manuscript of an article on "Sugar in California," which he has in preparation for a coming number of the *Overland Monthly*. Prof. Hilgard notes the fact that the true sugar-cane can be successfully grown in the lower counties of California, and says the extension of its culture becomes purely a commercial question. He says: "It was in the fields of Los Angeles that the sugar-beet and sugar-cane, the two competitors for the championship of the world in sugar production, met face to face, perhaps for the first time in the history of the industry; one of the many examples afforded by the California climate of the bringing together of cultures elsewhere separated by wide climatic and geographical intervals."

We find also, in Professor Hilgard's paper a clear statement, drawing a comparison between sorghum and the sugar-beet as a source of sugar. This is of such importance to those contemplating sugar production that we quote as follows: "The juice of the sorghum is much less pure at best than that of the true sugar-cane, and it varies greatly in the different varieties. In the first place it contains, beside the true sugar or sucrose, a variable but very considerable amount of glucose or grape sugar which is predominant at first, then gradually diminishes as the maturity of the cane is approached, and forms an inevitable source of difficulty in the making of sugar from the juice. In other respects, as in the contents of mineral salts, the sorghum juice is not as pure as that of the sugar-cane; and as the stem is not nearly as juicy as in the case of the latter, its product per acre, with the ordinary processes, is at best considerably less. But it can be grown where the cane cannot, and geographically is the real competitor of the sugar-beet, since both flourish in the same conditions and soils, at least in this country."

"The average sugar percentage found in sorghum in the East is about 14.8 per cent; the average of three California samples, not yet quite mature for sugar-making, which the writer analyzed in 1880, was over 14.3 per cent. The juice contained at the same time, however, an average of 6.5 per cent of impurities which stand in the way of the granulation of the cane-sugar." \* \* \* From these causes sorghum has been until recently regarded as adapted only to the manufacture of syrup or molasses, and it has gained wide acceptance in this capacity in the Eastern States; while the production of sugar from it is as yet in its infancy, with the chances of financial success apparently against it, from causes inherent in the nature of the plant."

Of the character of beet-juice Prof. Hilgard says: The juice of the beet ranges in its sugar contents from 6 to as much as 21 per cent, but the average contents of the beets worked in Germany does not exceed 12 to 13 per cent of cane-sugar. The juice of the beet however, does not naturally contain any other kind of sugar that would follow the cane-sugar into the purified juice, as in the case of sorghum. Besides the sucrose, the beet-juice carries only what the manufacturer designates as "non-sugar," and practically all of this sugar that



is of vegetable origin can be more or less readily separated out by the treatment of the juice previous to, or after, the final evaporation. After this purification there remain with the cane-sugar only the greater portion of the ash ingredients—mineral salts derived from the soil. The quantity of the latter is from twice to as much as five times greater than in the tropical cane-juice; but apart from these salts, and usually a smaller percentage of sugar, the purified beet juice stands even with cane-juice as regards purity and consequent facility of granulation.

Your committee has thought best to incorporate in its report this comparison of sorghum and the sugar-beet, for in the character of the plant is the foundation of sugar enterprises. Prof. Hilgard proceeds to describe at length the process of beet-sugar making, and the parts of the State which promise to yield beets best adapted for sugar-making, but for this information we must refer those who are interested to the full essay when it is published.

With reference to the last duty assigned us—that of reporting "the best methods of manufacturing sugar from" the productions mentioned—your committee regrets its inability to produce a report that would be satisfactory to the committee or profitable to any one.

The manufacture of sugar involves the application of scientific and technical knowledge to which your committee makes no pretensions, and a multitude of processes of which we have no knowledge. We are, therefore, under the necessity of asking that you seek desired information on this subject elsewhere. Perhaps the most available information may be found in two special reports by Prof. H. W. Wiley, published by the U. S. Department of Agriculture. One is entitled "The Northern Sugar Industry" (1884); the other "The Sugar Industry of the United States" (1885). These are government documents, and may probably be obtained by application to any California Senator or Representative.

S. T. COULTER,  
GEORGE OHLEYER, } Committee.  
A. T. DEWEY,

## THE APIARY.

### Experiments in the Production of Comb Honey.

EDITORS PRESS:—Last spring I promised to make some experiments in the production of comb honey—something that would work with more satisfaction than the wide frames. I was unable, for want of time, to do much experimenting in this line.

The Flory corner clamp I do not think I should like, as it leaves at least one side of the section exposed to the bees, which would become so soiled by them as to make it quite a task to clean it off, and even then it does not look neat. By whatever means comb honey is stored in the sections, they must be protected on all sides from the bees.

I have tried several experiments the past season in regard to the use of comb foundation in the section. I placed in different hives one-pound sections, with starters, triangular pieces, half and full sized sheets of foundation; also, sections that had no foundation in them. In each case separators were used. After the sections were filled with honey by the bees, each section that contained a starter, triangular piece or a half sheet of foundation, could be easily detected by the eye, as in every case the bees changed the style of the cells (in the remaining part of the section not filled with foundation) from worker to drone cells. This injured the looks of the honey quite materially.

Some of the foundation used was quite dark, some a golden yellow, while part was white as snow. In the finished section the color of the foundation used could not be detected in any way.

The next test was for "fish bone," as it is called, a thick sheet of wax found at the base of the cells. From some of the sections partly filled with foundation the honey was extracted; even then they did not show the color of the foundation used. The cells of the comb were then cut away down to their base or foundation. In every instance the base of the cell where the foundation was used was as thin as that of the natural comb, and in some cases even thinner. Only when the comb was cut away to the base could the color of the foundation be seen.

For the benefit of those who do not understand the science of bee-keeping, I would say that comb foundation is made from pure beeswax, any adulteration being easily detected. Paraffine makes a very pretty foundation, but as it melts at a low degree of heat it cannot be used for this purpose, as the heat of the hive is sufficient to soften it so that it will break down when filled with honey. If resin is added it can be easily detected by the taste.

An article has been going the rounds of the newspaper press about the manufacture of artificial honey-comb filled with glucose, capped by machinery and sold as "pure honey." It always has been and always will be beyond the ingenuity of man to imitate the work of the bee in building honey-comb or capping it when filled with honey. W. W. BLISS.

Duarte, Cal.

## THE VETERINARIAN.

### Pleuro-Pneumonia in Cattle.

EDITORS PRESS:—Late telegrams bring us the unpleasant news of an outbreak of this disease among the cattle in the State of Illinois. As California and the Pacific Coast are largely interested in cattle-raising and considerable wealth is invested in the business, and, moreover, our wideawake cattlemen are constantly endeavoring to push still further the improving of their already high-graded herds by new importations, I think it timely to make a few remarks regarding this dreaded disease, to give those concerned some enlightenment about it and some valuable hints against its introduction into our domain.

**Symptoms:** In the beginning the symptoms are mainly those of simple pneumonia—general fever, light coughs, rough standing hair, quickened respiration and pulse and changing surface-temperature; appetite, milk secretion and digestion are depressed; patient usually separates from the herd and selects a cool or sheltered place. The further development depends on constitutional, climatic and general surrounding influences. We may classify the forms as acute, sub-acute and chronic. The first form usually attacks fat and vigorous animals and reaches its culmination in from 8 to 12 days, after which slow convalescence sets in or the patient succumbs to gangrene of the lungs. The other two forms develop in less vigorous cattle, or follow the first form; are less violent, but offer in the result no better chances. Patients sometimes linger for months, get very weak, and though they may partially recover, are worthless.

The post mortem examination shows one or both lungs—more frequently the left one—enormously enlarged and heavy—up to 30 pounds and over. The texture of such lungs or lung parts (the progress is usually upward) has changed to more liver-like (hepatized). The pleura, the serous membrane lining the lungs and ribs, is covered with false plastic membranes, which often unite lungs and ribs. The thoracic cavity and pericardium often contain a great quantity of serum. Incisions into the degenerated lung parts present a marmorated appearance. If some parts are gangrenous, dissolution and gangrenous gases will testify.

#### Prevention and Remedy.

Therapeutically no specific remedy is known. Besides strong counter-irritants on the sides of the chest, such as croton oil, Spanish-fly blister or corrosive sublimate solution or firing with red-hot iron, the internal treatment must depend on the stadium and the form of sickness, etc. In the very beginning anti-pyretics, such as glaucous salts, saltpeter, tartar emetic, etc., are in place. Where the sthenic fever has subsided, the treatment has to be changed and light stimulants and expectorants given.

Prophylactically, the general rules of health will answer. Fresh air and water, and good, not over-rich food is preferable. Hot, sultry, impure as well as damp and too cold air, is detrimental. The cardinal point is avoiding the contagion.

This disease is highly contagious and, in my opinion, which is based on large experiments and observations as government veterinarian in Germany, only spreading by contagion to the exclusion of spontaneous development. Pleuro-pneumonia has become more or less stationary in some of the Eastern States, Europe and Australia. Our State has, so far, been free, but once introduced here and not extirpated on the spot, it will spread and become very expensive and troublesome. The main danger is in the importation of new stock, and if such importation is necessary, it should be conducted with the greatest care. Don't buy in or near infected districts, and further ascertain if the shipping car or vessel is perfectly clean and disinfected, as healthy cattle may contract the disease in this manner. Cattle thus imported, however healthy seemingly, should be vigorously quarantined for at least two months after their arrival.

H. H. CLAUSSEN.

Veterinary Surgeon.

332 Bush St., S. F., Oct. 8, 1886.

## THE GARDEN.

### Notes on Pea Growing.

EDITORS PRESS:—I. N. Clark, a veteran gardener living near Aptos, gives us the following notes on the pea:

Considering all its qualities, Bliss' Everbearing is the most valuable of all our peas. It is a very large bunch pea, bears heaviest and in season longer than other varieties. It is very sweet, and for table best. It is easily handled, and most valuable for shipping; comes in two weeks later than the next following.

The Telephone is the largest pea and pod. The growth is rank, the vines some six feet long, falling on the ground; a prolific bearer, a magnificent pea. Rather too much hull is the only objection to it. Next to Bliss' Everbearing in point of value.

Large Sweet pea. Fine for shipping and

brings highest price in market. Season same as Telephone.

For dwarf the American Wonder is the finest and sweetest early. For table use, fine quality, sweetness and shipping it is the best early dwarf pea.

The only dwarf Mr. C. is using, however, is McClain's Advancer. Tall-growing, very prolific. The only objection is, the pod is not large, and so is tedious picking for heavy growers. For table use, first-class, and brings the highest price. Time same as Bliss' Everbearing.

Mr. C. does not train peas, but lets the tops lie on the ground. He ships to San Francisco. Has been in the business of gardening 40 years, and seems well informed. Has been raising here and shipping to S. F. for five years. Was in this business near Portland, Oregon, five years. His place here is a sandy loam.

Santa Cruz Co.

McD.

## THE VINEYARD.

### A Modified Raisin-Drier.

J. T. Goodman, the well-known vineyardist, is about to commence the construction of a large raisin-drier upon a plan originated by himself, which will, in all probability, be an invention of much value to raisin-growers. The objection to raisin-driers now commonly in use is the expensiveness of their construction and of their operation. Mr. Goodman's drier will be made with a view to avoiding this objection. In size it will be 200 feet in length, 10 feet in width and 8 feet in height. It will be covered by a shed roof, and the high side of the drier will be covered with glass in movable frames. The lower side will be made of lumber, and will also be movable. This will permit of closing the drier at night and during damp weather, and of opening it when the atmosphere is warm and dry, so that there will be a free circulation through it. For use in case of unusually bad weather a furnace will be built on each end, and a six-inch stovepipe will lead from the furnaces to the opposite end of the drier. The drier will be built with the high glass side fronting the south, so that it will get the full effect of the sun's heat during the day.

A very important part of the plan, so far as economy is concerned, is the manner of placing the trays in the drier. Driers commonly have frames with cleats upon which to slide the trays, or where the trays are piled one upon another, extra slats are usually nailed on the ends of the trays to give them the necessary distance apart. Mr. Goodman has adopted the simple but very satisfactory plan of piling his trays so that the ends lap, thus doing away with the necessity of extra slats except upon the outer edge of the end tier of trays.

This drier will be built at once, and will be used as necessity may require in curing his second crop of grapes. Mr. Goodman's experiments may well be watched with interest by all raisin-growers.—*Fresno Republican*.

**HOME-GROWN GRAPES IN NEW YORK.**—A dispatch from New York, October 8th, says: The grape season is now at its best in this portion of the country. The supply is enormous, and growers are selling at very low prices. The most abundant are Concord, Catawba, Delaware and Malaga. A fruit dealer said today that along the Hudson valley the supply is greater than it ever has been. He said the vines are so loaded as to hardly pay for picking and sending to market. Growers are shipping to all parts of the country by boat and rail. Last year was a phenomenal season, but from estimates made in a few of the grape-growing sections, the gross tonnage this fall will exceed that of 1885 by at least 5000 tons. Most of the Concord sold in New York come from the country in the neighborhood of Newburg. There is one tract, 12 miles broad and 30 miles in length, which is nothing but vineyards. You can buy grapes now as cheaply as you want to, and out of the city get all you want by just asking for them. Grapes are being stored in coolers, and we shall have this fruit all winter. It ought to be a good year for wine, too, as the grapes are very rich in quality. Delaware grapes are coming into market in such a large supply that they are as cheap as the common kinds usually are.

**THE RAISIN-STEMMER.**—The following is a description of the machine used for stemming raisins, at McPherson Bros.' packing establishment. We clip it from the *Grocer and Canner*: "The stemmer consists of two wire cylinders, one inside of the other. The outer cylinder is stationary, the inner one movable and inclining at an angle of 35 degrees. Above the outer cylinder is a hopper or receiver, into which the bunches of raisins are fed. The inner cylinder is revolved by means of a crank. The machine can be run by hand, horse-power or steam. The raisins pass from the hopper into the space between the two cylinders, the revolutions of the inner cylinder rubbing the stems off the raisins, which drop into a trough at the end of the machine and pass down into a large box or receiver. The stemmer is very simple, but does its work perfectly. We publish the above for the benefit of all who are in need of raisin-stemmers."

## HORTICULTURE.

### Sulphuring Almonds.

EDITORS PRESS:—A few days ago we were at the residence of Mr. J. J. Brown, of Madrone, and found him in the backyard of his orchard-house hulling almonds, and had with him an interesting conversation on the subject of almonds, their preparation for market, etc., and in the course of his remarks found that he highly condemns the public taste which calls for the practice adopted by many almond-growers of sulphuring to give the unnatural color so much admired by some superficial observers, and so frequently seen among almonds in the markets. He thinks the natural color of the ripe almond is, to the properly cultivated mind, the most beautiful, as it indicates the genuine article not tampered with by artificial processes. After sulphuring, the almonds have to at least be sold within the year, or sulphur will damage and spoil them. He has personally known of sulphured almonds for sale on commission at San Francisco, which, upon examination, were, through the influence of the sulphur, so badly spoiled as to be unfit for use.

Many persons let almonds remain on the tree long after ripe and until fogs and rains have so discolored the nuts that to hide the want of the natural brown almond color they sulphur, thus catering to the taste for the changed and yet unnatural color thus secured. This exposure to bad weather is generally wholly unnecessary, and if almonds are gathered in the proper season, before rains come or fogs have had time to weather-beat the shell, the nut will show the natural color, and no purchaser should require a change from this to any other, if even the color substituted should under other and natural conditions be very attractive.

This matter of naturalness in appearance is of importance in the sale and purchase of all natural objects, but more especially is this true with reference to articles of food. Our standard of taste should be high enough to force from the market almonds that are colored artificially. As it is known that sulphuring does no good, but only injures the nut, it should be understood that when almonds come into market sulphured, this process is resorted to only to make them appear better than they really are. Otherwise it is presumable that the color should be natural. This would show genuineness, and from it we might reasonably infer that the producer and dealer are acting on the square. This thought induces the cultivation of the higher taste for the natural color heretofore mentioned. It would seem that a little reflection would be sufficient to banish the taste that requires a sacrifice of the good, sound nut for this unnatural coloring of the shell with sulphur. McD.

Santa Clara Co.

### The Central California Citrus Fair.

Active preparations are being made for the coming Central California Citrus Fair, which will be held in Sacramento, at a date yet to be determined upon. The *Record-Union* of Friday has the following: The Executive Committee of the Central California Citrus Fair Association held a meeting at the Board of Trade rooms yesterday afternoon. L. L. Lewis was chosen chairman, and Dr. Latham, secretary. It being deemed of great importance for the success of the approaching fair that the organization of the association should be completed with the least possible delay, with a view to entering immediately upon preparations for collecting exhibits, the committee proceeded to the selection of directors for the citrus-growing counties of Central and Northern California. The additional members of the Board of Directors thus chosen are as follows:

Calaveras—H. A. Messenger and H. H. Paulk.  
El Dorado—S. G. Beach and H. Mahler.  
San Joaquin—W. B. West and Joseph Hale.  
Placer—J. J. Morrison and M. Williamson.  
Nevada—S. G. Lewis and Felix Gillet.  
Yuba—N. D. Rideout and C. B. Kimball.  
Butte—L. D. Freer and John Bidwell.  
Tehama—N. P. Chipman and Mr. Harvey.  
Shasta—C. C. Bush and Marion Griffin.  
Colusa—W. P. Harrington and Mr. De Jarnatt.  
Yolo—George D. Fisk and R. B. Blowers.  
Sutter—George Ohleyer and A. F. Abbott.  
Solano—A. T. Hatch and L. W. Buck.  
Napa—M. M. Estee and H. A. Pellet.  
Sonoma—Thomas L. Thompson and W. McPherson Hill.  
Contra Costa—Dr. Strentzel and L. C. Wittemeyer.  
Marin—F. C. DeLong and F. M. Pixley.  
San Francisco—W. T. Coleman and J. B. Stetson.  
Alameda—H. W. Meek and E. J. Wickson.  
Amador—J. W. Violet and Mr. Turner.  
The election of officers was next proceeded with, and the following were unanimously elected for the ensuing year: Honorable Newton Booth, President; Albert Gallatin, Vice-President; Dr. H. Latham, Secretary; and A. Abbott, Treasurer.



## PATRONS OF HUSBANDRY.

Correspondence on Grange principles and work and reports of transactions of subordinate Granges are respectfully solicited for this department.

## The Farmers in Council.

## THE STATE GRANGE MEETING.

## Fourteenth Annual Session.

(CONTINUED.)

Continuing our report from last week, we give a portion of the proceedings had during Wednesday, Thursday and Friday, as follows:

## Patrons' Rally for Right, Truth and Justice.

Written, recited, and by request repeated by Worthy Pomona, Mrs. E. Z. Roache, of Watsonville Grange.]

From near and far, from here and there,  
Is heard upon the troubled air  
The coming sounds of desperate strife  
To freedom, meaning death or life.

This mighty power, with vengeful force,  
Sweeps onward in its destined course,  
With banners waving at its van—  
A token that the force is man.

And from the North a countless band,  
In myriad ranks, united stand,  
Their friends to shield, their cause to save,  
Though even Justice find a grave.

And from the South another band,  
With cheer and shout and stern command,  
Proclaims that conquest is its cause,  
With power, alas! to make our laws.

And from the East a lesser band  
For human rights a voice demand  
That all shall hear and profit, too,  
And rum's fiend fly to fields and new.

And all these powers, with columns long,  
Demand their rights with voices strong,  
Yet stand as one in every fray,  
And work together night and day.

And from all quarters comes a band  
With faltering steps and stiffened hand,  
With forms that bear the marks of toil,  
The sun-browned patrons of the soil.

With heads bent low, like any slave,  
They doff their hats to every knave;  
No banners wave, no trumpets grand  
Foretell the standing of this band.

But march they on, with mournful tread,  
These winners of the nation's bread—  
Their raiment rags beyond repair;  
Their souls are sunk in black despair.

So pass they by, to toil for years  
Mid sorrow, scorn, and vilest sneers;  
The scoffed of earth, their courage dead—  
To them the joys of earth have fled.

So here I'll pause, while men of mind  
The reason seek, yet fail to find  
Why men and women, millions strong,  
Should be held down by any throng.

Because in union there is might,  
That man sustains in wrong or right;  
That binds together all whose cause  
Is governed by the self-same laws.

And here is where we fail to find  
The riches of our mighty mind;  
Our ranks so strong, but catch the gleam  
Of union on life's beacon stream.

But having seen the brilliant star  
That shines so bright but yet so far,  
We'll rally quick ere 'tis too late,  
And like free men avert our fate.

Why stand we idle at each gate  
While foes are marshaling in their hate?  
Why longer bend the knee in fear  
Because our lords are drawing near?

And flaunt they in our very face  
The wrongs they've piled upon our race;  
They tramp us down like any beast,  
While on our rights they foully feast.

Oh! is your manhood, then, so dead  
That on your homes you let them tread?  
Your chivalry laid so very low  
That for your wives you strike no blow?

Your fathers' blood from sea to sea,  
That flowed to make your country free,  
And bind true men in union's fold,  
This, brothers dear, will you not hold?

Your children's lives will you not save,  
Because, perchance, they're born a slave?  
And will you let the hand of scorn  
Be pointed at your yet unborn?

No, Patrons, no! the day has come,  
Our thoughts no more shall be held dumb;  
We'll strike for right, as did each sire,  
And mow down wrong with vengeful ire.

We'll strike till fraud is in its grave,  
We'll strike to free each farmer slave;  
We'll strike for maid and matron, too,  
And battle for the good and true.

We'll loose the horn-gloved hands of toil  
And make them master of the soil;  
And sheathe no more bright reason's sword  
Till justice fair is our reward.

We'll match the world with mind and thew,  
With bone and strength, and muscle, too;  
With brains that rival classic Greece,  
Our victories all we'll gain through peace.

But hand in hand, and heart to heart,  
Each one must bravely do his part;  
And, like a granite rock, defy  
Our treacherous friends that gold can buy.

Hurrah, then, Patrons, for the day  
When crime and wrong are swept away;  
When one and all shall equal stand,  
And truth and right shall bless our land!

## Committees Appointed.

The following committees were appointed by the Worthy Master during the session, in addition to some published last week:

Credentials—Bros. Amos Adams, Geo. W. Hancock and D. A. Ostrom.  
Order of Business—Bros. B. R. Spilman, N. Mertes, W. C. Blackwood, Sisters Blackwood and Frisbie.

Officers' Reports—Bros. Frisbie, Dennis, Raymond, and Sisters Cross and Frisbie.  
Transportation—Bros. Totman, Ashley, Flint, Hancock, and Sister Coulter.

Constitution and By-laws—Bros. Adams and Ostrom, and Sisters Hull, Jones and Dewey.  
Resolutions—Bros. Capels, J. Strentzel, J. D. Bagnal, J. V. Webster, Sisters Lander and Coulter.

Education—Sisters Lander, A. P. Roache and W. D. Ashley, Bros. J. W. DeGolia, W. Cunningham and J. C. Marsh.

Taxation—Bros. D. A. Ostrom, J. H. Gardner, I. C. Steele, A. D. Nelson, E. Kelsey, W. D. Freeman and J. F. Cross.

Irrigation—Bros. V. E. Bangs, A. A. Krull, H. Raap and A. M. Plummer.

Good of the Order—Bros. B. F. Walton, J. D. Huffman, D. S. Sherburn, Geo. W. Hack, R. G. Ham, and Sisters E. A. Johnston and L. A. Clark.

California Patron—Bros. W. C. Blackwood, A. P. Roache, B. F. Walton, Amos Adams and J. P. Loucks.

Memorial Committee—Bro. Spilman, Sisters Dewey, Lander, Overhiser, Roache, Mertes and Plummer.

Feast of Pomona—Bros. C. A. Hull, T. B. Hull, G. W. Carpenter, J. D. Bagnal, Geo. Ohleyer, C. E. Williams and D. A. Ostrom; Sisters Hull, Frisbie, Jones, Smith, Walton and Keyes.

To Select Matter for the Local and Associated Press—Bros. A. T. Dewey and B. F. Walton.

## Worthy Lecturer Flint's Annual Report.

Worthy Master and Patrons:—I herewith present my report as Lecturer of the California State Grange for the past year. It is well known for the last two years that the farmers have not prospered as well as in former years. Short crops and low prices has been the universal complaint.

Low prices are beyond the farmer's control, but short crops are in some instances chargeable to neglect, want of skill in his methods, and a lack of the knowledge of the soil he is cultivating, and its adaptability to certain kinds of crops.

With a live man that is full of experiments, observation and inquiry, and that reads the best agricultural works of the day, I think some of these losses might be avoided.

From my point of observation there is not that progress made in the advancement of the Grange during years of depression and short crops that there is in years of general prosperity. Hope is not as bright—the smile does not come and go like the song of the lark; the step is less elastic; there is a less desire for social intercourse, and self-improvement and advancement are more overlooked.

If these suggestions are correct it goes to make up a large factor for the lack of progress made in the Grange in this State for the last two years. When reverses come upon us, whether human or divine, we need these very associations; this commingling together; this co-operation; these suggestions, and words of encouragement, words of hope, to buoy us up, that we may drive away the gloom of despondency and polish our shields for a renewed attack.

Two Granges have been reorganized, two Pomona Granges have been instituted, some of the Granges have made remarkable progress, and I have had the pleasant duty to dedicate two halls or buildings in the last year.

I have visited several Granges, and a number of invitations I had to decline on account of previous engagements or personal matters preventing. I do not think it can be said the Grange is on a decline. The Grange is such a household and family institution. Its teachings so broad and grand. It inspires and stimulates the loftiest and purest thought. It is laying foundations for future monuments, that shall be more lasting than brass or steel; and mid the realization of these facts we are impatient of delay. Innumerable suggestions and brilliant thoughts have been advanced for the quickest and surest road for the success of the Grange. But, according to my mind, all will be failures unless we take into our confidence that little word, work. Somebody must be vigilant, somebody must stand guard at the outer ramparts, somebody must stand in the highways, by-ways and the high places as living monuments for the principles we advocate.

According to instructions, I visited Oregon State Grange in May. Mrs. Flint and I went by water and returned overland. By the earnest solicitation of Bro. Cook, I was prevailed upon to visit their Grangers' picnic at McMinnville before the session of the State Grange. Their three-days' picnic was gotten up in good style—good attendance, good speaking and music—and they treated me with all the courtesy due a representative. I attended two picnics, two Pomona Granges and the State Grange. I found the members intelligent, courteous, warm hearted and hospitable, and fully imbued with the high order of our institution.

We supped with the Worthy Master and State Lecturer, and found they fully appreciated and were in possession of the good things of the land. Other brothers and sisters

contributed to our pleasure by entertaining us at their firesides. I invariably received a kind word for California and the sisters and brothers of our order.

The affairs of the Grange were conducted on thoroughly business principles, and the way they dispatched business showed they knew the value of time. Their Pomona Grange meetings were regular business meetings for buying and selling, and a general discussion of farm interests. The members took up the discussion with a vigor and will that showed how fully they appreciated the benefits of the Order. The vitality and life of the Grange in Oregon owes its existence to the untiring efforts of its Master and State Lecturer. Bro. Hays is most constantly on the go, to the detriment of his private affairs.

No good cause can fail where they have such good material for its guide and support. Bro. Hays is fortunate in having a State Grange that makes an appropriation of \$500 to the Lecturer's fund to lubricate the rusty machinery of the Order. I neglected to say in the proper place that when we were presented to the State Grange we were welcomed by the Worthy Master, Bro. Boyce, in such eloquent and flattering language that for a time I hardly knew whether I was a delegate from California or dreamland. Whether the occasion justified it or not I will not say, but it was a grand and successful effort to please the ear. We were well compensated for our time and expense in our trip to the Oregon State Grange, and we shall ever turn to it as one of the pleasant memories of the past.

In my visits to the subordinate Granges I make no charge. If they are able and willing, I accept the bare traveling expenses. If they are not, I go just as cheerfully without expectation or reward. I long to see the time come when our State Grange can put the right man in the field with sufficient funds to canvass the entire State and awake the farmers to their duty and pleasure.

I wish it had been my good fortune to have done as much for the Patron as my predecessor. But circumstances and individuals proved the contrary. He never left a stone unturned or a pool unfathomed.

All cannot work in the same channel. Each has talents peculiar to himself, and in the mutual development and combination of the whole it will form a symmetrical structure whose imposing sides shall be a monument to the earnest and faithful.

We behold a beautiful and massive structure or a towering monument on whose summit rests the dome of the sky. We applaud the genius and handiwork of the architect on whose brain its first impressions were made, and were traced and planned for the guidance of the builder. Do we consider that the vast and varied material was furnished by different contractors from different sources, grooved and dovetailed together stone by stone, brick by brick, by different hands into one complete whole?

Our architects have drawn the plan of the Grange; its skeleton form we see, it is beautiful in its outline and promising in its completion. It is inviting bids for construction. Its promise of profits is large. It settles its bills on the deposit of every pound, yard or foot of material.

It engraves upon its sides, in indelible letters, the name of every assistant.

We have our architect; the plans are prepared; the season is propitious; we are eager to build; we are waiting for material.

In the abundance of material the facilities for transportation and the adaptability to construction, who will volunteer and send in the first invoice that our labors may be employed?

## Resolutions Adopted.

The following resolutions were duly reported from the appropriate committees and adopted during the session:

## CONCERNING EDUCATION.

To the W. M. and Officers: Your Committee on Education beg leave to report that the following resolution, which has been referred to them, has been duly considered, and the committee recommend its adoption.

Your committee would also recommend that the school law, relating to the library fund, be so amended that a majority of the trustees, with the concurrence of the County Superintendent, may have the power to expend the library fund, or any portion of it, when in their judgment it is not required in the libraries for the purchase of school furniture or other necessary fixtures for the schoolroom. Many of the schoolhouses are lacking in trees to protect children from the hot sun, and sheds to keep roads and vehicles dry. Therefore, as most of the libraries are full, we suggest that a small part of the fund be used for those purposes. Many of the books of fiction for older children in school libraries vitiate the taste for solid reading, such as the study of insects that destroy fruit. The education now most needed is of a practical, thorough, systematic kind. There should be less of theoretical and more of practical information imparted, therefore your committee would suggest in employing teachers, that those who are practically given to labor thoughts, both physically as well as mentally, should always have the preference.

WHEREAS, The school law as at present enforced makes each fiscal school year commence on the first of July, and requires that all school funds shall be expended in and for the year for which they are collected; and

Whereas, Said funds are collected with other State and county taxes in December and January, all of which must be expended on or before the first of July following, therefore leaving no funds in the treasury with which to pay the salaries of teachers for the full term of school; therefore, be it

Resolved, That the law should be so changed as

to make the school year commence on the first of January.

## ON TRANSPORTATION.

Resolved, That we hail with delight the concessions that have been made by the transportation companies to the fruit interests of our country, and regard them as a happy omen to the return of reason to the brain that directs these companies and feel encouraged that our demand for further reductions, both in freights and fares, may receive intelligent consideration by the transportation companies. That a standing committee of five be appointed to present to the Board of Railroad Commissioners the reforms which inevitably inure alike to the producer and transporter.

## NATIONAL GRANGE—EXPERIMENTAL.

Resolved, That our delegates to the National Grange be and they are hereby instructed to use all honorable means in their power to induce the National Grange to hold its session of 1887 in the city of Sacramento.

Resolved, That the Master, Secretary and Executive Committee be requested to inform our delegation in Congress of the passage by the State Grange, 1885, of the resolution concerning the establishment of agricultural experimental stations.

## ON IRRIGATION.

WHEREAS, The question of water for the purpose of irrigation stands paramount to every other in this State at the present time; and whereas, the necessities of our people are such that a speedy solution of the question must be reached which will admit of the innavigable streams of the State being equitably distributed for the purposes of irrigation; therefore, be it

Resolved, That irrigation districts should be established under authority of law and State control which will secure such equitable distribution of the waters of said streams.

Resolved, That no individual or corporate right to the waters of the streams shall be recognized or allowed with the exception of a sufficiency for the actual and legitimate use of riparian owners. But to satisfy the greater necessities of farming communities, even this single reservation may be taken under the law of eminent domain, upon the payment to said riparian owners of the actual damage resulting from such diversion.

## ON TAXATION.

WHEREAS, In consideration of the fact that the property-holders of this State are taxed more than any other in the Union, and doubly so in comparison with the great agricultural Middle States, and with whose products we are forced to compete, and while our people are staggering under this strain upon their finances and subsistence, our State Legislature and Boards of Supervisors of the various counties have, from the early and flush years, been in the habit of making extravagant and sometimes useless appropriations; and as the Governor of the State, at the last session of our Legislature, recommended an increase in the salaries of our State officers, notwithstanding all agricultural products have scarcely paid the cost of producing, and the additional fact that some of our largest commercial firms have been forced into insolvency by the stagnation and general depression of business; therefore, be it

Resolved, That the time has come to call a halt, and we demand, as taxpayers, retrenchment in all governmental affairs, in both State and county, and that as close economy as may be consistent with good government be inaugurated.

Resolved, That we are unalterably opposed to an increase of salary of any office, but rather favor a decrease in accord with the times, and also we are opposed to the creation of new offices, but favor the wiping out of all unnecessary ones.

Resolved, That we recommend that at the coming session of the Legislature laws should be passed so that all goods, wares and merchandise of whatever form shall be assessed under an itemized statement, and that we favor one system of taxation for all.

## ON GOOD OF THE ORDER.

Resolved, That the thanks of this Grange be tendered the officers of the State Grange for the able and efficient manner in which they have conducted the proceedings of this session.

Resolved, That the thanks of the State Grange be tendered to the officers and members of Yuba City Grange and the residents of Marysville and vicinity, for their kind and fraternal welcome and the hospitable and generous manner in which they have entertained us. That the promises made before the State Grange at its last session have been more than fulfilled.

Resolved, That the sincere and heartiest thanks of the Grange be especially tendered to the Yuba City Grange Musical Union for their able and well-rendered musical and literary program, which was prepared for our entertainment.

Resolved, That the thanks of this Grange are hereby tendered to the Masonic Fraternity, for the uninterrupted occupation of their handsome and commodious hall.

We shall be able to give further resolutions in our next, together with the names of the authors of the above.

## Report of Committee on Literary Entertainment.

Worthy Master and Patrons:—Your Committee on Literary Exercises have but a brief report to make. The regular proceedings of the session have been more than usually brisk, and the order of business, arranged for four days instead of the usual term of five days, has afforded shorter time for literary exercises than in preceding years, so that our present list of contributions rendered is correspondingly less.

The following contributions have been presented during the session:

Recitation—"The Substantial Bank," by Miss Josie Roache, of Watsonville Grange.

Original Recitation—"The Patrons' Rally for Truth, Right and Justice."

Original Address—"Sweep Out the Bases," by D. Lubin, of Enterprise Grange, Sacramento county.

We have the pleasure to recommend the publication of the following worthy contributions in our official proceedings, the reading of



which, we exceedingly regret, was omitted for want of time only:

*My Father's Home*—Original Essay—By Sister E. O. Smith, of San Jose.

*Our Educational Interests*—Original Essay—By Brother Charles Wood, of Danville.

Essay—Written by Brother Henry Clark, of North Butte Grange.

Thursday evening, apportioned to literary exercises, was well given over for one hour to the excellent entertainment by the Yuba City Grange Choir and children, under direction of Sister B. F. Frisbie, and for which the thanks of the Grange were tendered by the Worthy Master. The program was as follows:

Opening, piano solo by Miss Annie Cooper; chorus, by the Grange; instrumental piece, by Miss Gertie Wilkie; song, duet, by the Misses Mattie and Ella Walton; rendition of several pieces by selected quartet; recitation, "Gone with a Handsome Man," by W. J. Hardy; song, by Miss Ada Ohleyer; recitation, by Miss Mattie Walton. The program was closed by a chorus rendition of the song "Farewell."

We deem it appropriate to mention here the musical selections rendered by the Yuba City Grange Choir and other volunteers, which have added so materially to the literary and social pleasures of our grand gathering. From the first rousing song, rendered before the Grange opened, to the last inspiring strains (that shall go with us when, with hearts forever united, we part hands around our fraternal altar), their ministrations to our good cheer will prove in all respects most elevating and praiseworthy.

We are glad to say that our work has been so harmonious, and so kindly received by the Grange, during the three years that we have each and all served on this committee, that our duties have proved only a pleasure.

We now resign our official career with most sincere thanks to the talented contributors who have, without compensation, made the introduction of the literary exercises so easily and satisfactorily effected in this Grange under the feeble administration of your committee.

A. T. DEWEY,  
J. D. HUFFMAN,  
A. P. ROACHE,  
Sister E. Z. ROACHE,  
Sister JAMES MARSH.

#### Pomona Feast.

THE Marysville *Appeal*, which gave very creditable daily reports of the session, mentioned the Pomona feast in its Saturday's issue, as follows: Fully 2000 people attended the festivities at the Pavilion given by the State Grange. At about half-past nine o'clock the Yuba City Band marched to the Masonic hall and there waited until the Grange was ready to come down in a body. When it did, those who had invitations fell into line, and the whole procession was nearly three blocks in length, two by two. When once inside the building there was found to be half a dozen rows of tables stretching half the length of the hall, laden with cake and all the palatable fruits the land can produce. The floral pieces upon the tables were exquisite and showed much taste.

When all had marched to position at the tables, the chaplain's prayer was said by Bro. B. F. Frisbie. Many were compelled to wait. The opening ceremonies of the Feast of Pomona were announced by Worthy Master Johnston in the simple words "Partake of that which is before you," and all readily responded. Pomona in this instance was Mrs. A. P. Roache, who sat at the head of the center table, dressed in an elegant costume of white, with fruit in profusion. Her throne was also a very handsome affair.

In the hurry of writing up the reports this week we have no chance to do justice to this leading feature of the occasion. We hope some Sister present will do it for us with a more graceful pen, in a future issue.

At the conclusion of the feast, the music was started, and the lovers of the light fantastic indulged to their heart's content.

#### Fatherly Congratulations.

Near the close of the session, at a late hour on Saturday evening, the chairman of the literary committee, in an informal manner, requested the five stalwart Past Masters of the California State Grange to step forward in front of the Master's chair, facing the altar, when he expressed the great pleasure of himself and fellow-Patrons in annually meeting these grand old patriarchs in our cause, the men who have labored so long, ably and faithfully for the good of our Order. In most fraternal societies, after reaching the highest honors, past presiding officers are apt to become lukewarm, and seldom, if ever, are so many past presiding officers ever found remaining hand in hand, faithfully continuing their good work. He was sure that each would have some welcome words of wisdom and encouragement to speak in their usually eloquent and heartfelt manner. Bro. Spilman, being the senior in years, was called upon. Each, addressing the Worthy Master and brothers and sisters, responded in about the following language:

B. R. Spilman.

So long as I have strength and live, I intend to uphold the great work and noble principles of this Order, and to the utmost of my ability carry out my sacred obligation made in the presence of my brothers and sisters, before high heaven. We must part, and most probably, we shall never all see each other again in this world; therefore, let us strive fearlessly, with faith, and in harmony, to do our full duty,

that we may in the end meet in the great Grange above where partings are never known.

J. V. Webster.

If I must respond to this call, I will simply say that, from the infancy of the race, agriculture has ever been acknowledged the first, as well as the most important calling of man.

Fresh from the hand of his Creator, with the blue arch above him, sparkling with its new jewels, and in the midst of rural scenes, the first man was placed. And, sir, it was here, surrounded by rich fruits and fair flowers, radiant and emblematical of the beauty and glory which surrounded her, that woman first appeared. Since then, ever sounding down along the stream of time, the echoes from the flocks and handiwork of the husbandman have been heard in all the land.

In every struggle for freedom and in all the wars waged in aid of ambition and for the perpetuation of despotic governments the tiller of the soil has stood the brunt in every fight. And, sir, every cradle, in which liberty has been rocked and nurtured, has been discovered in the midst of rural homes. In conclusion I will say that in the history of the world from its beginning, no page can be found wherein is recorded the existence of an intelligent, prosperous people, that did not encourage and honor agriculture. And the standard of enlightenment and liberty possessed by each nation and people upon the earth at the present time is accurately gauged and determined by the degree of intelligence and thrift of its farmers. And, sir, the chief glory of our calling rests in the fact of the stability and prosperity of the governments wherein agriculture is fostered.

I. C. Steele.

To have passed the Master's chair in a State Grange is to have enjoyed the best opportunities at the disposal of the Patrons of Husbandry in a State, and to have incurred obligations that can only cease with duties well done—duties which only cease with translation to the higher life. Past Masters know by experience the value of harmony in the Order, and are bound by every consideration of honor to cultivate fraternal affection in the Grange, as it is the only sure foundation on which harmony can rest.

Your Past Masters standing among you, united in feeling, devoutly desire moral strength to exemplify the principles of our Order in our lives, and to be worthy of the generous confidence so freely extended to us by the brothers and sisters in the Grange; and whenever from the weakness of our common nature we fail in a duty or commit a fault we are ever ready to acknowledge it, and, so far as possible, correct it. We rejoice with you over the good accomplished at this session of the State Grange, and we will go forth to other duties with fond recollections of its many happy incidents, and with renewed hope and unflinching determination to labor in our cause.

Daniel Flint.

*Worthy Master and Patrons:* When elected to preside over the State Grange, I put on the badge of office with many misgivings, fully knowing the responsibility which such a position carried with it. If you made a mistake in the selection, I ask you to bear one-half the responsibility and I will assume the other. I did the best I could. My conscience is clear. I never could have gone through my term of office even as well as I did if I had not received the almost united support and kindly words of the Patrons. For the kind words and the advanced manner in which I was heralded to our Order by the *California Patron* and *RURAL PRESS* I shall ever bear a kindly remembrance.

When I look upon these bald heads and gray hairs around me (and do not look in the glass), I feel as though I was a mere boy; while they, as it were, are just ripening and growing to maturity.

To have the honor to stand beside and be ranked with the distinguished Past Masters of this State Grange is an honor worthy of the ambition of any true man, and I try and bear it with that modesty and timidity of one who has doubts of its proper allotment.

My mind has been expanded, my sympathy quickened, my intelligence enlarged, my observation clearer, and the needs of the farmer made more apparent to such an extent that it compensates me for all time and means expended in this great work.

S. T. Coulter.

I suppose it is my first duty to ask your pardon for absenting myself from the opening and first few days of this session. I beg to assure you that it was a great cross to me to be detained by public duties from your midst. And during the time of my absence I have been continually thinking of you and desiring to be present with you. You have so honored and petted and flattered me that I could not but feel that I ought to be here, and reproach myself for being away. But since my arrival—since I have learned how well and nobly you have conducted the business of this session, the glorious achievements accomplished, with so much harmony and unanimity, for promoting the honor and usefulness and influence of our beloved Order—I find that, instead of regretting my absence, I ought to be congratulating you on the wisdom that has guided you and the success which has crowned your efforts.

If anything has occurred to mar the peace, concord and fraternal affection which should pervade our gatherings; if, in a moment of excitement and forgetfulness, any word has been

spoken or act performed calculated to wound the feelings of any of our members, let us banish it from our memories; and, going from this important and successful meeting, let us endeavor to forgive any wrong and forget any folly that may have been committed, and only cherish in our hearts the memory of the pleasures we have enjoyed. Let us each carry with us to our homes a more unalterable purpose to labor more zealously for the prosperity, usefulness, honor and ultimate triumph of our noble and beloved Order.

Worthy Master Johnston responded, thanking the Past Masters for their kind and faithful attendance, and all the brothers and sisters present; also the people of Marysville, for their generous treatment. He expressed the belief that we shall all return to our homes better Patrons and with renewed zeal for the work of another year.

Sister W. D. Ashley being called upon, closed her remarks as follows: Bro. Spilman has given us a loving benediction; let us receive it and depart in peace.

The Worthy Master closed the Grange in ample form in the fifth degree, and the final goodbys were said by the brothers and sisters near the hour of one o'clock on Saturday morning.

In future issues we shall give still further information of interest, which we regret our space in the present issue will not admit of.

#### Miscellaneous Mention.

For liquidating the Patron Publishing Co.'s debts, over 300 shares, at \$10 each, were generously subscribed for at the State Grange, in addition to stock previously sold. [At the stockholders' annual meeting, Oct. 13th, the following directors were elected: I. C. Steele (Pres.), J. F. Deming (V. P.), A. D. Logan (Treas.), J. Chester (Sec'y and manager), W. G. Keesling, A. L. Chandler, Wm. Johnston.]

The weather was entirely delightful the whole week through. The days were warm and balmy, the nights cool, and the mornings clear and crisp.

Bro. H. C. Jones, while suffering constantly from a disabled hand, nobly performed an important part in preparations for the comfort of all and success of the Pomona feast, including the services of the band and successful march in the pavilion.

The results of thoroughly established confidence between clear-headed business Patrons were plainly evidenced by the well-planned and perfectly-carried-out entertainment of the large body that gathered at the session. Bro. and Sister Ohleyer, and their equally able co-operators in the work, will ever be remembered for their delicately but efficiently bestowed favors. We all now have to thank Bro. Ohleyer over again for his consistent and persistent efforts last year in securing the location of this session at Marysville; also for reduced rates of fares, which doubtless added greatly to the attendance. It was a wise thing, too, for Yuba City Grange to so thoroughly interest the citizens of Marysville to aid in making the visit every way convenient and agreeable.

Often, during the delightful scenes of the session, our hearts would reach out to the absent members of old who have gone before us to their final Grange home, and those still near and equally dear souls who were, by misfortune or otherwise, detained from attending. We could heartily wish that every member of our own, and every other Grange, could have been present through the session, and especially its closing hour.

Worthy Steward E. W. Davis, Master of Santa Rosa Grange, in more than usual eloquent and forcible words, cordially and heartily invited the Grange to hold its next annual session at Santa Rosa, offering on behalf of his estimable Grange and the enterprising and generous citizens of "Santa Rosa and its environs" every possible inducement for the convenience, comfort and economy of representatives and visitors. This cordial offering, backed by the remembrance of the beautiful city and rarely complete entertainment enjoyed there seven years ago, effected a very large vote on the first ballot in favor of Santa Rosa—blessed Santa and beautiful Rosa.

The officers of this session have reason to be proud of the efficient manner in which the work of the session was performed, especially in the orderly and perfect method in which the fifth degree was conferred and the Pomona feast ceremonies were conducted. The vote of thanks passed for able services rendered was well deserved, and not the least those of Bro. Chester's assistant secretaries, Sisters Nellie G. Babcock and Roxie Dennis.

Bro. Colter was detained as a member of the Board of Supervisors of Sonoma county during the first portion of the session, although his faithful work was present throughout the session. His well-written report on sugar culture published in this issue, as adopted, was read by Bro. J. D. Huffman, of the literary committee, before Bro. Colter's arrival.

The Marysville *Appeal* of Saturday promised to publish on Monday the list of contributors to the Pomona Feast, furnished them by kindness of Bro. Williams and ourselves. Through some inadvertency, no doubt, the list failed to appear, and we are unable to publish it. Gen. Bidwell and a number of local contributors gave very ample donations, and the supply of fine fruits, nuts, cakes, raisins, flowers, etc., was extensive.

The untiring assistance of Bro. Geo. W. Hancock and Sister M. G. Frisbie, to the choir, was notably valuable. The following special-

ties rendered during the meetings were received with favor:

Quartet—"The Belfry Tower." Vocal Solo, by Claude Phipps—"Jack Came Home To-day." Quartet—"Farewell to the Forest." Piano Solo, by Frankie Stevens, of Sacramento Grange—"Old Black Joe." Solo by Miss Roxie Dennis, of Eden Grange—"Consider the Lilies."

#### Sutter County Farmers and Homes.

Our thanks (wife included this time) are due Bro. B. F. Walton for a fine ride and visit to his home and dairy farms on Saturday last. Quite a number of other visiting Patrons were also pleasant participants of Brother and Sister Walton's kind and thoughtful hospitality. It is always refreshing and a real delight to newspaper men so closely confined as ourselves to enjoy such hours of recreation, and especially at homes so thoroughly, sensibly and comfortably conducted, both indoors and out, as evidenced at Bro. Walton's. His farms, considering the quality of land, are extensive and show so much practical system in layout and conduct that we invite him to furnish our readers with a diagram and description, believing it will afford good practical hints to many, and be read with rare interest by all.

Bro. Walton's hospitable residence shows a substantial build, commanding appearance and beautiful surroundings, and we are glad to say that, like Bros. Geo. Ohleyer and A. L. Chandler, he is one of the small band of representative pioneers who have unitedly, bravely and intelligently protected their fair land from debris destruction.

They have also been the foremost farmers in the State to combine their capital and real estate securities in co-operating in the purchase of sacks, storage of grain, marketing their produce, purchasing supplies, etc.; and beyond all this, they combined and purchased two newspapers, each of which was bound to quarrel with the other, right or wrong (all for bread and butter, of course), on every question of public interest arising in the community. They merged these papers into a single engine of public good, devoid of politics and liberal and impartial in its conduct to meet the approval of its owners, composed of men of various views, creeds and politics, but all bent on protecting the true interests of the highest and lowest citizens. This sensible combination of the two papers helped them fight the anti-debris contest successfully, without the chance of a rear or side fire in their own community. It has proved a financial success, enlightened the men who have conducted it, brought to the front and established confidence in some of the most modest but best and ablest of farmers, and stands ready to protect the highest interests of the community and to lead the fight against any common enemy that may approach the people's rights hereafter.

Best of all that we can say of these men is that they have builded better than they knew, from the fact they have made apparent, that what they have done in Yuba county a few intelligent, reliable and determined men may similarly accomplish in any other good farming section of our own State or the United States.

#### On the State Grange.

The *Sutter County Farmer*, the farmers' co-operative journal of Yuba City, issued on Thursday, speaks of the State Grange as follows: The attendance is quite large, and yet not as many came from the south as we had anticipated. Those who did come express themselves delighted with the town and surroundings and the reception so cordially extended to them by our people. As years roll by these annual reunions (as we prefer to call them) are anticipated with increasing pleasure, and none need the recreation more than the isolated farmers and their household. A year has passed since we last met, a year of joys and sorrows, of trials, triumphs and disappointments. All this furnishes food for thought and a joyful greeting by those so fortunate to make this fraternal call. Though it is but a year, many old comrades are missed; some for one reason and some another, unable to attend, and others, alas! have gone to that bourne from whence no traveler returns. Their places are occupied by others, and in turn all will be succeeded, and let us hope our own experience will be a guiding star to our successors. In this Order the men and women are on a perfect equality. In this instance the men seem to do all the talking and the women the listening; this is not in accordance with the usual pretense of the lords of creation and should be revised. The literary exercises, which devolve chiefly upon the sisters, have so far been rendered with consummate ability and have been received with universal favor. The music, both vocal and instrumental, could scarcely have been excelled, and through its popularity is likely to encroach upon the other business of the session. The local Granges of Yuba, Sutter and Colusa counties, through their committees, are entitled to great credit for the very efficient manner in which they have discharged their labors. We feel sure that no promise heretofore made to this body has or will remain unfulfilled, and that our visitors will depart to their homes with a more exalted opinion of Marysville and her surroundings.

(Continued on page 329.)





### Berkeley Blossoms.

[Written for the RURAL PRESS by ANONYMA.]

Berkeley blossoms, bright and rare—  
(Sweetest blossomed anywhere),  
Were ye mindful of your duties  
While the sunlight dyed your beauties,  
As ye budded slow and saintly in the summer air?  
Berkeley roses, gold and cream,  
Did your folded petals dream  
Most of dark sad rooms and faces  
Turning mutely to the vases  
Where your bending clusters would in stately beauty  
gleam?  
Did ye dream so, cream and white,  
Waxen roses, frail and light,  
Of the pain ye would dissemble,  
Of the fingers that would tremble,  
To reach forth and clasp you in the weary, wakeful  
night?  
Purple pansies, widely blown,  
In your fancies was it known  
What your mistress was desiring,  
Bending o'er you so, untiring,  
While her soul's sweet musings in her clear eyes  
shone?  
Heliotrope in bud and bloom  
Breathing fragrance to the noon,  
She had meanings rare and tender,  
She had duties for your splendor,  
As she cut and bound you for the sorrow-haunted  
room.  
Dewy, dainty, softly fair,  
Berkeley blossoms, ye were there  
In the gilded vases smiling,  
All the long, sad hours beguiling,  
While about you hovered, surely, lost words from a  
prayer.

### The Evolution of Mrs. Thomas.\*

NUMBER 2.

[Written for the RURAL PRESS by M. H. F.]

If an audible voice from heaven had fallen upon the ear of the sad and troubled mother of the Thomas household, it could hardly have brought more surprise. She believed in a special Providence in a vague, general way, but nothing in her experience had ever seemed so direct and personal, so fatherly-kind, as this. The letters had caught her eye, and then she had read a dozen lines before she could quite take in the idea, a dozen more before she could believe her eyes. Why, here was a plan exactly fitted to her needs! There were other souls, then, as hungry and thirsty as her own, and here was the manna dropping from the sky, the water gushing from the rock, in response to their famished cry. Some women would have had doubts and fears lest this curriculum of scientific and historical and literary study might prove too long and difficult for their tired feet; but our heroine had a dauntless spirit. She was used to hard work. The discipline of all these years of toil had hardened her muscles and strengthened her will. She just slowly re-read the whole article, thanked God and took courage. Should she keep her thoughts and plans to herself, she queried silently, or should she talk it over with them all and ask their help and sympathy? The younger boys had gone to bed, so there were only Albert and the girls to be confronted with the scheme; but the poor mother felt strangely shy before these young scholars. She made up her mind, however, to take them into the council, and so struck womanfully into the subject.

"Here's something in the paper that interests me very much," she said with a little tremor in her voice, "and as you all seem to be about through with your lessons, I guess I'll read it aloud."

"Yes," assented Mary, just a trifle slowly, lest the interesting matter should prove rather dull to youthful listeners.

"It is about a new society—a sort of school for old folks—this is what it says," and Mrs. Thomas read the clear prefatory explanation, and then the aim and method and proposed plan of study for the Chautauqua Literary and Scientific Circle.

The children took it in silence, very much as they would have taken a short sermon, and then Albert said, jocosely, "Well, what does it prove?"

"It proves," said his mother, "that everybody isn't satisfied with the book-learning they have when they're 20 years old" (here Amy gave Albert a significant nudge with her elbow), "and that there is a chance for them to do some more studying even after they are 40; and," she slowly added, "I'm one of the people that feel so."

Mary drew her chair close beside her mother, and took her toil-worn hand. "You dear old mamma," she said, "you know more than 40 girls and boys, books or no books."

"That's all very well for you to say, Mary,"

but there's another side to it, and I'm going to be a—a—" she couldn't quite trust herself with the new word which she had skipped each time in reading—"I'm going to join."

Mr. Thomas, who was warming his feet at the grate, suddenly woke up. "Join what?" he asked.

"Mother is going to college," said Albert.

"Mamma is going to stop working for us every blessed minute, morning, noon and night," said Mary, "and going to do what she has a mind to 40 minutes every single day, and I'm going to help her! Here, mamma, let's have the paper. Now, papa, you listen." Again the C. L. S. C. article was read, and this time with all the vigor that Miss Mary's elocutionary training could bring to bear upon it.

Mr. Thomas seemed considerably dazed, but made no comments or objections.

"See," said Mary, "there's a 'Pacific Coast branch' just organized, and so, of course, we can find out all about it right away. Mamma shall 'belong,' shan't she, papa? And what's this first book?" ran on her voluble young tongue. "Green's Short History of the English People?" Why, that's the very book they've just bought for our school library, and I'll bring it home to-morrow!"

"Well, I guess you and mother will run it without my help," said Mr. Thomas, "judging by the way you go on."

"I'm going to help 'run it,' too," said Amy, kissing her mother good-night.

"And I speak for a professorship in the new college," said Albert.

"For my part," said Mr. Thomas, "I'll try and foot the bills."

And so it came about that before New Year's day, 1880, Mrs. Richard Thomas, of San Luis, became a Chautauquan and was duly enrolled as such upon the secretary's books at San Jose.

Mary brought home the Green's history, as she promised, but ere many days elapsed she and her father had a whispered consultation, and a copy was ordered from San Francisco, which in due time arrived and was formally presented to our Chautauquan. Mrs. Thomas had thought when she was young that she did not like history. Its cruelties and barbarisms shocked her gentle heart. It seemed to her that it was just a record of man's fierce greed and selfishness, with scarcely a gleam of noble feeling to redeem it.

"Right forever on the scaffold,  
Wrong forever on the throne."

So she had almost utterly neglected it in her limited school days, and since then she had really never opened a historical book. It had not been an alluring prospect to her, therefore, to see a history as the very first book she was to read in her new course; still she was glad that the Pacific Coast Chautauquans were behind their Eastern classmates, and so were doing the reading which had been done at the East a year previous. This year the Eastern class were reading Roman history, and Mrs. Thomas was sure that would be far more trying than English history. It did not seem as if the English were such wholesale butchers on principle. So our heroine fell resolutely to work. She did not see at first just where she was to find the required 40 minutes for the daily reading. It seemed as if she never had a spare moment, and a leisure hour was just a figure of speech to the busy house-mother; but the time must be found, if not in one entire period, then in odd minutes. There was usually a little time for sitting down in the afternoon, after the dinner work was cleared away, which had been wholly given to sewing. Out of this Mrs. Thomas tried to get her Chautauquan hour, but often there would be interruptions or some stress of work, so that the reading was put off till evening. Often there would be too much sociability in the evening to admit of much concentrated attention, but she persevered. The long, unused mental faculties were a little rusty, of course, and names and dates were more easily forgotten than learned; but she did not give up. Ere long she began to reap her reward. She had not read 50 pages in Green's history before she became so interested she could scarcely lay her book down. No romance could have charmed her so much. She found herself looking at history in an entirely new light; no longer was it the story of one tyrant succeeding another, by virtue of wielding a stronger battle-ax, or using baser perfidy, but instead, the record of the slow but steady uplifting of a great people. Mrs. Thomas found herself thinking of it as she went about her daily round of housework. Much of her cooking and clearing away she had done so often that it was almost a mechanical process, and now she found great advantage in this perfect familiarity with her duties. She cooked and washed dishes and swept and dusted in California, but her heart was far off in "Merrie England," with her ancestors of 1000 years ago. Out of the abundance of the heart the mouth speaketh, and it followed very naturally that at the table or by the evening fire-side she would open a conversation with the novel preface "I have been reading," and then tell the children of the way in which the English people grew through fierce struggles, lighted by heroic deeds and lives. Even Albert and Mary had not read much English history, and they very soon grew to depend on these intelligent bits of talk. The end of it was that the mother read with redoubled interest for the sake of telling it to the children, and thereby fastened the story in her own mind. The whole family grew interested. When the mother took up her book in the evening, if there was not the great-

est need of other study, she was besieged to read aloud, and then, when she had read awhile, Albert or Mary would take a turn at reading, and the father listened to it all with as keen zest as if he, too, were a Chautauquan.

Did the mending basket heap up and overflow on to shelves and into drawers? Not to any distressing degree. The daughters of the house nobly redeemed their promise. When Mrs. Thomas read aloud in the evening they plied their needles, if not with their mother's speed and dexterity, at least with very passable results; and every Saturday morning saw a pair of extremely energetic young ladies take hold of sweeping, cleaning, baking and cooking of all sorts. They had always been good girls to help, but now they felt pledged to see their mother through with her undertaking. She often looked at them through happy, grateful tears as they merrily drove her out of the kitchen and declared it was her schooltime and she must not be tardy. Mary had a great knack also in the management of that most untractable being—the small boy. In the Thomas household each boy had an ostensible amount of "chores" to do, but it by no means followed that he did them day by day of his own free will and choice. On the contrary, it was a notorious fact that it took far more energy on the part of some older member of the family to look after these boys and get the work out of them than to do it one's self. Mr. Thomas was not particularly successful as an overseer, and Mrs. Thomas had a way of doing altogether too many of these "chores" herself; but Mary was blessed with a sort of cheerful and contagious energy, which, when backed by the mother's and father's authority, was quite successful. She put it to good use now, and every morning she devoted a few moments to "cheering her band," like Marco Bozzaris. Woodboxes were filled, steps were cleaned, the yard put in order, balls and tops, stilts and traps, cages and machines, all picked up. "You know mother has got to have a little time, boys, and we must help her or she'll never get it in this world!" urged Captain Molly.

Thus a sweet spirit of helpfulness spread in the household, blessing both giver and receiver with a heavenly benediction.

(To be concluded.)

**THE TOMBOY AT WOMANHOOD.**—The girl romp, otherwise known as the Tomboy, is an eager, earnest, impulsive, glad-hearted, kind-souled specimen of genus feminine. If her laugh is too frequent, and her tone a trifle too emphatic, we are willing to overlook these for the sake of the true life and exulting vitality to which they are the escape-valves; and, indeed, we rather like the high-pressure nature which must close off its superfluous "steam" in such ebullitions. The glancing eye, the glowing cheek, the fresh, balmy breath, the lithe, graceful play of the limbs, tell a tale of healthy and vigorous physical development which is nature's best beauty. The soul and the mind will be developed also in due time, and we shall have before us a woman in the highest sense of the term. When the Tomboy has sprung up to a healthful and vigorous womanhood she will be ready to take hold of the duties of life, to become a worker in the great system of humanity. She will not sit down to sigh over the work given her to do, to simper nonsense, or fall sick at heart, but she will ever be ready to take up her burden of duty. In her track there will be sound philosophy, in her thoughts boldness and originality, in her heart heaven's purity, and the world will be better that she lived in it. To her allotted task she will bring health, vigor, energy and spirits; these will give her both the power and the endurance, without which her life must be, in some respects at least, a failure.—Cincinnati Enquirer.

**ANTI BIRD WEARING LEAGUES.**—The birds and the flowers have always gone together as types of innocent loveliness, and partly on that account have always found congenial friends in women. But of late the birds have found this attachment fatal. The fashion of wearing feathers and whole birds as headgear has led to such an enormous laughter of the birds that nature cannot make good the waste. Why will the women be so impatient to assume their wings? As it is, the pretty birds are disappearing so rapidly that their scientific friends are becoming alarmed, and in the true American way have formed a committee and issued an address. It is to be hoped that "anti-bird-wearing leagues" will now extend and flourish in the land, and that the woods and meadows may have rest from the relentless emissaries of fashion. The simple and unassisted resources of nature gave out long ago in the attempt to keep pace with woman's desire for flowers. And perhaps unless the fashions change, we shall have aviaries, as we have conservatories, where birds of striking plumage will be cultivated for the market.—Washington Star.

"Is THAT a Landseer, Mr. Croesus?" asked the visitor, pausing before the painting. "No," replied the host, "reckon it's a Durham; see how broad it is between the horns, and see the color and the curl on its forehead. That's a genuine Durham, sure. That ain't no Landseer."—Burdette.

**CITY BELLE** (pointing to a wild plant by the wayside).—"What's that?" Country cousin.—"That's milkweed." City Belle.—"Oh, yes, what you feed the cows on, I suppose."

### The Useless in Nature.

[Written for the RURAL PRESS by PROF. GRANVILLE F. FOSTER.]

No traveler to the sea-coast can fail in being struck with the vast numbers of apparently useless pebbles with which the beaches are strewn—mere fragments of rock detached from the storm-beaten cliffs overlooking the sea, worn smooth and polished by attrition and thrown up upon the shore. There they lie in exhaustless profusion, of all sizes, colors and forms, of no apparent use to anybody, save perhaps to the child, who, admiring them for their gaudy colors, chooses a few of them for jackstones. To the ordinary mind, what useless things are the pebbles!

The rainy season has come. The soil of our gardens is prepared after much labor and pains, and we plant therein the choicest and purest of seeds, but vain will be our hope if we look for no other seeds than ours to germinate. No sooner do the useful, yet delicate (delicate, perhaps, because useful), plants appear above ground but the worthless and hardy weeds must appear also, and while the former will require our constant and vigilant attention, the very elements themselves seem to have combined to promote the healthy and vigorous growth of the latter. To save the useful plants from utter destruction in their struggle (a bootless one unaided) for existence, a reversal of Darwin's favorite idea of the "Survival of the Fittest," we must vigorously ply the hoe, root out and toss over the garden wall the evil and noxious weeds, which to our minds are the very embodiment of utter uselessness. Indeed, in no pleasant mood, we cry out in our indignation: How comes it that such unsightly, useless, good-for-nothing weeds are allowed to grow in a world pronounced by the Almighty so good? Is it just and right for a benevolent Father to allow such weeds to grow to vex and annoy His children? Indeed, we often think had the world been in our hands to create, we would have been able to plan and construct it on a more reformed and progressive model.

Then there are the insect pests—the mosquito, fly, canker-worm, curculio, woolly aphid, and myriads of others, whose sole purpose of existence seems to be to inflict pain upon and give annoyance to man or to rob him outright of a well-earned hope of a harvest. Shall we believe that an all-wise God created them, or shall we adopt the solacing creed of the old Persian Magi, that Ahuro Mazdao, the Supreme, made the blue sky, the lofty and beautiful mountains, the laughing rill, the majestic river, in short, all that is grand and beautiful in Nature, but Ahriman, the devil, made the weeds, the insect pests and all that is evil, unsightly and hateful in Nature?

The mistake made here is in judging everything from the human standard of whether it is adapted to minister to the passions and appetites, or can be made to yield a pecuniary profit. Then, too, man's discipline must be taken into account. A perfect world, according to our standard, would have at least one very imperfect being in it—man; and the worst of it is that he would always remain in this condition—there would be and could be no improvement. Man wants difficulties to overcome, weeds to destroy, insect pests to study, and thus learn to avoid their annoyances and to save the fruits of the earth from their depredations, or a pitiable being indeed would he be. Then the learned hold, that having found out much already of the infinite wisdom and goodness of God, as portrayed in the scheme of creation, in the admirable adaptation of means to end displayed therein, and in the eminent usefulness of most of what appears about them, and since too, in the constant advance of science the circle of the utterly worthless narrows yearly in area, that all things have their uses, but man's ignorance prevents these being seen in many cases. It may be, too, for aught we know, that the world is still an unfinished work, that agencies are still at work putting on the finishing touches, and that in consequence, as an unfinished building, some of its parts may seem to be useless or unsightly or out of place, simply because we are profoundly ignorant of the far reaching and infinite designs of the Divine Master-builder.

The scholar, however, has made an advance beyond the ordinary untrained person, and sees uses where the latter does not. Take the case of the pebble. To the unreflecting and unob-servant mind, how utterly useless are the heaps of stones, scattered everywhere along the sea beach! But they have an intelligent story to tell the geologist—a wonderful story of the baths of fire and flood through which this old world of ours had to pass ere it was fitted for the advent of man, and by means of the fossils or parts of fossils contained therein, they may serve to extend the story to a description of the strange flora and fauna of periods when our planet itself was young. It is a fact that some very important facts, pertaining to the history of our globe, have been derived from the study of even pebbles. But the chemist, too, has had something to learn from pebbles, since a few years ago some very rare, simple substances were discovered by fortuitously analyzing in the laboratory a few rare pebbles picked up in out-of-the-way places.

And the term weed is only relative. What is esteemed a weed in America is often considered a very valuable plant in Europe, and the reverse. Then, too, many of the so-called weeds are from time to time found to contain

\* Continued from the RURAL PRESS of Sept. 26th.



active medicinal principles useful to the pharmacist, or are discovered to have a value by a use to which they can be put in the economic arts. A chemist has lately found quinine in a common despised weed of the fields and roadsides, and a vile shrub of Mexico has been found to furnish a fiber of great value in the arts.

Of the insect pests much might be said, for it is a fertile subject; but we must cut the matter short. It is pretty safe to conclude that any temporary inconveniences or annoyances arising from their habits of life are at least counterbalanced by some corresponding useful function which they perform in the economy of nature. Take the case of the mosquito, that almost intolerable pest, and yet that marvel of beauty when examined under the microscope. In the larva state, this insect acts as a scavenger in the stagnant waters in which it lives. As to the imago or completed insect, a late scientific authority assures us that the poison which the female inserts into the wound, whence she draws blood, has a medicinal use in fortifying the system more or less against the effect of malarial germs in the blood. If this is true, it is an incidental good to what seems an evil to us, though it is but fair to Madam Mosquito to say that she is not, as some suspect, possessed with the demon of vindictiveness against the human race. She must have blood, for certain functions necessary to the perpetuation of the mosquito race cannot be performed without it, and she is unable to employ her wonderful blood-pump to any advantage without dilution with the liquid poison she injects into the wound. It remains here to say that the male mosquito, more retired in his habits and less bloody in his intentions, contents himself with the juices of succulent plants. A number of years ago some of the Central States suffered severely from the grasshopper plague. It was, at the time, a terrible calamity, but there was a compensation. It was found that the soil was materially increased in its fertility by incorporation with it of the remains of these pests, and, therefore, however unpleasant at the time seemed the awful scourge, when in the path of the invading host the very heavens were darkened, and nothing but barrenness and desolation left behind, it became pleasant afterward when the compensation took place in increased fertility of the soil and consequently increased harvests.

Nature is a system of compensations when not interfered with by man, who, often by his conduct, robs himself of the benefit of these compensations. An evil at one time is often fully counterbalanced by a corresponding good—a good often depending for its very existence upon the very evil preceding it. Man oftentimes in destroying an evil hinders himself from receiving an ultimate good. To destroy the birds because they rob us of a small share of corn, which, after all, is their due for the good they do, would be to multiply the number of insects, which might leave us no corn at all. To cut down the forests, under the notion that the land occupied by the trees might be better employed in growing thereon grain, might result in drying up the fountains of water in the firmament above us, and thus defeating the very object aimed at.

History attests the fact that most of the great evils of the world were only the mere pains of travail, which resulted in the birth of some great and lasting good to the race. Let our labor friends who think they have not received their share in the distribution of wealth, and let the socialists and communists who, like Ishmael, whose hand was against every man, have placed themselves in antagonism to the existing state of things, beware. It is possible by seeming to right present wrongs, or by destroying the status of society now existing, to prevent the coming of a good depending on the very existence of the evils which now afflict society, or, in seeking to escape one evil, bring upon their heads hundreds they know not of.

Sunol Glen.

### The Churches on Strong Drink.

At the Congregationalists' Convention in Woodland last week, the Committee on Bills and Overtures presented the following resolutions:

*Resolved*, That this association would express its sympathy with the W. C. T. U., and would recommend the active co-operation of the women of our churches.

*Resolved*, That we especially favor the endeavors of this society to secure the passing of a law by our Legislature for scientific temperance instruction in schools.

The report of the Committee on Temperance was presented and adopted. The gist of the report is contained in the resolutions that follow:

1. That we will labor the best we know and until final victory for the total destruction of the liquor traffic.

2. That we recommend to our pastors increasing efforts to enlighten the people in this behalf, and to the churches to see to it that the children in the Sunday-school receive ample instruction regarding the evils of strong drink.

3. That we earnestly request our people not to encourage the liquor traffic by their trade.

4. That we urge our voters to vote in the fear of God, and to withhold their ballots from all whose position or influence favors the liquor traffic.

"NAUGHT" AND "NOTHING."—Many seem to think that "naught" means "nothing," whereas "aught" actually means anything. This is to explain that it is wrong to say "aught" for the "cipher" (0), the proper term for which is "naught."

## YOUNG FOLKS' COLUMN.

### Grandmother's Quilt.

[Written for the RURAL PRESS by LAURA EVERETT.]

Only a patchwork quilt,  
Faded and torn;  
Packed in this chest away,  
Worthless and worn.  
Only a patchwork quilt,  
Ugly and old;  
How many has it kept  
From winter cold?  
Only a patchwork quilt,  
Log-cabin style,  
Pieced forty years ago  
By Grandma Lisle.  
Ugly you say it is,  
Worthless and old;  
Yet has in grandma's eyes  
A wealth untold.  
Each piece to her brings back  
Memories fond,  
Twixt her and dear ones  
A holy bond.  
She knows whence each piece came;  
That indigo  
Was the last dress she made  
For little Flo.  
That fine soft brown down there  
Was Kate's best dress  
Full fifty years ago—  
It can't be less.  
This was Will's baby dress,  
And that was May's;  
Amelia, when twelve, spun  
Those browns and grays.  
Here in the very last block,  
The final page,  
Is grandma's wedding dress,  
Yellow with age.  
Ye searchers for antique,  
Come not too near.  
'Tis dear to grandma's heart  
As life is dear.

Marysville, Cal.

### From Our Younger Folks.

DEAR EDITOR:—How for Morro and its surroundings? As nobody else seems to notice poor little Morro, I will write a few lines. The thrashing will be through Monday night. I know everybody will be glad. People are hauling their grain to Morro and Cayucos to be shipped. There have been three steamers in at Morro. The *Newport* once, the *Salinas* twice. The *Salinas* stuck on the sandbar for two days. When a steamer appears I never feel easy until it is in and out again. There were three steamer loads of grain taken from Morro and there is yet more to go out. I think that is pretty good for Morro. The Portuguese will soon be thrashing beans, and then there will be more freight.

There is a larger school in Morro than there ever was. There used to be only 12 scholars and now there are 25. Our teacher's name is Mrs. Hamlin and she is a fine teacher.

The cattle are dying up Morro creek with the blackleg. I am sorry, because it is a great loss to the dairymen.

They have a very fine teacher up Morro creek. Her name is Miss Churchill.

Cayucos can boast of having had an ice-cream festival one night for the church, also, a theater and a minstrel show two nights. It has two butcher shops and two dressmaker's shops, three hotels and a number of stores.

San Simeon bay is growing; they are building a new schoolhouse.

I had almost forgotten to speak of the railroad. It is to come down Morro creek. There are 20 men working on the survey.

Morro, Cal.

EDITH MEAD.

From Visalia.

DEAR EDITOR:—I am an orphan girl of 12. I have a brother nine years old. We live on a farm with our uncle and aunt. We live about eight miles from Visalia. My uncle has 640 acres of land; he raises wheat, barley, Egyptian corn, fruit and vegetables. We have 11 horses and four little colts, and about 150 cattle, and a good many hogs. My aunt raises ducks, chickens and turkeys. We have four dogs and five cats; two of the cats are mine; their names are Pete and Spindleshanks. I will close now, for I am very much afraid this will find its way to the waste-basket. MOLLIE BELGRADE, Visalia.

### The Sloth.

[Written for the RURAL PRESS by EDITH M. SFAR.]

There are two different kinds of the sloth, distinguished from each other by their claws—one called the unau, which has only two claws upon each foot, and being without a tail; the other, which is called the ai, having a tail, and three claws upon each foot. The unau has a longer snout, the ear more apparent and the fur very different from the other. It differs also in the number of ribs; it has 46, while the ai has but 28. They are very slow in their movements; it often takes them a week in crawling to a tree not 50 yards distant. All motions seem to torture them; every step it takes it will set forth a melancholy cry. The ai from which I shall take my description, and from which the other differs only in the slight particulars above mentioned, and being more active, is of the size of the badger. Its fur is coarse and staring, somewhat resembling dried grass. The tail is very short, the mouth extending from ear to ear, the eyes dull and heavy. It has four stomachs.

## GOOD HEALTH.

### Boys and Cigarettes.

The city council of Oakland has recently done two very wise things: First, in passing an ordinance making it a misdemeanor for boys under the age of 16 to smoke cigarettes in any public place; and second, in passing a "curfew" ordinance, requiring the city hall bell to be rung at nine o'clock every evening, after which hour every young person under the age of 16 must go directly home and keep within doors until morning. The first ordinance, we understand, is promptly enforced; but we do not hear of any arrests for those ignoring the "curfew," and those whose business keeps them on the street after that hour are very much surprised at the great number of quite young-looking boys and girls whom the police seem to regard as having passed the proscriptive age.

Cigarette smoking, by young boys, has become an alarming evil in both Oakland and this city, and the ordinance referred to, if properly enforced, cannot fail to have a good sanitary effect, while it will also accomplish much moral good otherwise. In nine cases out of ten the boy who gets the habit of cigarette smoking well fixed upon him will have his days largely shortened and never amount to much in any way. An inveterate cigarette or cigar smoker gives very little promise of any very extended or useful future. A large portion of that class fall into the ranks of dullards, while all are more or less affected with a weak brain and decided lack of stamina.

The German Government understands this matter fully and has placed its interdiction upon the habit with boys of under age, giving as the reason that a young man who thus abuses himself can never make an effective or useful soldier; and all male Germans are required to give at least three years of their lives—from the age of 21 to 24—to active duties as a soldier in camp. To be serviceable to the Government it is considered necessary that they should not allow their intellect and physical strength to be undermined with the pernicious habit. And yet the Germans, as a nation, are the greatest smokers in the world. But under present laws they are not allowed to incur the habit until the physical system has become fully developed and in a better condition to withstand the poisoning and debilitating influences of tobacco. Is Oakland to be alone in taking care of her embryo citizens who are going to the bad? Will not San Francisco also assert herself in this direction? Just what the moral difference is in the act of smoking one day short of 16 and two or any number of days after, we cannot see, but as that question is not just now a matter of discussion, we should try to be thankful for even the small modicum of good sense that might be evinced by our city fathers if they would follow in the good way, only so far as the Oakland council has gone.

TETANUS TREATED BY REST.—Dr. De Renzi states, in the *Rivista Clinica*, that by treating patients with traumatic tetanus by means of perfect rest, he has been able to restore four out of five to health; whereas when treated in other ways these patients usually die in two or three days. He places the cases in a special room, where absolute silence reigns. Even in the passages leading to it, and in the neighboring wards, care is taken to lay down carpets so that no sound shall penetrate the tetanus ward. The door of the latter is, of course, well oiled, so as to open and shut noiselessly, and the patient's ears are stuffed with cotton wool, he himself being strictly enjoined not to make the slightest noise. He must, of course, be fed. This has generally been considered impossible, the teeth being clinched and the spasmodic contraction being increased by attempts to masticate. The obstacle may, however, be easily overcome; by parting the jaws and introducing liquid food, swallowing is accomplished without difficulty. This method of treating traumatic tetanus has been tried with success by several Italian practitioners—Drs. Pisani, Maragliano, Ria, etc.

THE THROAT.—The throat is a wonderful instrument of music. Place the fingers upon it, and every time you speak you can feel the vibration of the musical organs. Anything that ever touches the throat impairs the purity of those sounds. Throw a cloth over the strings of a piano or violin and get music out of it if you can. So every piece of cloth which surrounds the throat impairs the sweetness of the voice. Women go with necks bare; men have theirs swathed and bandaged, and 10 women have sweet voices where one man has. A man's voice should be as pure as a woman's. Why not? He is shaved and choked. God has provided a covering for a man's throat, light and soft. It clothes the neck and preserves the health. But man gets a sharp iron, scrapes his neck and face, ties a rag around the former, takes cold, has a sore throat, bronchitis, consumption, and dies.—*Christian Advocate*.

PRECOCITY.—Precocity is the too early unfolding of the higher faculties of the mind. For instance, the love of sport and play in a child would not indicate precocity; but a dislike of sport, and a love of arts, sciences and subjects proper for adults, would. Precocity is generally at the expense of physical development.

## DOMESTIC ECONOMY.

### Tested Recipes.

[Written for the RURAL PRESS by ADA E. TAYLOR.]

Daisy Sponge Cake.—One cup sugar, one cup flour, six eggs, a little salt, one teaspoonful yeast powder. Beat yolks and whites separately, mix sugar with beaten yolks, add whites beaten stiff, sift yeast powder with flour, beat all together thoroughly. Bake rather slowly. Flavor to taste.

Delicious Hotcakes.—One quart flour, small half cup yeast, a little salt, mix to a thin batter with warm milk, in the morning add one teaspoonful of yeast powder, stir briskly for a moment. When fried they are as light as a feather.

Omelet.—Four eggs, one cup sweet milk, a little salt; beat whites and yolks separately, beat the yolks and milk together, whites and salt, then mix very gently, pour in a buttered tin; when commencing to set, place in the oven a few minutes.

Epicurean Cake.—One cup sugar, yolks of three eggs, two small cups flour, one cup sweet cream. Beat the yolks very light in three tablespoonfuls of sweet milk, mix with the sugar; then add cream and a little salt, sift two teaspoonfuls of baking powder with flour, and mix lightly. Bake in a shallow tin, rather quickly. Flavor to taste. When baked, beat the whites of three eggs to a stiff froth, add one-half cup of white sugar, one teaspoonful of flavoring, and spread over the top, return to the oven a few seconds.

Mulled Buttermilk.—To two quarts of fresh buttermilk, when about scalding hot, add a teacup of sugar, two well-beaten eggs, a teaspoonful of ground allspice, and boil together. Have ready in a tureen some nice bits of light bread, and turn the buttermilk over them. Good either hot or cold.

Fruit Cake.—One pound sugar, one pound of butter, one pound of flour, twelve eggs, two pounds raisins, one pound currants, one pound citron, one-half cup syrup, one cup sour milk, one teaspoonful soda, spices of all kinds, one wineglass of brandy and one of wine. Bake two hours.

Creamed Tapioca.—Put one small cup of tapioca in water and let it stand over night. In the morning drain it, add a quart of milk, a pinch of salt and a teacupful of sugar. Boil it five minutes in a double farina-kettle, and add the beaten yolks of four eggs; boil it a trifle longer and remove as soon as it becomes a cream. When cold, stir into it a teaspoonful of vanilla and the beaten whites of four eggs. Set on ice or in a very cold place. It is frothy and delicate and very attractive in appearance.

Fricassee Chicken, with Green Corn.—One chicken, six ears of green corn, one teacupful of sweet cream, two tablespoonfuls of flour, a little water, a large lump of butter, seasoning. Cut the corn from the cob; put it in the pot with water enough to cover it; let it stew until the corn is nearly done; then cut up the chicken, put it with the corn, and let them stew together for about half an hour; add pepper to season it and cream; thicken with the flour and butter, and add the salt the last thing.

Layer Pudding.—Place in a pudding dish a layer of fine bread crumbs, then a layer of finely-chopped apples; on top of each layer of apples put four tablespoonfuls of white sugar and one of butter, cut in small bits; have the top layer bread crumbs. Let the pudding stand three or four hours before putting in the oven. To be eaten with a sweet sauce or beaten cream.

### Hints to Housewives.

[Written for the RURAL PRESS by MRS. DORA KOPFITT.]

In dressing wounds, instead of using linen rags, tinfoil is a most excellent substitute, being cooling and does not stick. There is no danger whatever in it, being used entirely by the surgeons of the German army. Save the foil wherein the compressed yeast is wrapped, wash it and put away for use. Don't take any lining of teaboxes.

To mend leaky water pipes, where a plumber is not handy, turn off the water and dry the pipes by waiting or pouring over scalding water; then take shoemakers' cement (you can buy a bottle from any shoemaker for 25 cents), pour some of it on a piece of pliable, warmed leather, and quickly apply to the pipe and wrap tightly with some braiding or other flat, strong material; in 15 minutes turn on water.

Alma, Cal.

ITALIAN CREAM.—Rub the zest of two lemons upon three or four lumps of loaf sugar; stir these into a pint of rich cream and add enough sugar to sweeten. Whip the cream with the juice of one lemon, straining in one ounce of gelatine that has been dissolved in a little water. When thoroughly light, flavor to taste and pour into a mold and freeze. When served, garnish with preserved fruit.

POPOVERS.—Two cups sweet milk, two eggs, two teaspoons of baking powder, half teaspoon of salt, and enough flour to make a thin batter; bake quickly in gem pans.—MRS. SARAH BRITTINGHAM, San Felipe.





A. T. DEWEY. W. B. EWER.

Published by DEWEY &amp; CO.

Office, 252 Market St., N. E. cor. Front St., S. F.  
Take the Elevator, No. 12 Front St.

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A. T. DEWEY. W. B. EWER. G. H. STRONG

SAN FRANCISCO:

Saturday, Oct. 16, 1886.

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## The Week.

Winter is drawing on with shower, and frost, and snow in the higher altitudes. There was rain at Vacaville on Saturday last, but not in amount sufficient to harm the grapes. White frosts have appeared in many places, and here and there light films of ice have formed on still water. The mountains in Lake county were snow-clad on Sunday morning, and on the same day Sacramento announced the approach of winter with white frost and a temperature of 36° Fah. These little weather tonics seem to act well on the blood, and the delightful clear sunlight, which is characteristic of California winter, is a blessing which all can enjoy. So far there has been no complaint of winter's heralds, except that they trod too heavily on the bean crop in Northern Santa Barbara and in San Luis Obispo counties. Large destruction is reported by telegraph, which we trust later reports may lessen.

The autumn fairs are closing this week and the winter fairs in which the citrus fruits reign are being arranged. The central part of the State is determined to do better even than last year. We trust the southern counties will begin early, not only for their local citrus fairs, but for a grand, central fair in which all will do their best. It seems to us that it is time

that Los Angeles should put forth inducements to secure the grandest citrus display the world has ever seen. There is plenty of material for it in the southern counties.

## Pluck and Energy.

There are thousands of young men in this city and throughout the country who have passed through their school days and arrived at the point where they must throw off the dependence of youth and assume the helm of their own fortunes. It is one of the most eventful periods in human history. All depends on the way they start. Very few seem to think how much success hinges upon the spirit, pluck, energy and equipment of the individual at the outset. Five or six years will usually determine what sort of a destiny the maturer years of manhood will develop. Fortunate circumstances may place here and there one above the plane of toil and effort; but it is certain that 99 out of every 100 will have to work out their life problem. If a young man starts life in a mood of indifference, with low aims and ambitions, inclined to wait till he is married and settled in life before he puts forth any special effort, or to trust to luck, adventure or a prize sent to him from the wheel of fortune, he may for a season have a good time, but old age is almost certain to overtake him not far from the place where he started.

The first element of success is a proper equipment. "The winds and waves," says Gibbon, "are on the side of the ablest navigators," and it may be added that fortune favors the man who woos her knowledge. Take, for instance, the most unskilled labor of all, that of the tiller of the soil. It is his business to make the earth grow food; the elementary rules are very simple, the practice easy, yet between the worst agriculture and the best lie agricultural chemistry, the application of machinery, the law of the economy of force and some of the curious problems of physiology. But each point of science which the farmer acquires will not only make him a wiser but better tiller of the soil. The same fact is true of the whole catalogue of manual craftsmen—the blacksmith, carpenter, tailor, bricklayer, printer, or those who toil with hand and brain—doctors, lawyers, editors, reporters, engineers and preachers. Whoever would grow and thrive must become skilled in his particular art or vocation. This is no world for mopes and idlers. The young man who cares more for fine clothes than a knowledge of his business, more for cards, billiards, places of amusement than hard work and fidelity to his employer, may for awhile enjoy a sort of glow-worm glitter, but will always be a routine man, a drudge and an automaton in his work.

Then along with a good equipment, a young man must have pluck, courage, hope, faith and an intelligent appreciation of opportunities. Possessing these elements, he can hardly fail. His reward will be commensurate to his deserts. There may be exceptional cases, but they will generally be found not attributable to the man so much as to those contingencies that like tropical storms suddenly come and give no warning, and destroy the work of a life-time in an hour. But such squalls are rare. And then the plucky young man cannot be wrecked by any ordinary gale. He is equal to the emergencies. We learn from the Santa Rosa Democrat that two well-dressed young men recently passed through that place en route to Mendocino county, where they intended to take up and pre-empt a homestead. Through no fault of theirs, but owing to dull times, they had been discharged from lucrative positions in San Francisco, and after seeking employment for a few days concluded to strike out and make a situation. This kind of pluck is sure to win in the struggle of life. It is safe to predict that within a few years these young men will be independent and prosperous, while the great majority of those who hang about large towns and cities, content to be book-keepers and clerks, will be dependent upon the caprice of employers and as helpless as a fish out of water if thrown out of employment. And yet, we regret to say, but few young men of the present generation are amply endowed with this kind of pluck and energy. Many of them prefer to be duds and ladies' poodles, counter-jumpers and lackeys in the city than strong, independent and valiant men in the country, and verily, they have their reward.

## The Cattle Plague.

Upon another page of this issue we give an important article by Dr. Clausen, a leading veterinarian of this city, on the symptoms, treatment and pathology of pleuro-pneumonia. The points presented by Dr. Clausen will be received with much interest by our readers on this coast, because of the foothold which the disease is unfortunately obtaining east of the Rocky mountains. We have trouble enough in this State with black-leg and other minor cattle diseases, and all should be on the alert lest something more grievous should gain access. No doubt the matter will be brought to the attention of the coming Legislature, and it should be the duty of all interested to inform themselves so as to aid in the intelligent handling of the subject by the legislators. We notice that our Nevada neighbors are awake to the dangers of the situation. At the Reno State Fair last week an address was delivered by Mr. Mercer, of Cheyenne, in which we find this paragraph:

Hundreds of years ago there was developed in the high mountains of Central Europe an insidious and fatal bovine disease known as pleuro-pneumonia. Confined to this high plateau, whence the cattle could not descend to the plains or settlements below, and where each farmer had but a few head of cattle and them under fence, the disease slowly spread until every herd was infected. About this time war was going on in the plains below, and the supply of beef being exhausted, a requisition was made on the mountain country. In this way diseased animals were brought into the channels of commerce, and from the disease center thus created, animals have been carried to nearly all parts of the globe and the fatal infection given off. The disease is carried, not developed. The source whence came each new outbreak can be as easily traced as a white line on a blackboard. From this and other contagious diseases more cattle have died than to-day exist on the face of the earth. And this disease is now safely anchored in six of the Atlantic States—New York, New Jersey, Pennsylvania, Delaware, Maryland and Virginia—and recently it has broken out in Illinois. This disease is bad enough in the old States, where each farmer has his cattle inclosed, so as to prevent their coming in contact. But on the open plains there are no fences, and nothing to prevent the general mixing of herds. Hence, one sick animal turned loose on the plains would inoculate the entire cattle country, and in a few months reduce to poverty all of our present wealthy stockmen. The constant western movement of high-grade cattle for the purpose of improving our herds renders it impossible to tell the day or the hour when an infected animal will be shipped among us. Under these circumstances the only safety lies in absolute quarantine against all States or counties where bovine diseases exist. Old Mexico on the south and British Columbia on the north are without sanitary laws, and almost the entire west coast of the Pacific ocean is lined with sick cattle. Under the circumstances, it behooves every citizen of the State of Nevada to see to it that the next Legislature takes action on this subject.

We hardly understand the allusion to the "west coast of the Pacific ocean." This must be the east coast of Asia and Australia. There is no cattle movement this way from Asia. Some cattle are being brought from Australia and New Zealand, but we have not heard of trouble there of late. However, it is important to guard against the introduction of such a disease from any quarter, and therefore there should be suitable regulations adopted by the State concerning the introduction of animals and the treatment of any dangerous disease which might break out. The U. S. quarantine arrests imported animals, but the quarantine is not carefully enough guarded to prevent distribution of infection should any attend the animals. The subject is worthy of attention.

The latest telegrams from the seat of the disease in Chicago bring the statement of Dr. Salmon, Chief of the Bureau of Animal Industry, that investigations of the past week show that pleuro-pneumonia is widely scattered among the cattle at Chicago. He is perfecting arrangements to secure the quarantine of exposed animals and to slaughter diseased ones. In this work he has the hearty support and co-operation of the State Cattle Commission of Illinois. A new quarantine notice has been issued, in which the penalties provided by the national law are set forth. The experience of the last few weeks is inciting Commissioner Colman to claim again from Congress the powers which he asked for last winter. He advocates the passage of a law by Congress that will give the Department authority to slaughter diseased and exposed animals, and appropriate a fund sufficient to at least partially indemnify the owners.

## California Poultry Association.

The fall meeting of the California Poultry Association was held Wednesday, Oct. 13th, at the rooms of the State Board of Horticulture, No. 40 California street, S. F., President Geo. B. Bayley in the chair. There were present Secretary Geo. T. Marsh and Messrs. Cousens, Crowell, Everett, Lund, McBirney, McFarling, Newhall and Waite.

Owing to receipts having fallen short of expenditures connected with the exhibition last winter, a deficit of somewhat over \$130 was reported, the difference having been advanced by President Bayley. After some informal discussion of the ways and means question, measures were taken toward making good the deficiency.

Mr. Crowell, from the Committee on Amending the Constitution, gave notice that, at the annual meeting in April next, they would recommend that the offices of recording secretary and treasurer be consolidated; that the annual meeting for election of officers be held in January, during or immediately after the exhibition, or in case no exhibition be had, on the second Wednesday of the year; and that the number of the Executive Committee be increased from 12 to 15.

M. W. Parker, of Biggs, and H. R. Bowie, G. H. De Mamiel and Frank J. Warren, of San Francisco, were elected members, and Chas. M. Chase and H. N. Stevens honorary members.

The question of having a show the coming winter was earnestly debated. In view of the lack of attendance at the last, the prevailing dullness of the times, and the experience of societies in Eastern cities, who have found it expedient to skip a year and thus regain the charm of novelty, it was finally voted to hold no exhibition until January, 1888. Adjourned.

**SECRET OF SUCCESS.**—That great and shining example of success as a workingman, Benjamin Franklin, has left to the workingman of the present day, in the following valuable sentiment, the key to the secret of his advancement in life: "If any one tells you that a workman can become rich otherwise than by labor and saving, do not listen to him; he is a poisoner." In the first place, it is necessary to labor with judgment, intelligence, patience, perseverance and constancy. In the second place, it is necessary to save. Save what? To save both time and money. Franklin saved the wages of his toil and purchased books; made good use of his leisure time, studied those books and mastered their contents. Thus, by simply persevering, strictly and firmly, in this, the guiding rule of his life, he became rich in purse and eminent in knowledge. By industry and frugality at all times and in all things, he became a master workman, a philosopher, a statesman and a sage, and beloved and respected by all men within the bounds of civilization. The course pursued by Franklin is open to every workman in America; the key to success is in every workman's hand. If it fails to admit him to the enjoyment of at least a reasonable competency, it is because it is rusted in the lock for want of use.

**WAGONS AND ROADS.**—Are roads made for wagons, or wagons for roads? The municipal authorities of a town in Wisconsin, says the *Carriage Journal*, have been giving this query some consideration and have issued a tire ordinance requiring loads of 3000 pounds to be carried in wagons having tires not less than two and a half inches wide. Manufacturers may be inclined to regard this mandate as an interference with their right to make or change the styles of wagons. One thing is certain—our roads would be a great deal better if all heavy loads were drawn on wagons with four-inch tire, instead of one and one-half or one and five-eighths inch tire.

## Please Send in Your Subscriptions.

We are grateful to all subscribers who, when called upon by one of our agents, pay promptly and in full whatever is due us on account. We thank even more heartily those who never allow themselves to run behind, but without waiting to be called upon, remit to us, whenever they find their subscription due. Beside the financial aid they thus afford in carrying on the paper, such patrons cheer us with a very practical assurance that our labors in their behalf are at once successful and appreciated.



## Political Education.

Among the many admirable suggestions in Senator Stanford's address to the trustees of the Leland Stanford, Junior, University, the following is especially worthy of note:

It should be the aim of the institution to entertain and inculcate broad and general ideas of progress and of the capacity of mankind for advancement in civilization. It is clear that to insure the steady advancement of civilization great care must be exercised in the matter of the general development of the great body of the people. They need education in the fundamental principles of government, and we know of no text so plain and so suggestive as that clause in our Declaration of Independence which declares that "among the inalienable rights of man are life, liberty, and the pursuit of happiness, and that to secure these rights governments are instituted among men, deriving their just powers from the consent of the governed."

We sincerely hope a professorship may be instituted in this institution, when it takes shape, for the special development of this idea. Political instruction should form a liberal feature of every high-school and academic course. An intelligent understanding of our political system, the history of its origin, the ideas it represents, and the mission it is destined to fulfill, are essential qualities of intelligent citizenship. It is a kind of knowledge that is absolutely necessary to preserve the tranquillity and stability of free government. Proudly as we may boast of our free schools and the general diffusion of knowledge, there is more danger to be apprehended from ignorance of and indifference to the mechanism and working of our system than from any other quarter.

General Grant never said a better thing than the following, in his speech to the Army of the Tennessee: "In a republic like ours, where the citizen is the sovereign and the official the servant, where no power is exercised except by the will of the people, it is important that the sovereign, the people, should foster intelligence—that intelligence which is to preserve us as a free nation. If we are to have another contest in the near future of our national existence, we predict that the dividing line will not be Mason and Dixon, but between patriotism and intelligence on one side and superstition and ignorance on the other." We see at every election hundreds marched to the polls led by a few political captains, who fix the slates, dictate the votes, and take the offices. They toss up their caps, set all the old barrels ablaze, and tear campaign odes and songs to tatters for some political leader whose sophistry and tricks of words they have not the skill to detect and unravel. They take their cue from the inflammatory articles of papers that wear the brass collar of some boss or political ring. Now it is the duty of every man to be able to tell wherein his government differs from all other forms of government. He should know when a question is in agitation, wherein it tends to thwart its central idea and hamper the full play of its energies, without asking the itinerant peddler of political nostrums who has a special interest in puffing his wares. We are not talking of a liberal education. That boon is not possible to all. But there is no man so busy or absorbingly occupied who possesses average ability that may not acquire such a practical knowledge of political affairs if he cares to and is economical of his time.

And then, just in proportion as men apprehend the nature of the truths and principles which underlie our system of government, and are richly furnished in the political literature of the day, will be their ability to break away from party yokes, caucus management, the drill of cliques and rings, and assert the right to think and act from the standpoint of their own manhood and individuality. Of course, party organization in some shape may to a certain extent be necessary, in order to gather up and focalize the will of the people; but when they become, as they are apt to, a sort of strait-jacket, cut and made in advance of the sovereign action of the people, rectilinear flumes in which their votes must run, then they are an incubus that should not be tolerated. It is quite rare nowadays to see a man nominated to any judicial or legislative position who is the spontaneous choice of the people. Their will is so dyked and hedged by party drill and management that it is rarely gratified. Now, knowledge is power, and political knowledge especially makes a man conscious of his worth, and just so far as he is firmly seated upon the

throne of his reason will he claim the right to hold the scepter that guides his actions. And in the language of Senator Stanford, "With these principles fairly recognized, agrarianism and communism can have only an ephemeral existence." For these and many other reasons that could be given, we hope that his magnificent endowment may give prominence to this feature of education.

## The Heroic Remedy.

It must be acknowledged that the codlin moth is becoming most painfully oppressive, and unless something effective is done by the growers, several of our leading fruits will be well-nigh rendered valueless. We notice that some people are advocating the "heroic remedy," which consists in picking and destroying all the fruit as soon as it reaches size enough to gather, and before the worm has time to mature. It does not appear how all the growers in any district, or in the State, can be induced, not only to sacrifice their crop, but also to foot the heavy bills for picking it clean from the trees. It is not possible, so far, to get growers to agree on any proposition relating to the destruction of insects, and how they can be made to do this immense work is beyond our powers of penetration. We notice that some writers are commending the heroic treatment in destroying the crop of apples and pears, as though that would be sufficient. This would not do. If there are no apples and pears, quinces will suit the moth just as well, and they will destroy peaches also. We bought a box of peaches last week which were badly infested. We do not mean with the larvae of the peach moth, but with the codlin moth larvae. This pest will take one fruit if another is not handy, and it is hard to tell what it will not accept on a pinch. We consider the heroic remedy quite impracticable both on account of the disposition of the people and the disposition of the insect, and it seems to us that time occupied in talking in favor of it is wasted. Let us devise something more practicable.

## Silk Culture at the Fairs.

We intended to have alluded sooner to the exhibits made by the State Board of Silk Culture at the State and Mechanics' Institute Fairs. The silk exhibits for the last few years have been very fine at both these fairs, and have been made in such a way that the public has had an actual demonstration of the reeling process and many hints of the methods of rearing the worms and securing the cocoons. There has also been a profusion of resultant products shown, and the result has been a wide extension of the interest in the industry, which bids fair to become of great importance as a household avocation, employing the spare time of the women and children to advantage during a portion of the year.

The display at the State Fair, which we had opportunity to study best, was a most satisfactory one. It was planned and carried out by Mrs. Renzi, secretary of the Board, and she was indefatigable in her efforts to please and instruct the throngs of people who visited the exhibit. The new machinery ordered by the Board from Italy did not arrive in time for use at this year's fair; but one of the old steam reels was used and it did very well for popular demonstration. Two of the ladies from the State Filature in this city were at the fair and did their parts well. There were also glass cases filled with raw silk of earlier reelings, cocoons, manufactured silk and specimens of almost the whole paraphernalia of silk-growing. Interesting publications were distributed. The exhibit was given a high award by the judges, and the popular verdict approved the decision.

DON'T LEAVE THE END STICKING OUT.—A Yolo man, the *Democrat* says, lately lost a valuable horse in an unexpected and peculiar manner. A bolt projected through the door about an inch into the shed where the horses were stabled. In a difficulty between the animals, one ran against the bolt, severed his jugular vein, and died in a short time. The horse was valued at \$250.

OVER 15,500,000 pounds of fruit have been shipped over the Vaca Valley Railroad during the present season.

## Flax Manufactures.

There is little gained from the flax crop in this State but the seed, and the seed returns do not lead to large growth of the crop. The local oil mills have to get a large part of their seed abroad. The crop is a hard one on the land, but if more could be realized out of it, the grower could afford to restore fertility. There has been from time to time agitation to establish linen factories, etc., with a view of utilizing the flax fiber, but no great progress has been made in this direction. Growing flax for fiber is less exhausting to the land than growing for the seed, and if a good market could be found for the fiber, the beautiful plant could be used to advantage in diversifying our productions. The improvement in fiber-extracting machines promises to reduce the difficulty which has existed in this branch of the production. In view of the possibility of a demand for flax either for seed or fiber, the College of Agriculture obtained last year seed of the several prominent varieties of flax grown in European countries, and grew them this summer on the experimental grounds at Berkeley. The results of the experiment will no doubt be made known ere long, and samples of seed offered to those who desire to experiment for themselves.

These facts were brought to mind by a statement which we find in an Eastern exchange concerning a new use for the fiber of the flax plant, which promises to consume considerable quantities of it. The enterprise has been established at Mankato, Minnesota, in a district which has been producing considerable flax for seed, but had no way of gaining anything from the fiber. It seems that large, substantial buildings have been erected at Mankato by the Standard Fiber-ware Company, an incorporation. The following are the leading items in the description given of the establishment:

The buildings are brick, all two stories except engine and boiler-house and water-proof house. The latter is 14x25, the former 20x58. The main factory is 40x150, with wing 30x36; the finishing building 38x70, all built in the most substantial manner. They have 150-horse power Butman Furnace Company's boiler, 60-horse power Westinghouse engine; equalized system of steam heating both buildings and dry-rooms; two beating engines and one finishing engine for preparing the fiber, which is chiefly flax—tow; one board machine to make the fiber into board for pail and other bottoms and pressed ware; one pail machine by which the fiber is wound into pail bodies; one pail press and five other presses chiefly for pressing board into wash-basins, mats and other articles; one steam board and one steam pail calender, hoop-cutters, hoop-formers, bottomer, etc., machinery necessary to complete the goods. All are thoroughly water-proofed, and then baked in special ovens at a heat of 300°, sandpapered, painted, japanned, varnished, enameled, etc., as the case may be, and paints all baked on at heat of 150° to 175°.

From the above we infer that flax fiber is to be made into a host of useful things, including domestic utensils and possibly furniture. It is to take the place of wood, tin and crockery to a certain extent. There can be no doubt of the lightness and durability of the manufactures if well made. The company seems to have control of 10 patents which are employed in their manufactures and to own the territory west of the Mississippi. We see no reason, if the initial establishment proves profitable, why there should not be such a factory in this State to supply this coast and the countries bordering upon the Pacific ocean. In many of them lumber is scarce and high, and manufactured metals costly also. This may be one of the coming industries.

HOME WINERIES.—There has been rather more of an issue this year than usual between the grape-growers and the grape-buyers, and difficulty of agreeing as to what is a fair price for wine grapes. In the South there seemed no market at all for part, at least, of the wine grapes, and the growers formed an association, leased Mr. Rose's establishment and are making up their own grapes. In Sonoma there is an effort in another direction, and the members of the Grape-growers' Association of Santa Rosa are investigating the subject of home wineries. At the last meeting a resolution was adopted, asking the Board of Supervisors to appoint a special committee to investigate the cost to individual grape-growers of building and operating home wineries for the purpose of making their own crops into wine, and ascertain such other information in regard to the subject as may be proper and judicious.

## ENTOMOLOGICAL.

## The Hessian Fly and Resistant Grains.

University Experiment Station Bulletin, No. 58.

The Hessian fly (*Cecidomyia destructor*) appeared in the grain growing on the Experimental Grounds of the University of California in the spring of 1885. The visitation was so serious that it vitiated a number of experiments which were under way to ascertain the comparative values of different methods of culture and the application of different fertilizers. At the same time it was noticed that the work of the pest was much more destructive on some varieties of wheat than others, and it was decided to make the best possible use of the infested fields by a careful experiment in the season of 1886 to ascertain if any varieties could be found to be practically resistant. The experiment, owing to the peculiar character of the season, was conducted in such a way as to give the fullest advantage to the insect and the greatest disadvantage to the grain. The plots were sown late (February 25) and no doubt some of the varieties experimented with were ruined which would have only been partially destroyed had they been earlier sown and thus have reached a more advanced condition when the fly appeared. It is, however, quite as well, perhaps, because it made the test very severe, and the more useful, since, in the counties most afflicted by this pest, it is very often necessary to sow grain late because of the danger of water-killing during heavy winters.

Seed was taken from the collection which has been secured with much care from different grain-growing countries of the world. There were in all 170 plots sown, with upward of 100 varieties of wheat, 25 barleys, 35 oats and the balance ryes. The grain was sown in drills, was well cultivated and given every chance to make a good growth. The soil is the upland adobe, somewhat ameliorated by application of lime and other fertilizers during previous years. Careful notes were taken of the behavior of each variety, and frequent examinations made to ascertain the presence of the fly both in the larval and the "flaxseed" stages. A full account of these observations will be given in the report of the College of Agriculture, for 1886, which will be issued during the coming winter. At this time it is merely intended to present the results of the experiment in condensed form.

Of the 100 varieties of wheat sown, about 25 were destroyed. The plant was so weakened that no effort was made to throw out heads, and the stems were found to harbor in some cases as many as 30 larvae and "flaxseeds." About 35 other varieties made a little better struggle and bore a few heads of grain, although in all cases the stems were found to be infested. About 20 varieties bore a fair crop of grain, although in all cases there were insects found on the stems; sometimes but few, and they in the upper joints (as high as the fourth); and in others quite a number were found. Of the whole collection there were but six varieties in which no larva nor pupa of the fly were found, and they were as follows:

1. Bearded wheat from Missojeu. 2. Palestine. 3. Petali. 4. Volo. 5. Greek wheat from Atlanti. 6. Forelle.

These wheats all have solid stems, the straw being filled with pith. They all belong to the hard wheat type (*Triticum durum*), having rather long pointed grains, almost translucent, and a horny consistency, owing to their richness in gluten—though when grown in this State they rapidly change in this respect and become starchy. These wheats are chiefly grown in the countries bordering upon the Mediterranean and the Black sea. They do not succeed in the north of Europe, nor are they of much account even in the middle of France. They are, however, quite hardy and productive in California, and with the change in their character noted above, promise to be of considerable value.

Besides the experiment in which the large grain collection was used, as described above, there were larger areas sown on January 8th, with those varieties which had been observed as resisting the fly during the experiments of 1885, with the following result:

Variety.	Rate of yield per acre.
Volo.....	31 1/4 bush.
Bearded Missojeu.....	39 1/2 "
Greek Atlanti.....	9 1/4 "

The seed of the last variety, Greek Atlanti, was very old, being taken from the museum specimen, and it was therefore slow in germination, weak in growth, and deficient in yield. It showed, however, its immunity from the fly as none could be discovered by repeated examination. Now that fresh seed has been secured, it may be expected to yield as well as the others named above, which it closely resembles. These three wheats are of Greek origin. Samples of the grain were submitted to experts in milling and shipping wheats and pronounced good, merchantable wheat, and saleable in the market at about 2 1/2 cents per cental less than No. 1 shipping wheat. As they are naturally of strong growth and productive, it is expected that they will be



found valuable in those localities where other varieties are rendered unprofitable because of the Hessian fly, and there will be small lots of the seed furnished by the College of Agriculture to those who desire to experiment with them in fields known to be infested with the fly. Their success both when sown on January 8th and on February 25th shows that their immunity from the fly was in some peculiarity of their own and not in the time of sowing. The soil on which they were grown during the experiment here is quite poor and intractable, and better yields may be expected in more favorable situations.

It is a matter of some importance to determine whether a time for sowing can be selected so as to successfully circumvent the fly. In our own experiments it appears that Pringle's Defiance wheat sown on January 8th made a good growth, and bore at the rate of 11½ bushels per acre although attacked by the fly, while the same variety sown February 25th was practically a failure. The same was true of Nepal barley, which, sown January 8th, yielded at the rate of 20 bushels to the acre, while that sown on February 25th was destroyed. On some lands now infested by Hessian fly it is impracticable to sow grain until the heavy water of winter has disappeared from the soil, and it is, therefore, of more importance to have a variety which will succeed at any time of sowing than to have a safe time of sowing determined upon, which will come when the land is seldom in condition to receive the seed.

We expect during the coming season to repeat some parts, at least, of our experiments, to determine the fly-resisting ability of different wheat varieties, and also to secure testimony from our correspondents who will conduct experiments in other districts infested by the fly. We have a decided advantage in this work in California, because we can grow wheats from all latitudes.

The barleys grown beside the wheats seemed much less vulnerable to the attacks of the fly. Of the 25 varieties sown, about 20 bore from fair to good crops, although in most cases the larvae and pupae of the fly were found on the stems—sometimes few, sometimes many. Some escaped the fly entirely: the Guymalaya, a dark naked grain; the Manchurian, a small white grain; the Four-rowed black and the Six-rowed black, had no traces of the fly. The Large Naked Two-rowed had a few flaxseeds in the upper nodes. On the other hand, other varieties were nearly destroyed. Full details will be given in the forthcoming report.

The ryes were generally a failure in this year's sowings—in some cases traceable to the fly, but generally the result of other unfavorable conditions. There was no trace of the fly found in the oats.

During the last spring and summer many samples of grain supposed to be infested with the Hessian fly were received from wheat-growers in different parts of the State, extending as far south as Tulare and Ventura counties. In every case the pest was found to be the grain louse or aphid (*aphis avenae*), a much less serious enemy than the Hessian fly. A distinction between these pests can be coarsely made in this way: The Hessian fly does not appear congregated in great numbers upon the growing grain. When it is abundant it may be seen, especially in the morning and evening, hovering over the wheat fields in vast numbers. The fly merely descends upon the plant to deposit its eggs. It is exceedingly small, its whole length being but about one-tenth of an inch. On the other hand, the grain aphid is found collected in vast numbers on the grain, generally near the base of the stem, some individuals having wings, but the greater number wingless. The Hessian fly always has wings except in the larval state, when it is a white, semi-transparent maggot, rather spindle-shaped and about one-sixth of an inch in length. Under its transparent skin may be seen greenish stripes extending around the body. This maggot changes when mature into a bright chestnut color. When in this state it much resembles a flaxseed, and the recognition of these "flaxseeds" wedged in between the leaf and the stem, near the joints, is demonstration that the grain is infested with the Hessian fly. There are other whitish maggots infesting the stems of grain, but they do not assume a likeness to a flaxseed.

The Hessian fly has but recently been demonstrated to have secured a lodgment in California, and its ravages have thus far been confined to valleys adjacent to the San Francisco bay and its tributaries. It is a question how far its area may extend, but it is highly doubtful if it can thrive in the dry and hot interior valleys. It has been claimed that the practice of burning off the stubble is to be credited with the long freedom of California from the pest. Such practice is certainly to be commended as at least likely to reduce the infestation. In badly-infested localities this will not, however, accomplish the dislodgment of the insect, and it may be that the growing of resistant varieties will be of great advantage.

Berkeley, Oct. 9, 1886. E. J. WICKSON.

The celebrated orchid "Vandilowii," which was purchased by William S. Kimball at the great Morgan sale in New York, is now in bloom at his gardens in Rochester, N. Y. The orchid is the only one of the variety ever brought to this country, and cost Mr. Kimball \$12,500. It has been in bloom only once before, at the botanical gardens in London, where Mrs. Morgan purchased it.

## AGRICULTURAL NOTES.

### CALIFORNIA.

#### Alameda.

**EASTERN APPLES.**—Haywards Journal, Oct. 9: We were shown two unusually fine apples last week, raised by D. C. Kennedy, known as the Eastern Fall Pippin. The grafts were brought to this valley by David Smalley on returning from his last visit to York State, and he gave them to Isaac Collins, of Castro Valley, to introduce in this section. David has also a number of other varieties of Eastern apples growing in his orchard near town.

#### Contra Costa.

**ST. JOHN'S BREAD.**—Gazette: Among the exhibits at the late Contra Costa Fair was a branch of the Algaroba or St. John's bread tree, which is being cultivated by Dr. J. Strentzel. The fruit of the Algaroba is a long, thick pod; the leaves are similar in appearance to the leaves of the apricot. This is extensively raised in Asia Minor, and in the islands of Minorica and Majorica, where it is extensively used as food for horses and cattle, and also exported in considerable quantities to England and France. The tree will grow and thrive in very dry places, where other trees will fail for want of moisture. It is somewhat sensitive to frost and should be planted where the orange and lemon will thrive. It is said that a single tree will bear a ton of rich food, and that it is considered very valuable for all kinds of stock. It ought to be planted in the warm belt, or if planted in the valley there should be some little protection during the first year or two, after which none will be needed. At the Horticultural Fair recently held in San Jose, W. G. Klee, the State inspector of fruit pests, had a sample of ripe and dried fruit. The whole substance of the pod, which was of a rich brown color, seemed to consist of a pulp dried down to a firm consistency and which tasted very rich and sweet.

#### Lassen.

**HONEY LAKE VALLEY.**—Lassen Advocate: There is land in this county that would be worth \$100 an acre if it was situated in some of the valley counties. What this valley needs most is water for irrigation and a railroad to market. Tap Eagle lake so that our farmers can irrigate their lands, and the county will undergo a boom—immigration will head this way, a railroad will be built up the valley, capital will find investment, and a few years will see Susanville a city of 5000 souls. There are thousands of acres of land in our county lying idle, which, if irrigated, would produce wheat and barley of as good quality as can be raised anywhere on the globe, and 20 or 30 bushels to the acre could be raised with ease. Persons seeking homes will do well to give our county a trial. The climate is all that could be desired. It is never very warm in summer, nor extremely cold in winter.

**ARTESIAN WELL.**—Red Bluff Cause: An artesian well is being bored near Bieber, Lassen county. After sinking it to a depth of 250 feet a stream of hot water was struck. The borers have gone down 150 feet further, but cannot tell what formation they are in, as the stream of hot water washes away the chips from the auger as fast as it is brought up. They have run out of pipe and will have to get more in order to close off the hot water. They have gone through several streams. In some places the auger would drop a number of inches, showing that it had passed through a hollow in the earth. It is believed that a supply of water will be obtained before very long. If this proves a success it will be a great thing for the sagebrush lands of Modoc county, and the dry ranches which now do not amount to anything can be made to produce with the best, for all that is needed is water.

#### Los Angeles.

**GUM GROVE.**—Anaheim Gazette: The gum trees on the 40-acre grove of R. D. Curtis and J. W. Roach, east of town, are growing finely. The trees that were replanted this spring are also making a good growth; but owing to the ravages of jack-rabbits and the sheep of a neighboring camp tramping through the grove, many young trees were destroyed. The trees on this ranch are irrigated but once a year, in the winter, when there is an abundance of waste water in the river a few miles east. It is led to the grove in the old Fairview ditch. Some of the land is comparatively worthless, but the eucalyptus trees seem to grow thriftily. There are thousands of acres of cactus land in that vicinity which will, no doubt, be planted to gum trees at some future time. Water can be had in the winter-time when it is running to waste down the river.

**THE TUSTIN DRIER.**—Santa Ana Herald, Oct. 9: The big drier of the Tustin Company steamed up last week, and will dry about 100 tons of grapes this season. A large pipe is being connected with their steam apparatus so as to dry raisins by natural draft. A new furnace has been purchased. The raisins manufactured by this company sold last year for a good price. Some of the last season's crop which we sampled were excellent. The drier has a capacity of eight tons at a time. The grapes the company are now curing were partially dried by the sun, and require only three or four days to finish them into excellent raisins. The green grapes put into the machine take seven or eight days to make into perfect raisins. We hope this enterprising company

will meet with good success this season. They turned out a large quantity of splendidly cured apricots last year.

**FRUIT SHEARS.**—Valley Echo: L. H. Titus, of San Gabriel, has applied for a patent for fruit-cutting shears. They enable the operator to reach out at full arm's length while at work, and as he cuts the stem the fruit is grasped by the hand. The levers work on a fulcrum secured by rings on the right forefinger, while the thumb-rest works the shears, the shear-points being inward toward the palm. After a short practice the operator can cut fruit very rapidly with these shears. Mr. Titus is a fruit-grower and has given the subject a great deal of study, and he feels confident they will be a benefit generally.

#### Mendocino.

**CHAMPION HOP-PICKERS.**—Hopland Cor. Cloverdale Reville: Having heard it said that T. S. Parsons had the best crew of hop-pickers ever brought together in Mendocino county—that they not only did the best work, but were the fastest pickers—I resolved, during my visits to the hop-fields, to ascertain the truth of this statement. Although the majority of the hops were picked and saved very clean, Mr. Parsons' hands had, undoubtedly, done him far the best job. His crew consisted of about 80 white hands of all ages, from the lisping child to those tottering with age. Upon taking an average for a single day for the entire number of pickers, I found it to be 113 pounds. The largest half-day's picking for a single person was 104 pounds, and the largest average for the season was 140 pounds, while others reached 130. If any crew of pickers has ever eclipsed this record it has not been my fortune to see them.

#### Napa.

**SWINE PEST.**—Reporter: A most disastrous disease has prevailed among the hogs in Berryessa valley this summer. Almost every farmer has lost a number. It is called cholera by some, but others do not think it resembles that disease, and are at a loss to know how to prevent its spread and what would be an effectual remedy. Among those who have lost by it are Messrs. Coleman, Scribner, A. and A. C. Clark and others. Abraham Clark has lost about 250 head, and the disease is still extending up the valley.

#### Plumas.

**INDIAN VALLEY.**—Cor. Plumas National: Between Quincy and Greenville are some very grand mountain scenes, and we tried to persuade ourselves that we were traveling in Switzerland. We spent one night in Indian valley. The farmers were busy thrashing their grain. The farmhouses show that the farmers are prosperous. Vegetables are raised to supply the mines, and fine butter and fat cattle are sent to the lower valley. Fine horses are plenty, but one young man told me confidentially that girls were very scarce, which is a great drawback to the future development of the valley.

#### San Benito.

**FINE GRAPES.**—Free Lance, Oct. 8: The magnificent bunches of grapes exhibited in the window of this office were grown on the estate of Mr. N. Hawkins, on West street. Though the soil is that adobe so common throughout this valley, these grapes, grown without irrigation, demonstrate what can be done in the way of viticulture in San Benito county. Grapes like these have a ready sale at five cents a pound. Those brought us by Mr. Hawkins were of the Rose de Peru, Hamburg and Muscat varieties.

#### San Bernardino.

**GUAVAS.**—Press and Hort., Oct. 9: Mr. Garcelon has a strawberry-guava tree that is this year loaded with fruit. The people of San Diego have planted this fruit extensively, but our fruit-growers have paid but little attention to it. The fruit is good for table use, and as a jelly the guava beats the world. More of these trees should be planted in this county.

#### San Luis Obispo.

**TRAMONTANE GRAIN.**—Tribune, Oct. 1: Mr. Findley, of Paso Robles, has been for some weeks in the eastern part of the county purchasing wheat for the San Luis flour mill. He estimates the yield of the region east of the mountains at 300,000 sacks, of 130 pounds each, or 650,000 bushels. The quality is the nearest to perfection of any such quantity in the State. That called second-class would be plus first-class in any other section. Of the 20,000 sacks in the warehouse, one-tenth could be taken as they stand as perfect samples for exhibition, in glass or paper bags, at any fair or agency in the world. This wheat is sold in this market at from \$1.22 to \$1.27 per cental. The barley crop of the same region is estimated at 100,000 sacks, and is selling at about 75 cents per cental.

**ADELAIDA ITEMS.**—Simmonds Bros., the lessees of Edward Smith's ranch, had about 3000 sacks, of 130 pounds each, principally wheat. But this is an extra good ranch for wheat-raising, and would make a paradise for the culture of the vine. Mr. Smith is also largely engaged in the raising of thoroughbred horses, and now has a fine lot of young stock ready for market. Louis Neergaard and Paul Bunker have bought a lot of 40 acres on the Paso Robles ranch and intend to engage in the culture of the vine. Sydney and Clifford Neergaard have bought William Smith's claim of 160 acres, and are making arrangements for raising chickens on an extensive scale. The chicken department will be under the charge of Sydney, who has imported an incubator from the East, capable of

containing 2000 eggs at a time. He also has a bone mill to crush bones for chicken feed. It is a pity we have not a few more with the enterprise of the Neergaard boys. Clifford has purchased the thoroughbred stallion of Sam Smith, and will devote his attention to horse-raising. The Brian brothers are cutting up their ranch of 4000 acres to sell to purchasers in lots to suit. There is some fine vine land on the ranch.

#### Sonoma.

**QUINCES.**—Index-Tribune, Oct. 9: Robt. Howe, of the Eden Dale farm, made another shipment of quinces to Chicago this week, consisting of one carload of 500 boxes. This excellent fruit for preserving brings \$1.75 per box in the above city, and as the picking, transportation, etc., costs 60 cents, there is a profit of \$1.15 per box, or \$575 per carload. This makes the fifth carload sent East this season by Mr. Howe.

**GRAPE STORIES.**—There is on exhibition at the Union hotel, in this place, a bunch of grapes of the Rose of Peru variety that weighs 16 pounds. It is as large as an ordinary water-bucket. It was grown on unirrigated ground in the vineyard of Geo. H. Cornelius at the edge of town, and is but another of the many proofs that we have produced this season of the productiveness of our soil.

**Democrat, Oct. 9:** Our cotemporary brags somewhat about a bunch of Muscats weighing three pounds. Press Hall lays over this with a bunch of Rose of Peru that weighs eight pounds, and a bunch of Flame Tokay weighing six pounds. Not to be outdone, George F. King has on exhibition a small bunch of Tokay grapes, not weighing over one and a half pounds, but each individual grape on the stem measures larger than a common Damson plum. These are Sonoma county grape stories and are based on facts, while the following grape story that has found its way over here from Napa county might be regarded in the light of fiction: A bunch of Flame Tokay grapes, grown in a vineyard not far from Napa city, weighed 29½ pounds. The stem, after being shorn of the fruit, was used for a walking stick. The bearer of this tale is still in this city, and ready to vouch for the truth of this statement.

#### Sonoma.

**WINDSOR CANNERY.**—Telegram: The Windsor cannery closed Oct. 9th for the season. It has put up a total pack of 6000 cases. The entire pack is sold.

#### Tulare.

**ALILA THRIVING.**—Register, Oct. 1: People in the neighborhood of Alila express unlimited confidence in the future of their section. There is some land which has had the name of being too dry for farming and fruit-raising, but this bugbear is fast losing its terrors. A young man who holds a claim near Alila was in Tulare the first of the week. He says that any land in the driest sections, where properly cultivated, remains damp enough to mature a crop in the driest seasons. Where corn has been raised this season without any irrigation, and removed this fall, suckers are sprouting up with vigor. Young trees set out in the spring have grown finely, although receiving no moisture beyond that in the soil. The theory is that there is a liberal quantity of gypsum in the soil, and this accumulates and retains moisture for a long time. This appears reasonable.

#### Ventura.

**FALL IN REAL ESTATE.**—Free Press, Oct. 14 and 16: F. Hartman's ranch one day last week. It occurred in a field that had been in barley. We have not visited the spot, but we presume it is the result of internal fire consuming the bituminous matter so abundant in this county.

#### Yolo.

**WHAT A WHOPPER!**—Mail, Oct. 9: Mr. A. Q. Powell, of Madison, brought into the Mail Monday morning a pear measuring 16 inches in circumference equatorially and 19½ inches longitudinally, and weighing two pounds and 13 ounces. The specimen grew upon a tree three years old from the seed, and the tree grew in Shasta county, three miles north of Cottonwood. There were six similar prodigious pieces of fruit borne this season on this tree. It was of the Winter Bartlett variety. Mr. Powell owns a section of Shasta county land, and considers that portion of the State destined to become famous as a fruit country.

#### Yuba.

**WILD GRAPES.**—Wheatland Graphic: Wild grapes grow plentifully in the river bottom near town, and the boys do a rushing business gathering them. They are used to make jelly and are considered much better than any other variety of grape for that purpose.

### OREGON.

**GOOSE LAKE VALLEY.**—Cor. Reno Gazette, Sept. 28: Lake View has nearly doubled its population in the last year, and is still growing. A two-thirds crop was cut in Goose Lake valley, which gives the farmers an over-average price for their grain, which is marketed as follows at the mills: Wheat \$1.25, barley \$1.50 per 100. Nearly enough apples and plums were raised this season in the valley for home consumption, and in the course of two years there will be as good orchards of fruit here as in Honey Lake valley. It was thought a few years ago that this country was not adapted to fruit-raising. One farmer had 2½ acres of melons which he sold for 25 cents each; still they say this is only a stock country.



## San Jose Fair Premiums.

Following are awards at the Fair of the Santa Clara Valley Agricultural Society. We condense from reports in San Jose Times. The plan of giving the number of competing entries is a good one.

## Horses.

Thoroughbred stallions—Four years old, Wm. Boots, Milpitas, Nathan Combs. Three-year-olds, Thos. Gault, San Jose, Wild-eye.

Mares—Four years old, Wm. Boots, Milpitas, Mollie H. Three-year-olds, Wm. Boots, Leda.

Stallions other than thoroughbreds, with five colts; dams other than thoroughbreds, with three colts, E. Younger, San Jose, Addie and three colts.

Norman stallions—Four years old, E. J. Turner, San Felipe, Milo. Three-year-old, J. E. Wright, New Almaden, Keno; mares, four-year-olds, N. B. Edwards, San Jose, Chub.

Graded draft horses—Four years old, D. J. Murphy, San Jose, Prince Albert, J. Three years, H. McGee, Warm Springs, Pat. Two years, J. G. Meyersmith, Milpitas, Sampson, Jr. One year, G. P. Bull, San Jose, Monte. Sucking colts, D. J. Murphy, Brierwood, Jr.; mares, four years old, G. P. Bull, Chubby. Three years, Mrs. J. Lendrum, San Jose, Black Bess. Two years old, G. P. Bull, Dora. One-year-old, O. Boiteau, San Jose, Not Named; families three colts, G. P. Bull, Nora and three colts.

Roadsters, stallions—Four years, J. Boyd, Milpitas, Grosvenor (ten entries). Three years, Ed. Younger, San Jose, Electric Light (six entries). Two years, J. K. Buffington, San Jose, Linwood (four entries). One year, J. Weatherhead, San Jose (three entries); mares, four years, H. G. Cox, Pleasanton, Maud (eight entries). Three years, Massey Thomas, Gilroy, Anna M. (two entries). Two years, G. H. Bragg, San Jose, Rose (two entries). One year, E. Topham, Milpitas, Lady Grosvenor (four entries); Ed. Younger, Whisper (seven entries).

Carriage horses, matched pairs—L. R. Miller, San Jose, Jim and Frank (four entries).

Horses of all work—Stallions, four years, H. Pierce, Evergreen, Alonzo Hayward (five entries). Two years, R. D. Fox, San Jose, Bismarck. One year, J. S. Ballard, San Jose, Frank. Mares, four years, R. D. Fox, San Jose, Lizzie (six entries). Two years, Ed. Younger, Sweet Secret (two entries). Sucking colts, Ed. Younger, No Name.

Jacks—Three years, J. Boyd, Milpitas, Wellington.

Grosvenor colts—Special premiums offered by Mr. Boyd for best colts from his horse Grosvenor, one awarded to E. Topham, Milpitas, for colt Lady Grosvenor, three entries. The other to P. C. Walenbaugh, Livermore, for a sucking colt (two entries).

## Cattle.

Durham—Three-year-old bulls, C. Younger, San Jose, Forest King (six entries). Two-year-old bulls: Kirk Livingston 3d, of Forest Home (two entries). One-year-old bulls, R. Ashburner, Baden, Baden Duke 17th (five entries). Under one year, C. Younger, Kirk Livingston 13th (five entries). Cow and calf, Wm. Quinn, San Jose, Mary A. and calf, Mary C. (four entries). Cows, three-year-old,

C. Younger, San Jose, Red Dolly 14th; also took premiums for two-year-old cow, Amelia 11th, one year, Red Dolly, 21st, and heifer and calf Bonnie Bell, 8th (entries being two, seven and three respectively).

Ayrshire Bulls—Tyler Beach, San Jose, took all the premiums. (There were two entries for three years old and only his own for others.)

Jersey Bulls—Three years old, J. S. Connor, Santa Clara, Billy R. (two entries). Two-year-olds, C. B. Polhemus, San Jose, Rajah. One year, J. B. Briggs, San Jose, Black Prince (three entries). Bull calf, C. P. Polhemus, Orphan Boy (four entries). Cow and calf, Polhemus, Jersey Maid and calf Beauty. Cows, C. P. Polhemus, all premiums (entries being six, three, five and two for each class). Three years, Charlotte; two years, Edith; one year, Caddy Felton; heifer calf, Pinky.

Hereford—Williams & Saxe, San Francisco, all premiums. Bulls, three-year-olds, Poverty (no competitor). Two-year-olds, Rocket (seven entries). One-year-old, Pleasant Wilton (two entries).

Holstein Bulls—Three-year-old, E. D. Knott, San Mateo, Ansonio. S. H. Burke, Menlo Park, all other prizes excepting heifer calf and cow and calf. Two years, Pedro, 3168. One year, Kingsbury, 1033. Bull calf, El Aquila, 3230. Cow and calf, Wm. Farrington, Rebekah Egmont and bull calf (no competitors for three-year-old bull; two entries for two-year-old, six for one-year-old, one for bull calf, and one for the cow and calf). Cows, three years old, Neenah Wilt, 1469 (three entries). Two years, Kentucky Gem, 6490. One year, Edna of Troy (two entries). All owned by F. H. Blake.

Heifer calf, W. Farrington, Amy (four entries). Galloway—No premium provided for these, but premium recommended. Leonard Bros., Mt. Leonard, Mo., exhibited three-year-old bull, Hopeful, of Lyons; two-year-old, The Badger; one-year-old, The Boss; bull calf, Bruce, of Mt. Leonard; three-year-old cow, Cressus Mynnychon; two-year-old, Blossom, of Newtonbirds; one-year-old cow, Flustra 2d (two entries for two and three-year-old bulls and bull calf; for three-year-old cow, three entries; others entered only by Leonard Bros.).

Graded—Cows three years old, R. Ashburner, Baden Station, Music (three entries). Two-year-old, A. Smith, Daisy (three entries). Fat cow and steer, H. Able, Milpitas, Duke of Milpitas (one entry). Thoroughbred herd for beef purposes, C. Younger, San Jose, Forest King, cow and four calves (three entries). Thoroughbred herd for dairy, C. B. Polhemus, San Jose, Jersey Boy, and five cows (four entries).

Herd of any breed or age—C. Younger, Forest King, and four cows, same as thoroughbred herd above (two entries).

Sweepstakes, bull, any breed or age—R. Ashburner, Baden Station, Baden 7th (seven entries). Cow, of same, Ashburner, Minstrel Gwynne (eight entries).

## Sheep.

Southdown—R. H. Crane, Petaluma, Long John (three entries).

Cotswold, ram, ewe and pen of five ewe lambs: C. Younger (one entry).

## Swine.

Berkshire—Boar, one year old, A. Smith, Red-

wood City, Redwood Duke (three entries). Under one year, A. Smith, Grover (five entries). Sows under one year, J. S. Connor, Santa Clara, Dora 3d (five entries).

Essex—T. Beach, only exhibitor, took premiums for boar; one year old, Tarbox; under one year, Sweep. Sow, one year old, Blonde; under one year, Blonde 2.

Poland China—All premiums, W. D. Rucker, San Jose, only exhibitor. Boars, one year old, Ginnis Converse, 3149; under one year, Jumbo. Sows, one year old, Anna P, 6588; under one year, Anna T. 2d.

Chester white, boar—One year, W. B. Rodgers, San Jose, Garfield B. Sow, one year, Jersey Lily. Pen of five pigs, under six months, any breed—W. D. Rucker, San Jose (three entries).

Finest and fattest hog—T. Beach, Bruiser (three entries).

## Poultry.

E. H. Freeman, Santa Clara, took premiums on Light Brahmas, Plymouth Rocks, Partridge Cochins, Langshans, Wyandottes, Black-breasted red game Bantams, Houdans, Brown Leghorns (fowls only), Buff-laced Polish (chickens only). D. J. Murphy, San Jose, premiums on White Leghorn fowls, Sumatra game chicks, Minochi game chicks (Japanese), Wyandotte chicks, White Cochins fowls, Black-breasted red game chicks and on a trio of Bronze turkeys. Wm. Fisher, San Jose, on one pair Black-breasted red game fowls and Seabright Bantam chicks. Adam Smith, Redwood City, on Brown Leghorn chicks.

## Agricultural Machines, Etc.

Best display of agricultural machines by one person or firm, San Jose Agricultural Works; best cider or wine mill and press, and best horse hay-rake, Farmers' Union; hay and straw cutter, W. F. Babcock; hay press, San Jose Agricultural Works; hand corn-sheller, Farmers' Union.

Broadcast grain sowing machine, W. F. Babcock; best display reaping and mowing machines, Farmers' Union; harrow, cultivator and horse hoe or weed cutter, San Jose Agricultural Works; double shovel plow, W. F. Babcock.

Fanning mill, Farmers' Union; windmill, Geo. J. Bently.

Scraper, W. F. Babcock.

Gang plow, Boyce & Topham; sulky plow and side-hill plow, Farmers' Union; one-horse plow, W. F. Babcock; Mole or blind ditch plow, and open ditching plow, San Jose Agricultural Works; plow for all purposes, W. F. Babcock.

Two-horse family carriage and one-horse family carriage, Chas. Bradley; top buggy, open buggy, two-seated open carriage and spring cart, W. M. Hollenbeck; Farm wagon, W. F. Babcock; four-horse spring wagon, San Jose Agricultural Works; ladies' phaeton, W. M. Hollenbeck; delivery wagon, W. F. Babcock; farm gear and two-seated, four-spring wagon, San Jose Agricultural Works; combined plow and weed cultivator, Wm. Forbes.

## Medals.

The gold medal for the best exhibit in any department was awarded to Col. C. Younger for the best display of Durhams; a special gold medal was awarded to Leonard Bros., for their display of black

Galloway cattle; a special silver medal to J. Bean, Los Gatos, for his spray air pump.

Awards for exhibits at the Fifth District Fair (in Horticultural hall), in the line of agricultural and related industries, were as follows:

## Agricultural Products.

Silk—Pacific Silk Factory, best exhibit of a silk business, from the mulberry tree to the silk cocoon. (H. X. Van de Castele was also awarded premium for best exhibit of silk goods by one factory.)

Flour and grain—D. B. Moody, millers' products; T. M. Tenny, buckwheat and corn; A. R. Woodham, barley, beans and wheat.

Vegetables, roots, etc.—T. M. Tenny, squashes, pumpkins and sugar beets; best table of general varieties vegetables.

Plants and flowers—E. Bourguignon, collection of greenhouse plants; flower plants in bloom; hanging baskets of plants; cut flowers; two vases bouquets; two parlor bouquets; collection fern and leaf plants; special premium for floral display. J. Rock, collection of ornamental plants; cut roses and dahlias—most meritorious display in pavilion; Mrs. O. J. Albee, best exhibit flowers by amateurs.

Butter, bread, etc.—Mrs. O. J. Albee, soda biscuit, corn, rye, brown and wheat bread.

## Horticulture.

Green fruit—J. Rock, collections of apples, pears, peaches and plums; three varieties plums; three varieties prunes; collection quinces; best general display green fruit; Mrs. O. J. Albee, six varieties apples; three varieties apples; collection raspberries; T. M. Tenny, six varieties pears; single variety pears.

Canned fruits, etc.—Mrs. O. J. Albee, pickles, sweet pickles, jellies.

Nuts—J. Rock, soft-shell almonds, black walnuts; Mrs. O. J. Albee, paper-shell almonds; A. E. Gish, seedling, hard-shell almonds, Italian chestnuts; Mrs. D. B. Moody, English walnuts.

Evaporated fruits—H. B. Bristol, apricots, plums, prunes, peaches; general display of dried fruits. Sun-dried fruits—Mrs. O. J. Albee.

Glaze fruits—A. Damonte. Grapes, wines, brandies, etc.—P. O. Burns & Co., red dry wines, white wine, port and sherry; general display of wine; general display of brandy; D. C. Feely, Angelica wine, display wine grapes, table grapes.

## Miscellaneous.

C. H. Green & Bidwell, mowing machine; A. Steiger & Son, drain tiles, pottery and stoneware; Messing & Son, saddles and harness, single-buggy harness, saddle-trees, saddle and bridle; Kaiser & Koch, double-buggy harness; Hatman & Normandin, best one-horse family carriage, top buggy, open buggy, two-seated open carriage; Kaiser & Koch, best two-horse family carriage; best ladies' phaeton; Mrs. Teresa Zingg, best collection illustrating the ornithology of California.

## Cheap Money for Farmers.

Farmers in this State will be glad to learn that they can borrow on mortgage any amount, from \$5000 to \$500,000, from S. D. Hovey, 330 Pine St., San Francisco, at 6 to 7 per cent and taxes. \*\*

SAN FRANCISCO:  
Junction Market, Pine and  
Davis Streets.

# BAKER & HAMILTON.

SACRAMENTO:  
Nos. 9, 11, 13, and 15  
J Street.

MANUFACTORY: Benicia Agricultural Works, Benicia, Cal.

EASTERN OFFICE: 88 Wall Street, New York.

IMPORTERS, MANUFACTURERS, AND DEALERS IN

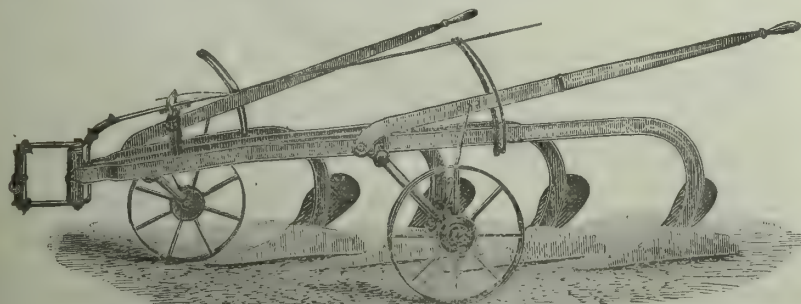
## Hardware and Agricultural Implements.

# "PERFECT" GANG PLOWS,

Manufactured by the BENICIA AGRICULTURAL WORKS,

Are the only Successful BENCH BEAM GANG PLOWS made with STEEL BEAMS, STEEL BOTTOMS and CAST CAST-STEEL SHARES. They have HIGH BEAMS, WIDE TIRE, WROUGHT IRON CARRYING WHEELS.

They are so constructed that there is ample space under the beams and between the bottoms to let the stubble and weeds freely pass through. "Perfect" Gang Plows are made with either three or four bottoms or plows, each cutting eight or ten inches, securely ganged together, making a Gang Plow which is unequalled for Lightness of Draft, strength, durability, and Good Plowing Qualities, and is in reality a "Perfect" Gang Plow.



LANDSIDE VIEW OF "PERFECT" GANG PLOW.

Hubs and Boxes of carrying wheels are detachable, and when worn out can easily be removed to put new ones in their place.

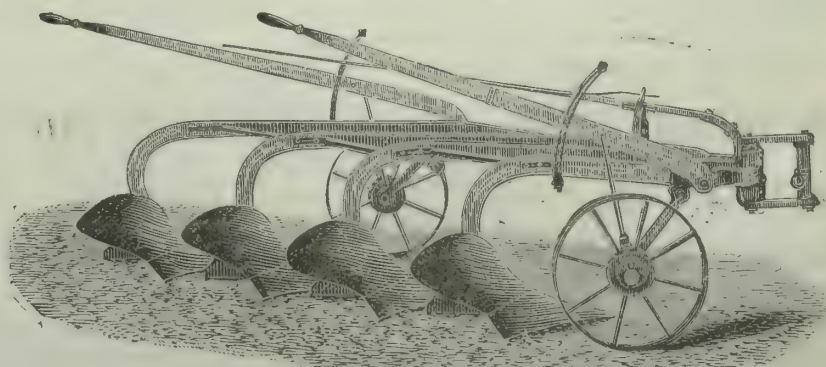
Each carrying wheel is provided with its own Regulating Lever by which the driver can easily adjust either side of the plow to make it run level and true.

The Regulating Levers are very long and securely bolted to the steel frame of the plow, and coupled to the crank axles by a heavy piece of round iron, which is adjustable to the regulating levers at three different holes, enabling the driver to adjust his plow so that he can handle it with the greatest ease.

The "Perfect" Gang Plow is also provided with a long Land Gauge Lever, by which the driver can adjust his plow to take more or less land as he may desire.

There is no danger of breaking the crank axle of the "Perfect" Gang Plows, as they are made of heavy 1½-inch round iron, and are fastened to the frame by wrought iron brackets.

If you contemplate purchasing a Gang Plow, don't fail to call and see the "Perfect" Gang before you purchase.



MOLDBOARD VIEW OF "PERFECT" GANG PLOW.

The "Perfect" Gang Plow will plow in any soil, as the bottoms are shaped after patterns that have been found to work equally well in adobe and free soils. The moldboards are made of the best iron center steel, chemically hardened, and well polished.

## PRICE LIST.

No. 1—3 Gang, 8-inch, with set of extra shares.....	\$75 00
No. 2—3 Gang, 10 inch, with set of extra shares.....	80 00
No. 3—4 Gang, 8-inch, with set of extra shares.....	80 00
No. 4—4 Gang, 10-inch, with set of extra shares.....	90 00

The "Perfect" Gang Plows are lighter draft, stronger, more durable, and do better plowing than any wood frame Bench Beam (commonly called "Stockton Gangs") Gang Plow ever manufactured.



## Lands For Sale and To Let.

### FOR LEASE AND FOR SALE,

40,000 ACRES

Of good land in Fresno, near the County Seat. Some of this land is already irrigated, and all can be easily irrigated. It is adapted not only to grain, but also to Alfalfa, Fruit and Vines.

1000 ACRES

Of the above land for sale at the low price of \$20 per acre. Apply to

E. B. PERRIN,  
402 Kearny St., San Francisco.

\$10.00 PER ACRE.

On the C. P. R. R., in Placer county; one half mile from Applegate; one-half hour from Auburn; fine climate; plenty of water; school, postoffice and telegraph near; easy terms; title perfect. Apply to

S. C. OSBORN,  
Applegate, Placer Co., Cal.

## CHEAP LANDS FOR SALE.

**5680 Acres** of rolling adobe hills, situated in Tehama County. Well watered by numerous springs, etc. Several thousand acres suitable for cultivation. Good two-story House, Barn and other out-buildings. Seven miles of fine wire fence.

**FIRST-CLASS CATTLE OR SHEEP RANGE.** The Cheapest tract of land in Tehama County. Price, \$6.00 per acre. Fair time and interest.

Also, a tract of 20,000 acres adjoining, can be bought at a great bargain. Title, U. S. Patent. For terms, etc., apply to

J. E. OROOKS, Benicia, Cal.

N. B.—Upon timely notice, intending purchasers will be taken from Cottonwood to the land and returned free.

## A NEW COLONY

On the new extension of Southern Pacific Railroad, on the lands belonging to R. T. BUELL, Esq., near Los Alamos, Sa ta Barbara county, Cal. Parties desiring to visit the property now, can go via San Luis Obispo and take the cars from thence to L. s Alamos, thence by stage to the Colony. **20,000 acres** of the best lands in California, subdivided into 20, 40 and 80-acre farms; \$20 to \$30 per acre. **INTERNATIONAL IMMIGRANT UNION**, 401 California St., San Francisco.

## FRESNO COUNTY.

## BRIGGS' SELMA TRACT.

This most desirable tract, comprising 1280 acres of first-class gray ash and sandy loam land (situated one and one-half miles from the fast-growing town of Selma, the second in the county, and two miles from Fowler, both being S. P. R. R. towns), has been subdivided and will be sold in 20, 40, 60 or 80-acre farms. The distributing ditches are now being constructed, and convenient roads are laid off. The main canal is 60 feet in the bottom.

### THE WATER RIGHTS

Consist of stock in the canals and entitle the owner to one-eighth of 2 feet 6 inches of water, being 2½ times the usual amount supplied to colonies. The owner of the water stock has a pro rata vote in the management of the canal, and the expense per year is about \$3.50 on a 20-acre lot.

A school-house is to be erected on the land this year, and it has two within two miles of it at present. Fresno, Selma, Fowler and Kingsburg are good local markets for produce. Opportunities to labor with or without terms are abundant, and land can be rented for wheat-growing in the neighborhood. The health of this region is perfection, and, in common with the plains generally, is an excellent sanitarium for persons affected with pulmonary and rheumatic complaints.

The best raisins in the world, wines unsurpassed, the finest grapes, the best peaches, apricots, plums, prunes, nectarines, figs and olives, and in fact all the choicest fruits and vegetables of the world are grown in this favored region. Raisin vines three to six years old yield per acre from four to seven tons, and increase to eleven. Wine grapes three to six years old yield from four to eleven tons per acre. Alfalfa is cut from four to six times a year, and yields from one to two tons per acre at each cutting.

Two good cows and 100 hens furnish more than half the living for a family, and can be kept, with a team, on three acres of alfalfa, the growth of which is incredible in this favorable combination of soil and climate.

A comfortable house for a small family can be built for \$150.

The low price, taking into consideration water and transport facilities, should especially recommend this to seekers of homesteads.

Price, \$25 to \$37.50 per acre, on very easy terms to actual settlers.

For further particulars call on or address

O. J. WOODWARD, FRESNO, CAL.

L. SHARPE, SELMA, CAL.

ESTABLISHED 1864.

INCORPORATED 1883.

## PACIFIC FRUIT COMPANY,

(SUCCESSORS TO HOWE & HALL.)

WHOLESALE AND COMMISSION DEALERS IN

CALIFORNIA GREEN

Raisins,

NUTS, HONEY,

Nos. 408 and 410 DAVIS STREET,

Between Washington and Jackson,

AND DRIED FRUITS,

Oranges,

BEANS, PRODUCE, Etc.

SAN FRANCISCO, CAL.

DRS. E. H. and GEO. C. PARDEE,

DISEASES OF THE

EYE, EAR and THROAT,

526 Montgomery Street,

Corner Clay, SAN FRANCISCO

Hours: 9:30 A. M. to 3:30 P. M.



The world-renowned 60 acre POULTRY FARM OF FANNY FIELD, that pays her a profit of \$1,000 annually, is having an immediate sale. Tells about houses, runs, incubators, brooder, chickens and capons. Every man, woman and child should read it. Price 25c. Steps taken. R. B. Mitchell, 69 Dearborn St., Chicago.

TO OWNERS OF HORSES, COWS, ETC.



Convince yourself by trial that the most speedy and effective cures are made by the use of Homoeopathic Medicines, and that this is by far the CHEAPEST treatment. Horse-car companies in New York who have adopted this treatment have found their losses by sickness and death very materially diminished. We can give the highest references in this State to prove the superiority of this treatment over any other. Send for our "Guide" and "Veterinary Index," pamphlets of 64 and 42 pages, respectively, containing most valuable information. Sent FREE by mail upon application to

BOERICKE & SCHRECK,  
234 Sutter St., San Francisco, Cal.

## WEST COAST LAND CO.

SAN LUIS OBISPO, CAL.

Incorporated March 27, 1886.

CAPITAL,

\$500,000.

DIRECTORS.

GEO. C. PERRINS,  
JOHN L. HOWARD,  
ISAAC GOLDTREE,  
R. E. JACK,  
C. H. PHILLIPS.

OFFICERS.

JOHN L. HOWARD, President.  
ISAAC GOLDTREE, Vice-President.  
R. E. JACK, Treasurer.  
C. H. PHILLIPS,  
Secretary and Manager.

## THE PASO ROBLES, SANTA YSABEL, and EUREKA RANCHES,

Recently purchased by the West Coast Land Company, are now offered for sale in subdivisions.

This immense body of land, including 12,000 acres unsold of the Huer Huero ranch, belonging to C. H. Phillips, comprises 64,000 acres of rich, virgin soil. It lies in a compact body, in the center of San Luis Obispo county, and is within from 9 to 20 miles of the sea coast. It is covered with white and live oak timber, is one of the most picturesque bodies of land in the State, and requires

### NO IRRIGATION.

It has an abundance of living water, and where not sufficient for domestic use, good water can be had at a depth of from 10 to 40 feet. It has an average annual rainfall of 21 inches, exceeding by six inches that of Santa Clara county, one of the most prosperous counties in the State.

The extension of the Southern Pacific Railway from Soledad southward traverses these lands for 15 miles throughout their entire length, placing the property within eight hours of San Francisco.

These lands are offered at from \$10 to \$30 an acre, and are all susceptible of the highest cultivation. In salubrity of climate, productiveness of soil and location as to market, they are equal to lands in Los Angeles and other counties, which readily bring from \$100 to \$200 and upward; and as to price and terms, offer the best inducements to those seeking homes on any part of the Pacific Coast. The survey of the

### PASO ROBLES RANCH

Has been completed. The maps and catalogues are now ready, and will be sent free on application.

This ranch, containing 20,400 acres, has been subdivided into 230 lots. It is 12 miles from the sea coast, and is 20 miles north and west from San Luis Obispo city.

This ranch was one of the earliest granted by the Mexican Government and having been held by the same party for over 30 years, has never before been offered for sale. It consists exclusively of land of the choicest character, and is second to none in the State for the production of wheat, wine, fruits, raisins and olives.

TITLE, U. S. PATENT.

### TERMS OF SALE.

One-third cash; balance in 4 equal payments at 2, 3, 4 and 5 years; interest, 6 per cent per annum. The mortgage tax paid by the mortgagee makes the interest about 4 per cent net to the purchaser. A deposit of \$25 will be required in all cases to cover expenses of sale.

C. H. PHILLIPS, Manager,

West Coast Land Co., San Luis Obispo, Cal.

Send for Catalogue and Map.

## LIGHTNING HAY KNIVES

WEYMOUTH'S PATENT.

This Knife is the BEST IN USE for cutting down hay and straw in mow and stack, cutting fine feed from bale, corn stalks for feed, cutting post and ditching marshes. The blade is Best Cast Steel, spring temper, easily sharpened, and is giving UNIVERSAL SATISFACTION.

A few moments' trial will show its merits, and parties once using it are unwilling to do without it. Its sales are fast increasing for export as well as home trade; and it seems destined to take the place of all other Hay Knives. They are nicely packed in boxes, 1 dozen each of 60 pounds weight, suitable for shipping to any part of the world. Manufactured only by

HIRAM HOLT & CO.

EAST WILTON,  
Franklin Co., MAINE.

For sale by the Hardware trade generally.

Warning of our rights, and the public are cautioned against purchasing any Hay Knives made as described above, which are not of our manufacture.  
EAST WILTON, Sept. 1, 1886.

CAUTION.

We are informed that various parties are infringing upon the widely-known Letters Patent granted originally to GEORGE F. WEYMOUTH for an improved Hay Knife. The invention patented by him is a sword-shaped blade provided with operating handles, the edge of the sword-blade being furnished with knife-edged serrations or teeth. It is our purpose to PROSECUTE ALL INFRINGEMENTS, and to hold responsible to the full extent of our ability and of the law, all parties who manufacture any knife infringing upon the patent, or who deal in the same. Several suits are now pending in the U. S. Courts. All manufacturers and dealers are hereby

warned of our rights, and the public are cautioned against purchasing any Hay Knives made as described above, which are not of our manufacture.

HIRAM HOLT & CO.

Democratic Congressional Nominee,  
FIFTH DISTRICT,  
FRANK J. SULLIVAN.

"I believe that the silver dollar of labor should equal in value the gold dollar of capital."

A Good Opportunity for a Machinist.

A variety of good Tools, Patterns, etc., with business for sale cheap by a party retiring from business. A splendid opportunity for an enterprising mechanic. Address A. B. O., care of this paper.

NATIONAL ASSURANCE CO.,  
OF IRELAND.

ATLAS ASSURANCE COMPY,  
OF LONDON.

BOYLSTON INSURANCE COMPANY,  
OF BOSTON, MASS.

H. M. NEWHALL & CO.,

GENERAL AGENTS,

809 & 811 Sansome St., San Francisco, Cal.

To Young Men and Young Women.

All competent boys and girls should prepare themselves for usefulness in business if they wish to "step up higher." We have for sale to such, on easy and favorable terms, a scholarship in one of the best business colleges in the U. S. Address this office.



## Patrons of Husbandry.

(Continued from page 321.)

## A Pleasing Finale.

## Dairy Improvements.

About 20 Patrons and Matrons from Yuba City and distant Granges met at Bro. B. F. Walton's dairy farm, near Yuba City, last Saturday afternoon, to witness the first operations of his new De Laval cream-separator. The machine was operated by horse-power, and within a few minutes after the warm, foaming and luscious-seeming milk was fed into the rapidly-revolving centrifugal operating manipulator, thoroughly skimmed, a current of milk flowed from the lower spout, soon followed by a more delicate streamlet of pure, uniformly rich cream. The operation was so speedy, quiet, continuous and uniform as to appear magical in effect to all upon first witnessing the operation of this wonderful improvement in the work of rich butter-making. About one in eight parts pours out in cream. All present were certainly pleased with the perfect operation of the separator.

Most of the visiting Patrons present had been delightfully entertained, during the day, with rides about the rich surrounding country and homes of their entertainers, including such genial and prosperous patrons as Bros. B. F. Walton, B. F. Frisbie, H. O. Jones, and others. We dare say none have visited any richer farming district of equal breadth and uniform good quality of soil. Its capabilities for diversified farming products, without irrigation, are certainly remarkable, and as yet but very limitedly appreciated. Some day, when the lands in these districts—saved from the destroying debris elements by the vigilance, hand work and levees of their pioneer owners—are sold in small tracts, at hundreds of dollars per acre, and in some cases perhaps by the thousand dollars, their real merits and capabilities will become fully apparent.

These rides about the country, closing with this lingering gathering of brothers and sisters, seemed the one thing only needed to cap the princely entertainment accorded to their visiting friends by the generous hosts of Yuba City Grange. The whole week will be long and pleasantly remembered by both guests and entertainers.

## The National Grange at Philadelphia.

The following notice has been addressed to the Worthy Masters of State Granges:

NATIONAL GRANGE, P. of H.,

Office of the Secretary,

WASHINGTON, D. C., Oct. 1, 1886.

DEAR SIR AND BROTHER:—In accordance with the provisions of its constitution and the resolution adopted at the session of 1885, the Twentieth Session of the National Grange, Patrons of Husbandry, will be held in the city of Philadelphia, Penn., commencing on "the Wednesday after the second Monday in November," 10th proximo, at 11 o'clock A. M.

The sessions of the Grange will be held in Musical Fund hall, Locust street, between Eighth and Ninth streets.

Accommodations for the National Grange have been secured at the Girard house, corner of Ninth and Chestnut streets, two and one-half squares from Musical Fund hall, at the rate of \$2.50 per day or \$3 per day, including heating of rooms.

By order of the Executive Committee,

JOHN TRIMBLE,

Secretary National Grange.

## Grange Items.

[Condensed from the Patron.]

PLACERVILLE GRANGE numbers over 140 members, and there are more coming. At their first September meeting, four sisters and three brothers took the fourth degree.

ENTERPRISE GRANGE conferred the fourth degree upon a class of five, the 23d ult., and then sat down to a fine harvest feast with visitors from Sacramento and American River.

PLUMAS GRANGE survives her short-lived neighbors, and although somewhat lonesome, is dear to her members, has grown and done good work in Sierra valley.

ALHAMBRA GRANGE now counts 109, and has lost but two of her 22 charter members.

DELIGHTFUL.—One of the pleasantest features enjoyed by some of the attendants at the State Grange at Marysville were the charming drives tendered them by members living in the vicinity and those who had come from abroad with their own teams. Among the latter was Bro. M. Sprague, P. M. of Sacramento Grange, who took more than one jolly load to delightfully enjoy the country around. Bro. S. was the happy guest, during the session, of his daughter, Hattie Sprague Jones, well and brightly remembered by old members of the State Grange.

STATE FAIR PREMIUMS—ERRATA.—Mr. J. J. Jones, of Martinez, hands us the following corrections in the State Fair poultry awards, as published on page 286 of the RURAL, Oct. 2d: Langshans—Best breeding pen. Buff Cochins—Best breeding pen. Houdans—Best pair. All, J. J. Jones. We are glad to make the correction.

## Stockton Notes.

[Written for the RURAL PRESS by Mrs. W. D. A.]

The fair was a decided success at the track and pavilion. The district show of cattle was highly commended, even to the great fat steer led by Farmer Grupe, and the Lockeford ox seven feet high, weighing 2376 pounds.

By electric light, the pavilion, with its mingled and varied whole, was entrancing. Its magnificent display of grapes, fine apples and other fruits and vegetables, its rich combinations and tasteful arrangement of store goods, laces (Feist imported a \$550 Duchess lace set, hand-made, for the fair), millinery, machine-work, paintings, embroidery and bric-a-brac were never equaled here before. Ten crazy-quilts lent their commingled colors, stitchings and paintings. A large one, bright with small, silvery beads, with "Althea" worked in the center, surrounded by painting and etching designs, held the premium, though many thought the joining and tracery of figures on Mrs. Dr. Grattan's quilt the neatest.

Unique and charming was a banner of white bolting silk with graceful clusters of single scarlet geraniums in very fine silk embroidery, by Miss O. Marsh, which held the blue ribbon, as did a chenille-embroidered sofa pillow with golden lining by Miss J. Fanning, who had two booths of painting on velvet and satin, point-lace, Kensington and silkwork, and lovely bric-a-brac. Mrs. J. R. Williams had a very large show of almost everything in beautiful fancy work, with paintings by Mrs. Waterman, in a large case (glass doors). Mrs. Boisselier's case was noticeable for a silk-embroidered sofa pillow on which the premium was being tied, a luster-painted parrot, limb and sprag, a lace-bordered white flannel toilet set, with pink, sweet wild roses painted thereon, and bronze-velvet table-scarf chenille-embroidered. Miss Hickman had four luster paintings, crimson satin banner with splendid peacock (premium), black velvet banner, tiger lilies, with the regal grace of the fields, another with azaleas and roses. Mrs. Dr. Grattan's show-case contained stalagmite specimens from the Mammoth Cave, Calaveras county, lovely chenille, silk and Kensington embroidery, painting on velvet and satin by Miss Mollie Grattan, and a fancy grain shovel painted by Miss Maud Southworth, from which hung the blue ribbon.

Mrs. T. H. Bond had a booth of tasteful embroideries, macramé and crochet-work; Miss Marshall, silk-embroidered white flannel skirt for Ethel Sperry, soon to become the bride of Charles Crocker's second son, Will.

On a post a set of pillow and sheet shams etched with red cotton held the premium.

Mrs. Utt and daughter made an amateur silk show of 15 pounds cocoons, carded reels, and fluffy orange and white bunches of silk and silk flowers, showing that silkworms are a success here, if understood. They have a rich point-lace parasol-cover, and many other delicately-worked pieces with drawn work, knitting and worsted robe. This exhibit of cocoons received the first premium—\$8.

Mrs. Fairbanks had a table of assorted cocoons, two small skeins of silk, and shreds of silk with a flower pyramid of cut cocoons, all for sale; a showcase of fancy work, several worsted carriage robes and a large crocheted picture-frame. Near were some crocheted work-baskets, strong as willow, by Mrs. Myres. Spread on the wall was a serviceable beauty of an afghan by Mrs. Oulahan, with the blue knot on it, and over it paintings in oil by Mrs. Alard, who is said to be the best flower painter in water colors in Stockton. Near, hung oil-paintings much admired, by Lena Bidwell; then a fine screen and art-work for house decoration by Mrs. Dorr.

T. Oxley Miller, Stockton's best artist, had some fine pieces in different places.

Crayon sketches by "Ione" Carr were considered very life-like, especially the sketch of the Presbyterian minister and Congressman Budd, and "The King Listens," "The King Triumphs." Higher up were Mrs. Louise de Horan's, from the Mechanics' Institute. Comment is unnecessary. She had the gold medal at New Orleans, and six of her pictures were marked sold here.

J. Marsh Ladd, a young artist, had fine paintings of floods and streams, mountains and waterfalls. Fidelity to nature characterized all of his work. His picture of a mill on a mountain stream, bordered by forest trees, won the first prize for sketches of nature. Miss Reep and Mr. Peters made a large show of portraits painted in oil. I beg pardon if I should make a mistake in all this maze of art work. Under a dome drooped a snowy wax chapel.

Mrs. C. W. Dohrman showed great success in teaching little ones to think, do and take pleasure in doing, by her Kindergarten exhibit, a marvel of loving patience in its varied collection. Fine etchings, drawings and paintings evinced skill. A good feature of the district was show-cases of children's work and cute little letters.

Knots of ladies gathered around the "Jewel," in Jackson & Earle's show of stoves—safest of all vapor stoves. One gallon of gasoline will last a family two days to cook, wash and iron.

One of the most useful shows was the Buhach, by the Buhach Co.—death to insects; also, the White Adriatic fig—best for curing and market. They showed fan palms, too.

The Peerless incubator—Biven & Co., Stock-

ton—is the cheapest and best I have seen. One hatching 100 eggs costs \$30.

In a large booth near, Mrs. Hoers showed knitted goods and home-made linens 140 years old, with lovely worked sheets.

Near the center, W. Bidwell, Stockton, has his model mower, with some new principles.

Chained to the post was a "self-car coupler," patented by S. A. Killmer and R. A. Ford, Binghamton, N. Y. Agent for Pacific Coast, R. A. Ashley. A long list of society and donated premiums were bestowed on the exquisite floral designs, Miss Marshall winning the first, \$20, and \$12 for chair and sickle. Mrs. Bates, five prizes. "Ladies' Relief Corps," fourth prize (barrel of flour). Eddie Adams, first donated prize, Duchess lace handkerchief, for flower basket.

The two large scrollwork cabinets inlaid with different woods were much praised. There price was \$70 and \$60.

The annual address was wanting in the usual adulation bestowed on farmers, but sensible and listened to.

Pomona exhibit has been ably described in the RURAL. I will only say that we had more room (60x36) to show our cerealia in jars and all our varied products, that "San Joaquin county" in letters of wheat were faultless, and that the perseverance of W. M. Fiske, Sisters Beecher and McIntosh, and Brother and Sister Williams, Brothers Elliot, D. J. Hoffman and others, is beyond all praise.

## Vacaville Notes.

EDITORS PRESS:—The fruit season is pretty well over here for this year. There are some grapes yet and will be until the rains spoil them. Five or six cars are sent East weekly from Vacaville now. We had quite a shower of rain yesterday, but not enough to damage green fruit unless it turns cold, which will cause grapes to crack.

Many have been so busy as not to be able to summer prune their trees at the proper time, and are doing it now. Generally, trees here are pruned twice a year; many prune apricot trees in September or earlier, which causes the fruit buds to set thicker than they would if the pruning is not done until spring. Several of our orchardists are putting in drain tiles; they are put in the ground from 14 to 30 inches deep. Some put the dirt on the pipe, while others put a layer of straw or fine brush next to the pipe; I think a layer of gravel or brush would be better than dirt. Five-inch tiles are usual for the main lines and three-inch for side ditches.

Stock are looking well generally, and feed is plenty; but this is not much of a stock country now. Hogs are low, being worth only 2½ cents per pound.

Vacaville, Oct. 10th.

## County Awards at the Mechanics' Fair.

Although we have alluded to the awards for the county exhibits at the Mechanics' Fair, we have not published the full list. Sonoma county was awarded a gold medal and \$250 for the best, most extensive and most varied display of farm products. Placer county came second, with a grand silver medal and a cash prize of \$150; Shasta county third, with a silver medal and \$100; and Contra Costa fourth, with the bronze medal and \$75. The honors in the display of fruit were divided pretty equally between Placer and Sonoma. Placer carried away the prize for the best display of table grapes, Vacaville gaining the second place, while Sonoma was awarded the premium for the best wine grapes.

## Our Agents.

OUR FRIENDS can do much in aid of our paper and the cause of practical knowledge and science, by assisting Agents in their labors of canvassing, by lending their influence and encouraging favors. We intend to send none but worthy men.

JARED C. HOAG—California.  
G. W. INGALLS—Arizona.  
E. L. RICHARDS—San Diego Co.  
R. G. HUSTON—Montana.  
FRANK W. SMITH—Nevada and California.  
GEO. McDOWELL—Fresno and Tulare Cos.  
O. F. BERGMAN—Tehama and Colusa Cos.  
S. S. LANYON—Nevada, Sierra and Plumas Cos.  
JEANNETTE HOUGHTON—San Mateo Co.

DELICIOUS.—There came to us a day or two since a 20-pound box, tagged "Non-irrigated grapes; compliments of C. H. Leggett & Son, Oroville." Opening it, we found choice clusters of Tokay, Muscat, Black Prince and Bishop, that could hardly be surpassed in delighting the sense, whether of sight or taste. We can assure the friends who thus kindly remembered us that none of those Muscats will keep till next March.

WORKINGWOMEN in London cover and embroider sunshades at three-quarters of a penny apiece, and, if work can be got, skilled workers do two dozen sunshades a day.

**DEWEY & CO**  
**PATENT**  
**SOLICITORS.**  
252 MARKET ST. S. F.  
ELEVATOR 12 FRONT ST. S. F.

## List of U. S. Patents for Pacific Coast Inventors.

Reported by Dewey & Co., Pioneer Patent Solicitors for Pacific States.

From the official report of U. S. Patents in Dewey & Co.'s Patent Office Library, 252 Market St., S. F.

FOR WEEK ENDING OCT. 5, 1886.

350,181.—GREASE-TRAP—C. H. Ackerson, S. F.  
350,105.—VAGINAL SYRINGE—D. F. Bennett, S. F.

350,242.—CARRYING VESSELS OVER OBSTRUCTIONS—W. A. Grondahl, Portland, Ogn.

350,254.—WHEEL HUB—A. W. Lane, Janesville, Cal.

350,205.—CLOD-CRUSHER, ETC.—D. Lubin, Sac., Cal.

350,261.—ANIMAL TRAP—R. Mathai, S. F.

350,390.—FURNITURE SUPPORT—C. M. Plum, S. F.

350,446.—COMPOUND ENGINE—J. Richards, S. F.

350,213.—DERRICK—Geo. Rounds, Vallejo, Cal.

350,274.—CHAIR—Daniel Smith, Santa Rosa, Cal.

350,470.—PILLOW-SHAM HOLDER—Souther & Taylor, Los Angeles, Cal.

350,171.—SEPARATOR—A. Swingle, S. F.

350,400.—REIN-HOLDER—L. S. Tambling, S. F.

350,223.—PILE-DRIVER NIPPERS—II. v. d. Wulbecke, Arcata, Cal.

NOTE.—Copies of U. S. and Foreign patents furnished by Dewey & Co., in the shortest time possible (by mail or telegraphic order). American and Foreign patents obtained, and general patent business for Pacific Coast inventors transacted with perfect security, at reasonable rates, and in the shortest possible time.

RATE CUTTING between the overland lines is said to be in rapid progress, with prospect of another "cruel war." This Wednesday afternoon the first-class rate is said to be \$60.

**46**  
**Years**  
**experience**  
**Proves**  
**Perry Davis'**  
**Pain-Killer**  
**the CURE for**  
**CHOLERA**  
**Cholera-Morbus, Diarrhoea**  
**Dysentery, Summer Com-**  
**plaints, and all Diseases**  
**of the Bowels.**

Mill  
With  
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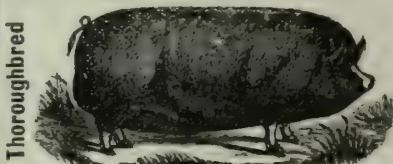
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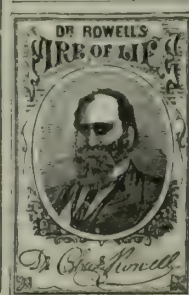
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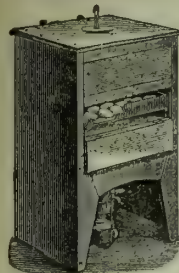
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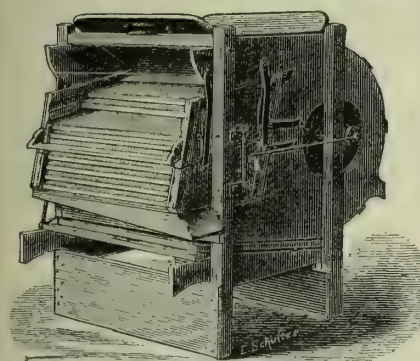
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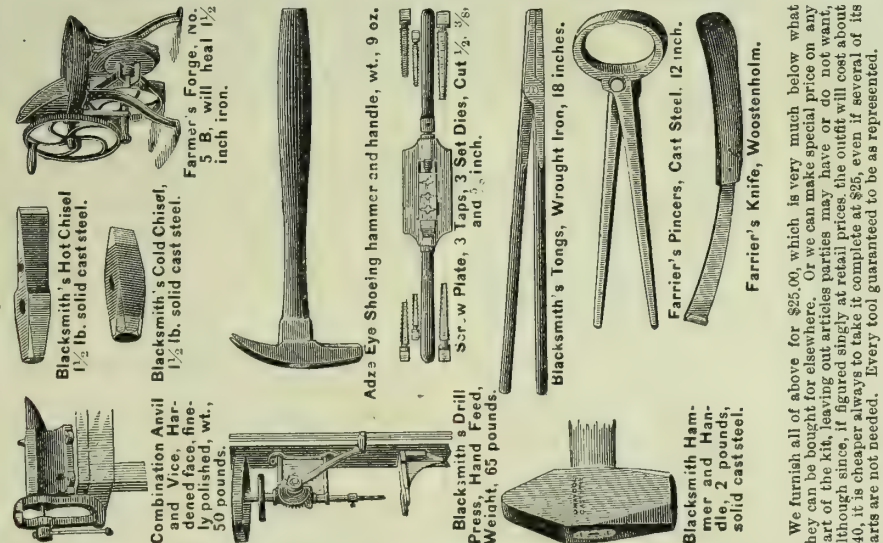
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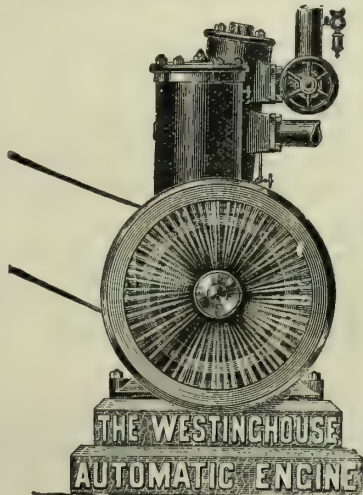
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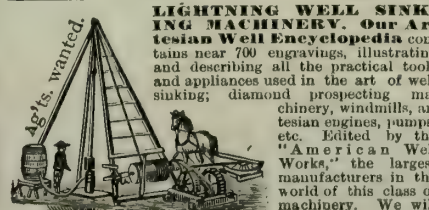
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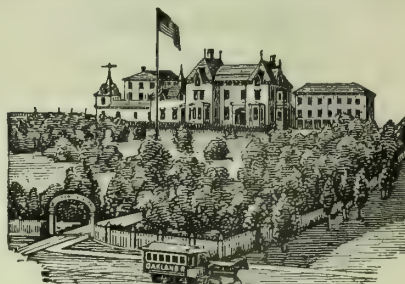
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H. M. LARUE.....Yolo County  
I. C. STEELE.....San Mateo County  
THOMAS MCCONNELL.....Sacramento County  
C. J. CRESSEY.....Merced County  
SENECA EWELL.....Napa County

CURRENT ACCOUNTS are opened and conducted in the usual way, bank books balanced up, and statements of accounts rendered every month.

LOANS ON WHEAT and country produce a specialty. COLLECTIONS throughout the Country are made promptly and proceeds remitted as directed.

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ALBERT MONTPELLIER, Cashier and Manager.

San Francisco, Jan. 15, 1882.

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Conducted upon Business Principles.

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MRS. C. E. KINNEY, Resident Director

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DEWEY & CO.,

252 Market St., S. F.



## S. F. MARKET REPORT

NOTE: Our quotations are for Wednesday, not Saturday, the date the paper bears.

## Weekly Market Review.

## DOMESTIC PRODUCE, ETC.

SAN FRANCISCO, Oct. 13, 1886.

The past week has been uneventful, outside of a glut in the grape market. In cereals there has been a more active inquiry, with sales restricted, owing to lighter offerings. Eastern telegrams gave lower wheat markets up to Tuesday, when a turn for the better was noted, resulting in quite an advance today. Foreign cables were of an unfavorable character up to yesterday, when a better tone was noted. To-day's cables gave an advance in quotations, as the following shows:

LONDON, Oct. 13.—Cargoes off coast, firmer; held higher; the continental demand continues. Cargoes on passage and for shipment, firmer. California wheat, off coast, 33s 6d to 34s. California wheat just shipped, 34s 3d. California wheat, nearly due, 33s 6d. English country market, steady. French country market, firm. Liverpool wheat, spot, firmer. Liverpool wheat, Cal. 6s 6d to 6s 9d. Weather in England, unsettled.

## Foreign Review.

LONDON, Oct. 11.—The *Mark Lane Express*, in its weekly review of the British grain trade, says: There is a steadier feeling both in London and the provincial markets. Dealings are firm at a slight advance. Sales of English wheat during the past week were 67,462 quarters at 30s, against 75,264 quarters at 30s 7d during the corresponding week of last year. There were large receipts of Indian wheat, and lower prices were accepted ex ship. Three cargoes were withdrawn and eight remained, four of which were Chilean, two Californian, one Walla Walla, and one Calcutta. At to-day's market there was a quiet and steadier tone. Wheat was slow of sale. American brands of flour were 3d 6d lower. Corn and oats were dull and unchanged. Beans were 6d lower. Peas were 1s cheaper. Linseed was 6d dearer.

## Eastern Wool Markets.

NEW YORK, Oct. 9.—Wool has been steady, under fair inquiry, though manufacturers are not buying so freely as last week. Holders, however, remain firm and speculators look for high prices. The sales of the week included 50 bales of spring California at 25c; 6000 pounds scoured California at 60c; 7000 pounds California and Texas scoured at 56c; 40,000 California spring greasy at 19c; 24c; 40,000 Eastern Oregon at 24c; 25,000 Utah at 25c.

BOSTON, Oct. 9.—The market has been fairly active the past week and prices have been firm and tending upward. The sales for the week have been 4,794,000 pounds foreign and domestic. The situation is as strong as ever. Holders feel confident that wool is good property. The demand for the past week has been almost wholly from manufacturers, but a few lots changed hands on speculation here. We look for no easing off in values, although the demand may not be so active. Large purchases for some time past have given manufacturers good supplies to work on. It will be no surprise to the trade to find a considerable falling off in the demand during the next few weeks. California wool has been in good demand. Sales have been made of 20,000 pounds spring at 24c; 100,000 pounds spring at 21c; 100,000 pounds spring at 20c; and 324,000 pounds on private terms. Oregon wools have been active. The sales embrace 125,000 pounds Eastern at 24c; 15,000 pounds at 25c, and 200,000 pounds on private terms. Receipts of domestic have been 14,066 bales, against 6675 bales in 1885. The imports of foreign for the same time have been 4510 bales, against 2298 bales in 1885.

## New York Wheat Market.

NEW YORK, Oct. 10.—A rapid increase in the visible supply of wheat, a light export demand, with continued reports of weaker foreign markets, have caused a material decline in prices. The market ruled dull and weak throughout the week. Spot closed 2c lower, and final figures were off seven-eighths of a cent for all options, except September, which is down three-fourths of a cent. Closing figures were as follows: October, 82; November, 83½; December, 85½; January, 86½; May, 92½c.

## New York Hop Market.

NEW YORK, Oct. 10.—There has been no change whatever in the situation of the hop market. Really first-class stock remains firm, while poor stock is freely offered with no buyers. Pacific Coast crop of 1886, good to choice is quoted at 30c; 35c; do 1885, 15c; 20c. New York State, 1886, common and medium, 25c; 30c; do 1885, prime to choice, 20c; 25c; do, common and medium, 12c; 17c.

NEW YORK, Oct. 11.—The almost absolute failure of the hop crop in this State has not affected brewers so seriously as at first expected. This is in a measure due to the large crops abroad and heavy competition among importers in this country. Good imported hops have been sold as low as 25 cents per pound in this city, and although the tendency is upward, the market is unsettled and quotations range all the way from 25 to 40 cents.

## California Products at the East.

NEW YORK, Oct. 10.—Beans—Choice stock meets with a steady demand, but low grades are dull and weak. California lima, \$1.70.

Seeds—California yellow mustard, 4½c; inferior quality offered on wharf, 3½c; quoted at 4½c. Canned Goods—Salmon is in better demand and firm. Fruits are quiet. California canned peaches, \$2.25; pears, \$2.10; plums, \$1.85 and \$2; grapes, \$2; apricots, \$2.15; salmon, \$1.55.

Honey—Extracted, 5c. Green Fruit—California pears, \$2 and \$4 per box; quinces, \$1 to \$1.50 per box; grapes, \$1 to \$5 per 40 lb case.

## New York Fruit Market.

NEW YORK, Oct. 11.—The *Times* says: There will be few peaches in the markets of this city this week, and they will come from many parts of the United States. Perhaps the largest and most attractive in appearance will come from California.

That State has been contributing a few peaches to the market since June last. The grapes now here come from the Mediterranean, California, Central New York and elsewhere. New York is the great distributing center for not only the Eastern States, but also all the leading cities of the South. Choice stock is moving freely and at remunerative prices. The purple Tokay from California has the preference, and sells for 10 to 12 cents per pound; Muscatel, from \$3.50 to \$4.50 per case, and Black Ferrara about the same. Almeria, from the Mediterranean, is plenty and sells for about 8 cents per pound. White Niagaras bring about 10c, Delawares 10c and Concord from 3 to 4c.

## Local Markets.

BAGS—A fair inquiry is reported for both bean and potato bags, at unchanged quotations. Grain bags are lifeless.

BARLEY—Receipts have only been fair, with steady but strong buyers concentrated stocks, allowing the demanding of an advance. The market to-day for sample parcels was strong at an advance. On call to-day there was more activity, with transactions reported as follows: Buyer season—200 tons, \$1.00½; 100, \$1.07½; 300, \$1.08; 200, \$1.08½; 100, \$1.08½; 200, \$1.07½. Seller 1886—100 tons, 95½c; 200, 95½c; 500, 97c. No. 1 Brewing, buyer season—100 tons, \$1.27½ c. Buyer season—100 tons, \$1.08½; 500, \$1.07½; 100, \$1.07½. Buyer 1886—100 tons, \$1.00½. Seller 1886—100 tons, 97c; 300, 96½c c. c.

BEANS—Under strong buying on Eastern orders, the market is strong at an advance. It is also improved on a report that the crop in one or two of the southern counties was damaged to a considerable extent by a heavy frost on Sunday night last.

DAIRY PRODUCT—Butter is reported weak, with a slack demand for fresh roll. Pickled is steady, with the supply large. Cheese is stronger and higher, with a good demand at the advance.

DRIED FRUITS—Receipts are coming in more liberally, with a ready market for all received at full quotations.

EGGS—Fresh laid eggs are higher and very strong at the advance. It is claimed that 37½ to 40 cts is readily obtained. Receipts of Californian are light.

FEED—Bran and middlings are higher. Ground barley is stronger. Other ground feed is unchanged. Hay is in good demand, with an advance obtainable for good to extra choice, owing to receipts only being fair. The following is the range for hay: Barley, \$7.00 to \$10; oats, \$6.00 to \$12; wheat, \$10.00 to \$13.50; with something extra selling slightly higher.

WHEAT—The market for sample parcels has ruled very strong throughout the week. Yesterday a schooner load of good shipping was sold at \$1.35, delivered alongside here. A large parcel was sold at \$1.33½. Port Costa delivery; the grade was good shipping. To-day it is claimed that holders are asking more money with very few offerings to sell. On call transactions were made at higher prices, as follows: Morning Session: Buyer season—600 tons, \$1.43½; 1800, \$1.43½; 300, \$1.43½; 500, \$1.43½; 100, \$1.43. Buyer 1886—100 tons, \$1.37½; 500, \$1.38; 100, \$1.38½ c. c. Afternoon Session: Buyer season—700 tons, \$1.43½; 200, \$1.43½; 200, \$1.44; 1000, \$1.43½. Buyer 1886—100 tons, \$1.38½; 100, \$1.38½; 100, \$1.38½; 300, \$1.38½; 100, \$1.38½; 100, \$1.38½ c. c.

HOPS—The market has a firmer, stronger tone, with freer sales reported the past week. One consignment of 150 bales of good to choice from Rogue river, Oregon, was placed with an Eastern buyer at 32½ cents per lb.

HONEY—Receipts are barely up to requirements for shipping to the East, but buyers do not bid higher prices, claiming that the market does not justify it. Holders are not pressing the market, consequently there is a firm, strong tone.

[COMMUNICATED.]

## Market Information.

## Cereals.

The International Corn Market, at Vienna, was held at the end of August this year, as usual since 1873. As in the previous 14 years, so in the present year, experts and others submitted their reports respecting the results of this year's produce in the different countries of Europe, which reports are usually regarded as a basis for speculation. According to these statements the output of wheat—taking 100 as an average crop—is as follows compared with the two preceding years:

	1886.	1885.	1884.
Austria.....	92½	104	103
Hungary.....	87	117	104
Prussia.....	95	94	97
Saxony.....	95	100	110
Bavaria, Franconia and Su-ba	101	100	107
Bavaria, Upper and Lower Ba-			
varia.....	95	105	105
Bavaria, Palatinate and Wet-			
terau.....	88	100	90
Baden.....	85	97	90
Wurtemberg.....	97	96	99
Mecklenberg.....	98	100	105
Dennmark.....	100	110	100
Norway and Sweden.....	90	105	105
Italy, south.....	89	85	78
Italy, upper.....	125	70	80
Italy, east.....	100	80	100
Italy, middle.....	80	78	80
Switzerland.....	100	125	80
The Netherlands.....	90	95	95
France.....	85	95	95
Great Britain and Ireland.....	75	95	105
Russia, Esthonia.....	97	77	80
Russia, middle.....	55	75	100
Russia, Padolia.....	60	90	100
Russia, Bessarabia.....	77	100	125
Russia, Cherson and Jecaterin-			
oslaw.....	60	100	100
Russia, north.....	85	83	90
Russia, Poland.....	105	97	115
Russia, Courland.....	75	85	100
Roumania, Moldavia.....	85	115	125
Roumania, Wallachia.....	87	82	112
Servia.....	90	110	150

It will be seen that the falling off in the estimated yield is very considerably below either 1885 or 1884. From the same source the rye crop is as far below an average as the wheat crop, and rye is

used very extensively in parts of Europe as a substitute for wheat.

The official report of the United States Agricultural Department places the wheat crop of this country at 450,000,000 bushels, an increase over last year of 93,000,000 bushels. When the difference in the carryover from the season of 1884-5 (755,000,000 bushels) into that of 1885-6, is considered in comparison with the carryover from 1885-86 (75,000,000 bushels) into 1886-87, it is quite likely this country can spare for export 120,000,000 bushels this season, against 95,000,000 bushels exported the season of 1885-86, provided the consumption is not largely increased. Many believe in a larger consumption owing to the failure of crops in Texas, a shortage of 250,000,000 bushels in corn and a lighter potato crop than known since 1881.

The local wheat market has ruled exceedingly strong throughout the week, with \$1.32½ to \$1.33½ quickly paid at Port Costa for fair to good white shipping, and an advance on this figure for a large, straight parcel, or a grade running from good to choice white shipping. It is claimed that interior dealers were free sellers, but now they are either holding back or else they have been cleaned up. Farmers are reported not disposed to sell, as they have their grain warehoused, and will await future developments. The engaged tonnage in port to load is very heavy, with more vessels under charter, to arrive, as is the disengaged tonnage here and to arrive.

The barley market has ruled strong and active during the week, with buyers' necessities compelling them to pay a slight advance each day. It is reported that considerable dark stock has been taken for seed, by farmers who have sold their bright barley. The shipping demand continues free, while the consumption does not appear to slacken.

Choice oats are very hard to get, owing to the bulk of receipts being composed of poorer grades. The market has ruled exceedingly strong with higher prices obtained for all grades, owing to receipts barely being up to requirements.

In both rye and buckwheat there is light trading, with quotations more or less nominal. Nebraska corn continues in liberal supply, with prices favoring buyers; but California is in light supply. The crop in this State, it is now claimed, will be larger than estimated the forepart of September.

## Dairy Product.

Eastern eggs have come in quite freely, but they have not had any visible effect on Californian, which are very strong under light receipts and a good demand. Fresh-laid, near-by ranch eggs continue to fetch from 35 to 37½ cts per dozen, with occasional sales at a slight advance.

Cheese has ruled steady but firm, with a fair trade reported. Receipts are barely up to trade requirements.

Butter is very much as reported last week. The trade is running chiefly on pickled, which continues in liberal supply, although the stock is being rapidly depleted. Considerable solid butter in kegs has gone out on distant orders. Fresh roll butter is in good supply, with prices barely maintained, except for a few favored brands.

## Feedstuff.

Bran and middlings are not only higher, but very strong at the advance. Ground barley is firmer, but other ground feeds are unchanged.

In hay there is nothing new to report since last week's issue. The market continues very strong, with receipts barely meeting the consumptive demand. It is claimed that many farmers are holding until the character of the winter is determined.

## Fruits.

Table grapes have come in in such heavy quantities that there was a decided break in values, with much difficulty reported to get over 40 cts for the very best varieties. One canner took 2000 boxes of Muscats, choice, at 22½ cts to 25 cts per box, after which they withdrew from the market. Wine grapes also receded slightly in value.

Berries are about out of market, as are peaches. Plums are steady under fair receipts, as are figs and quinces.

Poor apples and poor pears continue a drag, but choice are steady with a strong tone.

Cantaloupes are very hard to sell, owing to the cooler weather and heavy receipts.

## Hops.

European mail advices give a shorter crop than heretofore claimed. Germany's total crop is 126,000 cwt (about 25 per cent) short of last year's, while Great Britain is placed at 742,000 cwt against 960,000 cwt last year. In our market there is a strong tone, with buyers a little more anxious. Several fair sized sales were made the past week at 30 to 32½ for good to choice, with an advance bid for something extra.

## Live-stock.

Mutton sheep are weak. Beef cattle are barely steady, although the consumption is increasing. Hogs are very weak, with a heavy selling pressure. Receipts last month were over 30,000. Packers and slaughterers report receipts in excess of the demand. Carriage horses and also roadsters continue to be inquired for, at prices heretofore paid.

The following are to-day's meat prices: Beef—Stall-fed, 6½¢ to 7½¢ lb; grass-fed, extra, 6¢ to 6½¢; first quality, 5½¢ to 5¢; second, 4½¢ to 5¢; third, 4¢ to 4½¢. Calves, small, 9¢ to 10¢; larger, 7¢ to 8¢ lb. Mutton—Ewes, 4½¢; wethers 5c. Lamb—Spring, 6½¢ to 7c lb. Pork—Live hogs on foot, 2½¢ to 3½¢ for grain and dairy feed; 2½¢ to 2½¢ for soft; dressed, 5¢ to 5½¢ for hard, and 4½¢ to 4½¢ for soft. Grass-fed stock sell on foot, gross weight, at one-half the price they fetch dressed; stall-fed, on foot, fetch one-third less than they sell at dressed.

## Raisins.

G. W. Meade & Co. report a very strong and active demand at the East, with heavier sales than ever before known. Reports of lower prices for California raisins are not credited by dealers; on the contrary, Meade & Co. and one or two other large firms report a stronger market at the East, owing to higher prices ruling for foreign. This year's California raisins show to a better advantage than last year's.

## Vegetables.

Potatoes have ruled dull and weak throughout the week. Receipts have not been large, but the demand was light. The bulk of potatoes coming in are poor to fair, which are sold only at low prices;

good to something very choice have moved off fairly well, but to clean up concessions were necessary. Sweet potatoes have a wide range, owing to the great difference in the quality. The demand has been and continues to be good, allowing dealers to clean up without any marked concessions.

Onions have been creeping up under moderate receipts and an increased demand. On Tuesday of last week it was hard to get 65 cts for choice, but yesterday it was hard for buyers to get choice at 90 cts.

The season for green corn is about over, causing a weak, dull and lower market notwithstanding light receipts.

Tomatoes have moved off quickly at full quotations, with an advance in some instances. The demand is from canners who are packing heavily, owing to the short pack at the East, where early frosts in this month did large damage to the crop.

In other vegetables the low, dull and weak market reported last week prevails this week.

## Wool.

The market is exceedingly strong in sympathy with higher prices at the close. Although the Eastern market is higher, yet prices there are not as high as they are in England where there is no duty on imported wools. The stocks of wool in Europe are very light, not more than one-quarter of what they were last year at this date. Last month's wool sales in London were 50,000 bales short, while it is claimed that the sales in next month will be from 75,000 to 100,000 bales short.

## Miscellaneous.

The tonnage movement compares with last year at this date as follows:

	1886.	1885.
On the way.....	253,482	229,193
In port, disengaged.....	79,896	86,317
In port, engaged.....	86,360	32,768
Totals.....	419,738	348,278

The above gives a carrying capacity as follows: 1886, 670,580 short tons; 1885, 557,244 short tons; increase over last year, 113,336.

The poultry market is almost bare of choice fowls, but is overstocked with poor, which sell slowly. Large fat fowls are quickly taken at an advance on top quotations.

In seeds there is more inquiry, with some farmers buying.

Hams are from ¼ to 1c lb lower.

San Francisco, Oct. 13, 1886.

## Domestic Produce.

Extra choice in good packages fetch an advance on top quotations, while very poor grades sell less than the lower quotations.

SEASONS AND PEAS.		Peanuts.....		3 @ 14	
Bayo, Cal.....	1 40 @ 1 55	Filterbts.....	13 @ 14		
Butter.....	1 25 @ 1 75	POTATOES.			
Butter.....	1 80 @ 1 90	Burbank.....	1 00 @ 1 25		
Red.....	1 10 @ 1 15	Early Rose.....	1 00 @ 1 25		
Pink.....	1 05 @ 1 15	Cuffey Can.....	1 00 @ 1 25		
Large White.....	1 70 @ 1 75	Jersey Blues.....	1 00 @ 1 20		
Small White.....	1 75 @ 1 80	Pataluma.....	1 00 @ 1 20		
Lima.....	2 00 @ 2 25	Tonales.....	1 00 @ 1 20		
Old Peas, big eye.....	1 10 @ 1 20	River beds.....	1 00 @ 1 20		
do green.....	1 00 @ 1 12	Humboldt.....	1 00 @ 1 20		
do Niles.....	1 25 @ 1 35	do Kidney.....	1 00 @ 1 20		
BROOM CORN.		Chile.....	80 @ 1 10		
Southern periton.....	50 @ 70	do Oregon.....	80 @ 1 10		
Northern periton.....	50 @ 70	Peerless.....	90 @ 1 20		
CUCUMBERS.		Salt Lake.....	1 00 @ 1 20		
California.....	4 @ 4	Sweet.....	75 @ 1 20		
German.....	6 @ 7	POULTRY AND GAME.			
DAIRY PRODUCE, ETC.		Hens, doz.....	5 00 @ 7 50		
Butter.....		Roosters.....	5 50 @ 7 50		
Cal. fresh roll, lb.....	30 @ 30	Broilers.....	3 00 @ 5 00		
do Fancy brands.....	32 1/2 @ 35	Ducks, tame.....	4 00 @ 6 00		
Pickle roll.....	17 @ 21	do Mallard.....	2 50 @ 3 00		
Firkin, new.....	15 @ 18	do Sprig.....	1 50 @ 2 00		
Eastern.....	15 @ 18	Geese, fair.....	1 50 @ 2 50		
CHEESE.		do Goodings.....	2 00 @ 3 00		
Cheese, Cal., D.....	9 @ 12	Wild Gray, doz.....	3 00 @ 3 00		
Eastern style.....	11 @ 14	Turkeys, doz.....	12 @ 16		
EGGS.		do Dressed.....	12 @ 16		
Cal. ranch, doz.....	25 @ 40	Turkey Feathers.....	10 @ 30		
do store.....	25 @ 32 1/2	do Eggs.....	10 @ 30		
Ducks.....	1 @ 1	Ship, Eng, doz.....	1 @ 1		
Oregon.....	1 @ 1	do Common.....	1 @ 1		
Eastern.....	15 @ 20	Doves.....	75 @ 85		
Utah.....	20 @ 25	Quail.....	75 @ 1 00		
FEED.		Rabbits.....	1 00 @ 1 25		
Baro, ton.....	15 00 @ 16 00	Fare.....	2 00 @ 2 50		
Commeal.....	25 00 @ 27 00	Venison.....	10 @ 12 1/2		
Ground Barley.....	21 @ 23	PROVISIONS.			
Hay.....	8 00 @ 14 00	Cal. Bacon.....	5 @ 9		
Middlings.....	13 00 @ 18 00	Heavy, D.....	5 @ 9		
Old Oake Meal.....	25 50 @ 28 50	Medium.....	5 @ 9		
Straw, bale.....	25 @ 50	Light.....	10 @ 12 1/2		
EXTRA, CITY MILLS.		do Light.....	10 @ 12 1/2		
do Country Mills.....	4 12 @ 4 50	Lard.....	7 @ 9		
Superfine.....	3 00 @ 3 50	Cal Smoke Beef.....	113 @ 123		
GRAIN, ETC.		Hams, Cal.....	10 @ 12		
Barley, feed, cbl.....	8 1/2 @ 1 00	do Eastern.....	13 @ 14		
do Brewing.....	1 10 @ 1 25	SEEDS.			
Chevalier.....	1 45 @ 1 55	Alfalfa.....	10 @ 11		
do Coast.....	90 @ 145	Canary.....	34 @ 4		
Buckwheat.....	1 00 @ 1 25	Clover red.....	12 @ 13		
Corn, White.....	1 @ 1	White.....	17 @ 18		
Yellow.....	1 30 @ 1 35	Cotton.....	30 @ 30		
Small Round.....	1 30 @ 1 35	Flax.....	22 @ 24		
Norway.....	1 02 @ 1 15	Glazed Ryegrass.....	25 @ 25		
Oats, new.....	1 @ 1	Perennial.....	7 @ 9		
Choice feed.....	1 35 @ 1 40	Millet, German.....	4 1/2 @ 5		
do good.....	1 27 1/2 @ 1 32	Mustard, white.....	5 @ 6		
do fair.....	1 20 @ 1 25	Brown.....	2 25 @ 2 75		
do black.....	1 14 @ 1 15	Ky. Blue Grass.....	17 @ 18		
do Oregon.....	1 10 @ 1 23	2d quality.....	11 @ 13		
Rye.....	1 10 @ 1 25	Sweet V. Grass.....	7 @ 8		
Wheat milling.....	1 40 @ 1 45	Orchard.....	30 @ 35		
Gilt exported.....	1 38 @ 1 37 1/2	Red Top.....	18 @ 20		
do home.....	1 38 @ 1 37 1/2	Germanian.....	18 @ 20		
do fair to good.....	1 35 @ 1 37 1/2	Lawn.....	30 @ 40		
Shipping choice.....	1 33 @ 1 35	Mesquit.....	10 @ 13		
do good.....	1 31 @ 1 32	Timothy.....	5 @ 6		
do fair.....	1 31 @ 1 32	TALLOW.			
HIDES.		Crude, lb.....	15 @ 4		
Dry.....	1 @ 18	Refined.....	15 @ 64		
Wet salted.....	8 @ 9	WOOL, ETC.			
HONEY.		SPRING-1886.			
Beeswax, lb.....	20 @ 20	Humboldt.....	22 @ 25		
Money in comb.....	8 @ 10	Mendocino.....	17 @ 20		
Money in comb.....	8 @ 10	Sacramento valley.....	17 @ 20		
Tancy.....	11 @ 13	N. Shasta.....	17 @ 20		
Extracted, light.....	34 @ 4	S. Joaquin short.....	14 @ 18		
do dark.....	34 @ 32	do long.....	1 @ 1		
HOPS.		Caw's & F. H. I.....	1 @ 21		
Oregon.....	27 1/2 @ 32	Oregon Eastern.....	17 @ 23		
California.....	25 @ 34	do valley.....	13 @ 17		
ONIONS.		Southern.....	13 @ 17		
Pickling.....	45 @ 60	FALL-1886.			
Silver skin.....	75 @ 90	Salt, free.....	16 @ 17		
WALNUTS, CAL.		do defective.....	12 @ 15		
Walnuts, Cal.....	7 @ 9	Northern, free.....	20 @ 25		
do Chile.....	7 @ 9	do defective.....	15 @ 20		
Almonds, dshl.....	6 @ 10	Middle.....	15 @ 20		
Soft shell.....	10 @ 12	do defective.....	15 @ 20		
Brazil.....	11 @ 12				
Pecans.....	10 @ 12 1/2				



Fruits and Vegetables.

Table with 2 columns: Item and Price. Includes various fruits like Apples, Bananas, and vegetables like Potatoes, Cabbages, etc.

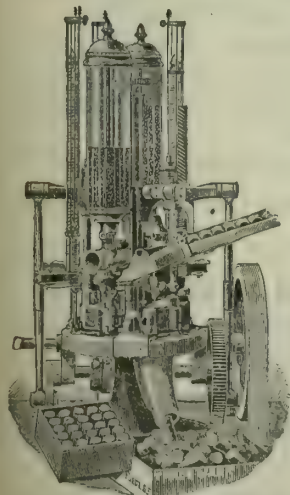
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Cures all Diseases originating from a disordered state of the BLOOD or LIVER. Rheumatism, Neuralgia, Boils, Blotches, Pimples, Scrofula, Tumors, Salt Rheum and Mercurial Pains readily yield to its purifying properties.

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Haywards, Alameda Co., Cal.

AUTUMN OF 1886-7.

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Table with 3 columns: Apple variety, Price per 100, Price per 1000. Includes varieties like Yellow Newtown Pippin, White Winter Pearmain, etc.

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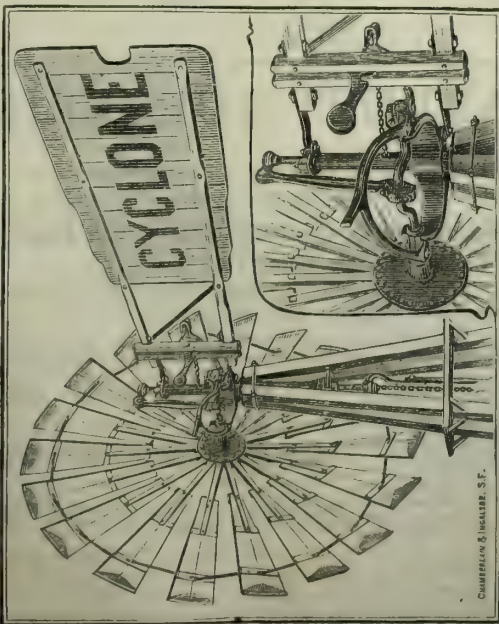
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Well, Amongst Others,

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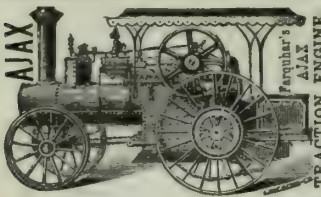


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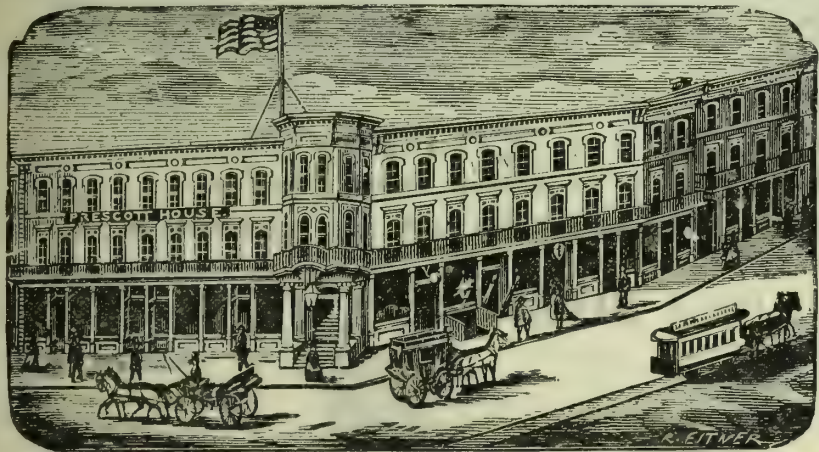
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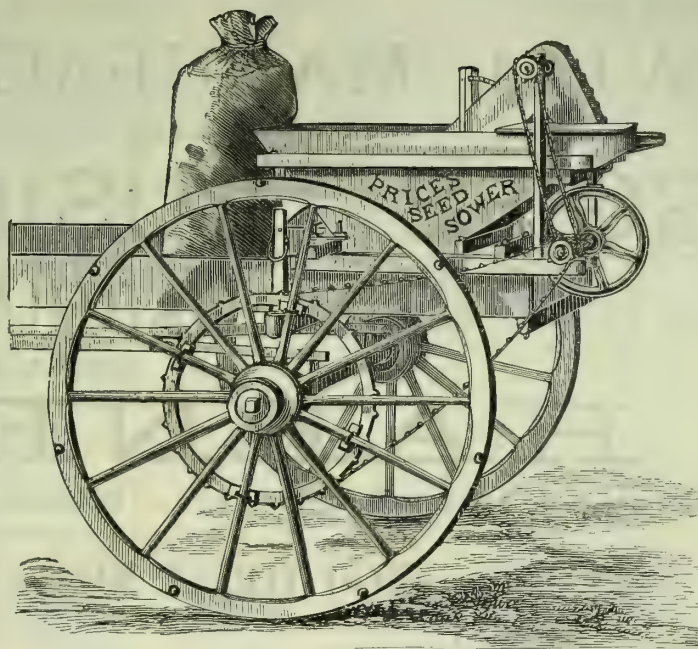


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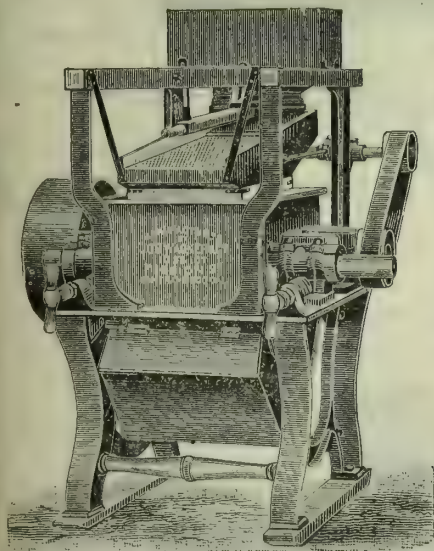
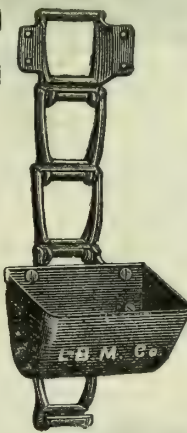
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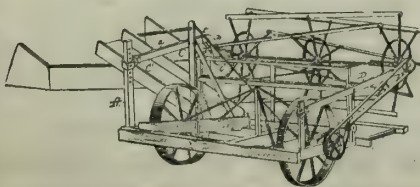
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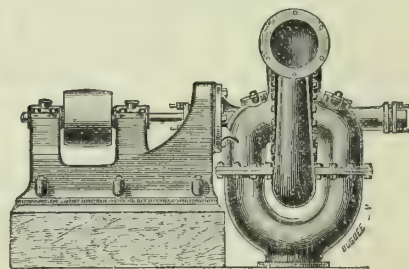
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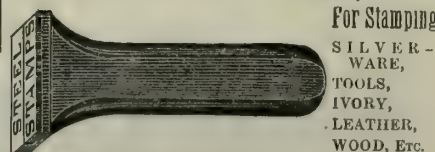
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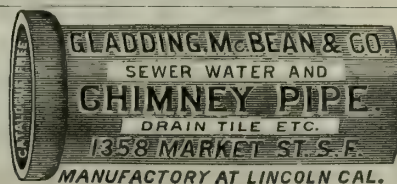
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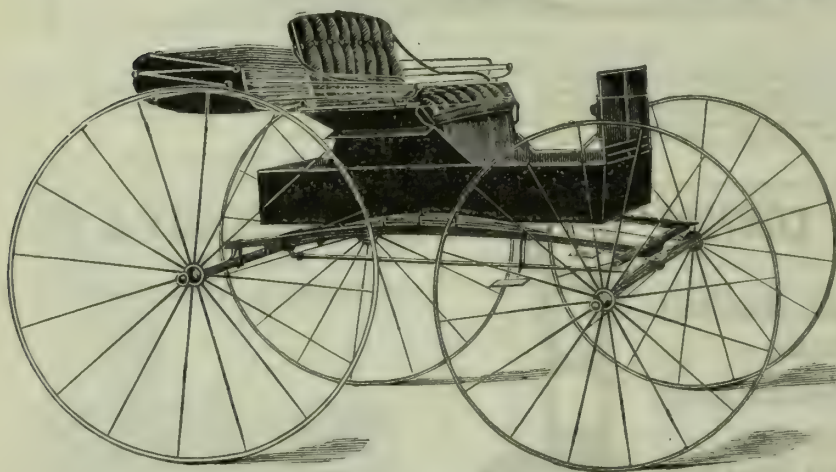
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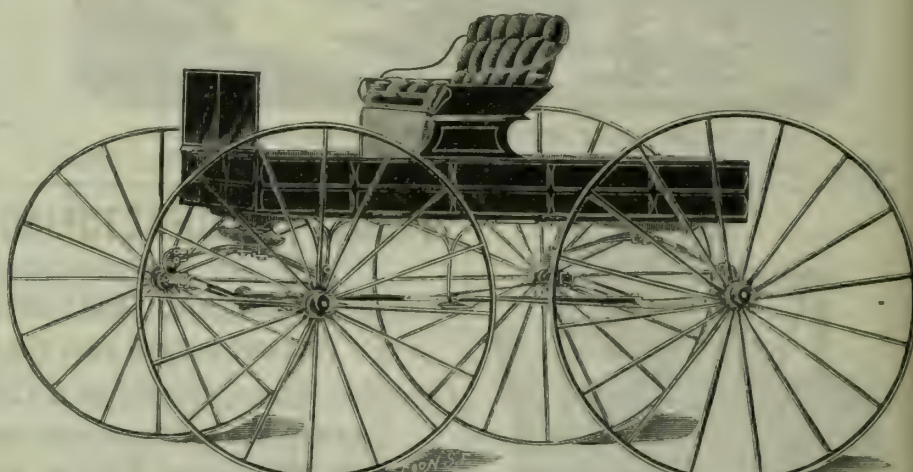
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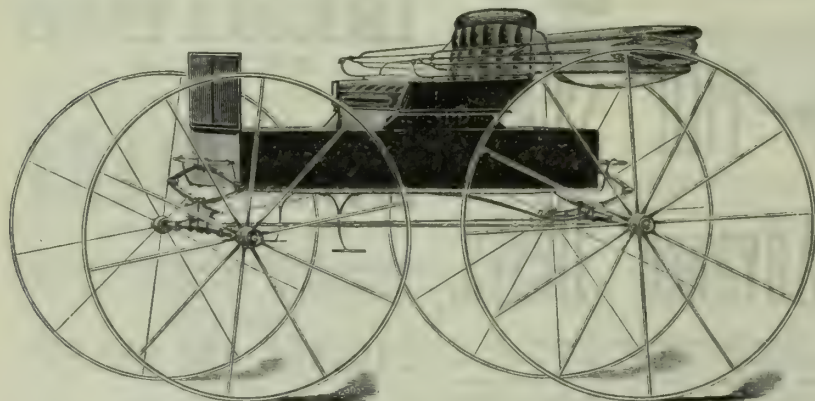


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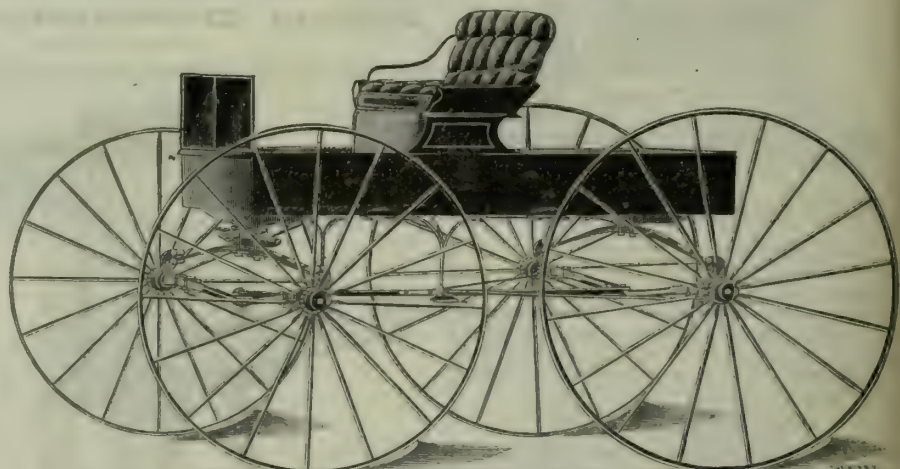


No. 100—LOWELL BUSINESS WAGON, Plain Body, with one or two seats,  
and with or without drop end gate.



No. 15—COMBINATION END-SPRING PIANO BOX BUGGY, with Top.  
No. 20—SAME KIND, except with Cornig Body.

These are an improvement upon the old End-Spring Buggies, and while retaining all the good qualities of that spring, the Supplement Spring remedies many of the defects.



No. 105—LOWELL BUSINESS WAGON, Panel Body, with one or two seats,  
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These Business Wagons have movable seats. They are new in principle and are intended to take the place of a heavier wagon for light delivery purposes, and are also very handy for use on fruit ranches. Being hung low, they are especially adapted for Sewing Machine Wagons; with an extra seat they make just the wagon for family purposes.

Having recently started the manufacture of these vehicles, we want to thoroughly introduce them, and therefore make the following

## EXTRAORDINARY OFFER!

For 30 DAYS from date we will sell these Goods as follows:

Buggies Nos. 5, 10, 15 and 20, without Top.....	\$105 00	Buggies Nos. 5, 10, 15 and 20, with first-class Leather Top, Lined, No. 1 Hand	150 00
Buggies Nos. 5, 10, 15 and 20, with good Rubber Top, Lined.....	115 00	Buffed Leather.....	100 00
Buggies Nos. 5, 10, 15 and 20, with first class Rubber Top, Lined.....	120 00	Business Wagons, Nos. 100 and 105, with one seat.....	105 00
Buggies Nos. 5, 10, 15 and 20, with first class Rubber Top, Lined, Leather		Business Wagons, Nos. 100 and 105 with two seats.....	105 00
Quarters and Back Stays.....	130 00	Good Rubber Top, Lined, for front seat of wagon.....	extra 10 00
Buggies No. 5, 10, 15 and 20, with first-class Leather Top, Lined, No. 1 Machine		First class Top, Lined, for front seat of wagon.....	extra 15 00
Buffed Leather.....	140 00	Brakes for Wagons.....	extra 10 00

All of the above prices are with Shafts. Any of the above with Pole instead of Shafts at \$5.00 extra.

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We have Single and Double Harness, HAND MADE, made from OAK LEATHER, which we are selling from \$9.00 to \$50.00.

WE SOLICIT YOUR ORDERS AND GUARANTEE TO GIVE YOU SATISFACTION.

Send for Circular giving full description of the material used, terms of warranty, etc. We particularly invite a personal inspection of our factory, where can be seen the material used, the process by which they are manufactured, and the vehicles in different stages of construction, which you cannot see when you buy vehicles made in the East.

## LOWELL MANUFACTURING COMPANY,

OCTOBER 16, 1886.

P. O. BOX 54, OAKLAND, CALIFORNIA.



# PACIFIC RURAL PRESS

TWENTY-PAGE EDITION.

Vol. XXXII.—No. 17.

SAN FRANCISCO, SATURDAY, OCTOBER 23, 1886.

\$3 a Year, in Advance  
SINGLE COPIES, 10 CTS.

## The Great Statue.

Before another issue of the RURAL reaches its readers the great statue "Liberty Enlightening the World" will have been formally presented to the American people and dedicated to its work of sending forth radiance which shall symbolize to the world the light of liberty. The statue is a gift to the greatest Republic of the world from the greatest Republic in Europe—a tribute of honor and esteem to the oldest popular government from a sister nearly a century younger. The gift and its formal acceptance, with all the sentiments involved therein, may be looked upon as constituting one of the greatest events in the history of the world's progress.

On Thursday, October 28th, the formal dedication of the statue will take place. The cable dispatches announce that distinguished Frenchmen sent by the President of the French Republic are now crossing the ocean to attend the ceremonies as representatives of the French people. The venerable De Lesseps, General Grevy, brother of the French President, and Senator Lafayette, great-grandson of the Lafayette whose name will live beside that of Washington, are among those who will be present next Thursday. There will also be a French fleet present, commanded by Admiral De Vigne. On the part of the United States it is expected that President Cleveland and his Cabinet will participate in the ceremonies.

From the many allusions made to the statue in our columns, our readers may be considered informed upon the general facts of the origin of the statue and many things about its progress from its inception to its completion. Suffice it to remind them that the money for the statue was collected by small voluntary contributions from the liberty-loving citizens of France. The task of embodying the sentiments of the contributors in fitting form was intrusted to the sculptor, Bartholdi. He came to this country to confer with Americans concerning his work. On his arrival he was struck with the beauty of New York harbor, and seeing Bedloe's island conceived the idea of a colossal statue which should be much larger than any hitherto erected. As Liberty has reached its highest estate in this country, it seemed right that the statue should represent "Liberty Enlightening the World." This would be a lasting acknowledgment of France's good-will and at the same time light up the harbor at night, embodying a lofty sentiment and conferring a practical benefit.

After he returned home the plan was put into execution, the money raised, and work commenced on the statue. It has occupied eight years of Bartholdi's time and the greater part of his fortune to complete the work.

The engravings on this page will be studied with great interest because the occurrence of the dedicatory ceremonies makes their appearance timely. There are many standards set up by which to estimate all efforts. Possibly allusions to the immensity of the figure are not the highest tribute which can be paid to it, and yet they are the most easily grasped. The statue is the largest in the world, and higher than any of the colossal statues of antiquity. The Colossus of Rhodes was only 105 feet high; this is 151.5 feet high. The height of the pedestal will be 91 feet and that of the foundation 52.1 feet. In position it will loom up 305 feet above tide-water. Its weight is 440,000 pounds, of which

176,000 pounds are copper and the remainder wrought iron. While it was being built 40 men found standing-room within the head, and men jumped with ease in and out of the tip of the nose. A six-foot man, standing on the level of the lips, just reaches the eyebrow. Ten people can stand with comfort inside the torch and 15 people may sit around its flame. This elevation can be reached by a staircase within the outstretched arm. The width of the eye is 28 inches, the length of the nose 3 feet 9 inches and the forefinger 7 feet 11 inches long.

This imposing statue, higher than the enormous towers of the great Brooklyn bridge or the steeple of Trinity

will add another to the wonders of the world. A word should be said of its artistic merit. The pose, stride and gesture, with its classic face, are pronounced perfect. The drapery is both massive and fine, and in some parts it is as delicate and silky in effect as if wrought with a fine chisel on the smallest scale. It stands on Bedloe's island (hereafter to be known as Liberty island), in New York harbor. It is one of the most accessible, as well as one of the most pleasant, breathing spots around New York. The solid granite walls of the old fort, which are in good condition, balance well the height of the statue and contrast nicely with the beautiful grass and



BARTHOLDI.



LIBERTY ENLIGHTENING THE WORLD.—Bartholdi.

church, which is the loftiest in the city of New York, by its rare artistic proportions, as well as by its stupendous dimensions, shade trees with which the island is covered. The telegraph announced that the exterior of the statue was finished October 14th.

Another week was occupied in putting in the apparatus for the electric lights. It was decided to put up eight 6000-candle-power lamps at equal intervals on the balcony about the torch. Reflectors will be placed behind each lamp to intensify the light. The four on the south side, with a combined power of 20,000 candles, will be visible from 30 to 40 miles off. Besides the eight lamps on the torch, there will be four lamps, each of 6000-candle-power, at the base of the pedestal. These will be placed behind the parapets, out of view on the water, for the purpose of lighting the outside of the statue. By obscuring the lights at the base, the outlines of the statue will be clearly visible on the darkest nights.

The day of the dedicatory ceremonies will be a general holiday in New York City, having been thus proclaimed by the mayor. Congress appropriated \$56,000 to pay the expenses of unveiling the statue, with the proviso that none of the money should be used for wines or liquors. Gen. Schofield has formulated a program for the occasion. President Cleveland and his Cabinet, Governor Hill and his staff, the Governors of the neighboring States and other prominent men have been invited. A part of the North Atlantic squadron will be on hand with a French fleet under Admirable De Vigne. Senator Evarts will turn over the statue to the Government in behalf of the American committee, and Chauncey M. Depew will make the commemorative address.

Auguste Frederic Bartholdi, the most distinguished living sculptor of colossal statuary, was born at Colmar, in 1833. He started life as a painter, but soon turned his attention to sculpture. At the age of 19 he produced a notable bas-relief of Francesca da Rimini, which won him his first laurels. During the Franco-German war he fought as a volunteer. In 1878 he produced the "Lion of Belfort," a colossal monument to the heroism of a beleaguered garrison, carved in solid rock. In recognition of this brilliant work the Government bestowed on him the Cross of the Legion of Honor. Among his other important work may be mentioned "Vercingetorix," the old Gallic patriot, and the graceful statue of "Lafayette" in Union Square, New York. At the Centennial Exhibition he was awarded the medal for bronze sculpture.

PROF. AND MRS. J. G. LEMMON have returned from the Sierras, where they have been busy studying pines and evergreens and taking notes for the Government report. Mrs. Lemmon has made water-color drawings, illustrating the *coniferae*, which are singularly accurate and beautiful, and which we hope will be reproduced and published by the Department. They were glad to see new growth of trees upspringing thriftily in the track of the devastating saw-mill, and aver that if the laws relative to fires were rigorously enforced the greatest enemy to the young forest would be vanquished, and in a few years the now-denuded mountain-sides would be clad with dense and varied woods. We have no doubt their work will inure to the advance of forestry.

COUNTY AND DISTRICT FAIRS.—We had in readiness for this week's issue reports of several of the county and district fairs which have been held recently, but have been obliged by the pressure of other matter to put off their publication.



## CORRESPONDENCE.

Correspondents are alone responsible for their opinions.

## Hop-Growing in Pajaro Valley.

EDITORS PRESS:—In the Pajaro valley, about one mile east of Watsonville, C. H. Rogers is engaged in hop-growing, and informs us that there are about 80 acres in this valley grown to hops. He has under cultivation 10 acres of the Hungarian variety, four years old last spring. The plants are in rows, nine feet apart each way, and one plant staminate to 64 pistillate. His poles are nine feet long and set in the ground one foot. From the tops of poles vines run on to strings, six to the pole; thus strings run with the regular rows both ways, and across rows diagonally one way.

In January, if not too wet, or in any event as soon thereafter as at all practicable, he opens the hill and cuts away the crown and the surplus runners. In May he opens the second time and cuts off all surplus shoots or vines after each cutting, covering over again. It is thought that by pruning thus the life of the plant is prolonged. Mr. Owen Tuttle, his neighbor, has hop roots 18 years old, annually pruned much after the same fashion, and they yet seem to be just as good as ever. After plowing in the spring the plants are hilled up with a hoe. In May or June the vines that fail to run up the poles or on to the strings are trained. Picking commences in September. Mr. R. has always paid for picking 90 cents to \$1 per day. Mr. Tuttle, we understand, has usually paid 80 cents per 100 pounds.

For his 10 acres, Mr. Rogers has a kiln 20x32 feet, built of redwood and plastered inside with lime plaster. The kiln is provided with openings at bottom for fresh air, and with openings at top for escape of steam. In drying, the thermometer in kiln ranges from 138° to 160°. The process of drying is continued day and night, any one lot being completed in 12 hours. After sufficiently dried, the hops are spread out in cooling-room and allowed to cool. They are then pushed back into piles and let lay from one to four weeks before baling. During the process they go through a sweat. It requires attention and considerable skill to dry sufficiently and not injure. If not dried enough, or slack-dried, they heat, turn brown and spoil. If over-dried, the little globules of lupuline burst, the valuable properties escape through process of evaporation, and the hops are rendered worthless. When drying is complete the hops are baled, being covered with 24 ounce burlap, each bale weighing from 180 to 205 pounds. In selling, seven pounds per bale are thrown off, to cover weight of baling material—such as burlap and rope.

The cost of production here is generally estimated at about 10 cents per pound. A ton per acre is, in this valley, considered about an average crop. The soil where hops are grown is a sandy loam, here known as willow land. It is loose, rich and easily cultivated.

Messrs. Owen Tuttle and Morris Tuttle, of the same neighborhood, on separate farms, are hop-growers, and prefer the English Cluster to the Hungarian. The last-named variety comes up earlier and very evenly, but is nearly a month longer than the English Cluster in perfecting its growth, and ripens later. A vine grows till it blooms, and then ceases to grow. The additional month of growth gives to the Hungarian much more vine; but Mr. Morris Tuttle, with whom we talked on the subject, prefers the English Cluster, because the same quantity of vine produces more hops. It grows more in clusters, while the Hungarian is scattering.

In the matter of cultivation, Mr. T. cuts away all the runners and also cuts stub back so as to leave three or four buds at winter. Between the 1st of May and the 1st of July, this pruning is repeated and all runners but four cut off. He prefers four runners to six because six make too dense a shade, and hops should have sunlight. Too much shade makes light color, light weight and lack of strength. The four lines from tops of poles run with the rows. Mr. Rogers' method of six lines to hill may give room for more hops to grow, but Mr. T.'s objection to this would take into consideration the loss of light and the cost of additional strings and extra training. His old yard of hops, 18 years old, yields better than any hops more recently planted. The arms are taken off in summer, about the 1st of July, for four feet up from ground. The arms are not valuable as bearers while the main vine runs up, and the cutting off gives air and light to the plants below. The cut places bleed, but soon cease to do so, and the same seems not to interfere with the general growth of the vine. The slight loss of strength that may result from the bleeding is more than compensated by the non-support of the arms.

The successful picking of hops requires close application to the business in hand. We would not discourage children and others from the city having little to do, and who may seek employment as hop-pickers when the proper season may come around; but they may well weigh the above remark. Mr. T. says he has not succeeded in finding white men who were willing to pick and stay in the work season after season. In order to get persons who will stick to the work he is forced to employ Chinamen. When hops are ready for picking, the

work should be done promptly—say between two certain dates—and it is found to be very hard to get enough help to do it at the proper time. If hops are picked at the proper time and in good condition, the work must be completed within 20 days from the time they are first ready. MCD.

Santa Cruz Co.

## Crazy Animals.

EDITORS PRESS:—A few weeks ago the blacksmith that shoes the animals at Jersey Farm Milk Depot, in this city, was proceeding with his usual daily examination of the horses' and mules' shoes, and when examining a front foot of one of the oldest and gentlest mules, that he had shod previously and regularly for years, he was violently kicked out of the stall.

The animal at the time and directly afterward seemed to be terrorized and all in a tremor of great fright, and the matter has been one of great surprise to all that knew the animal until to-day.

On inquiry, I found that the blacksmith had just left a butcher-shop, where he had been handling bloody scraps of fresh beef, the odor of which, no doubt, being fresh on him when he entered the mule's stall, and which caused the craziness of the mule.

The like has happened before on the farm, and my son George diagnosed the case at the time, that something like blood must have been on the blacksmith's clothes, or he would not have got kicked, and so it turns out.

A mule's sense of smell is perhaps as acute as that of the dog, which can smell the filth of a regular tramp 400 yards or more.

Our men on the ranch that do the slaughtering, give the mules and horses a wide berth.

R. G. SNEATH.

## THE FIELD.

## Dodder on Alfalfa.

EDITORS PRESS:—Can any reader of the RURAL inform me through its columns how to destroy a vine known as "love-vine"? It has a small yellow stem without leaves, small white blossoms, and seed resembling alfalfa or clover. It has no root in the ground, but draws its sustenance from the plant it grows on. It has taken all over my alfalfa like magic, and I believe will entirely destroy it if not stopped. I send by this mail some alfalfa with this love-vine (or whatever the name may be) growing on it. Any information in regard to it will be thankfully received, even if it is best to plow the alfalfa under. Stock will not eat it, but scatter it, as every limb broken off starts a new vine if it falls on anything green.—J. I. MORGAN, Delano, Kern Co., Cal.

This parasite is our old familiar enemy, the dodder—*Cuscuta Gronovii*. It has been often referred to and more than once illustrated in the PRESS of former years; but newcomers in the State have still to make its unwelcome acquaintance and learn to deal with the nuisance.

It is often propagated by foul seed, in which, however, its presence is easily detected by a common magnifying glass—the seed of alfalfa being shaped like a flat bean, while that of the dodder is roundish and not half so large. It is apt not to show itself while the clover is young, but waits for the plant to develop largely before it comes forth to suck and steal its life-juices.

One February W. G. Pennebaker, of Farmersville, Tulare county, seeded 12 acres to alfalfa, and in May cut the first crop. Toward the middle of July, on cutting it the second time, "I found," he says, "about 50 patches of dodder, covering from one yard to one rod square, mixed with wild morning-glory. I concluded to try an experiment, and on the 28th of August, when it was quite hot, put all my stock on that field, fed it off quite short, and left the sheep and hogs to graze it off very close to the ground, so that the heat of the sun would have full power on the crown of the growth. I left my stock to graze it until the following February, when I removed them and let it grow up." After cutting a second crop from it that season, he found not a rod square of dodder or morning-glory in the field, and was perfectly satisfied that it can be annihilated by permitting sheep to graze it close in August and September.

In France, too, M. Majou freed his lucerne from dodder by leaving uncut at mowing time the parts of the field affected. He then inclosed sheep on these spots till the lucerne was eaten down, without, however, injuring the crowns of the plant; if some of these should be destroyed, however, the luxuriant growth of what remains would prove an ample compensation.

Though the seed of the dodder germinates in the soil, the young plant hastens to fix itself upon any victim within reach, sucks its juices, and allows its own root in the earth to die. If at this time, after the original root is dead and before the parasite can ripen and drop its seed, dry straw be forked in among the clover and set on fire, the sudden flame will fatally scorch the dodder without seriously harming the alfalfa. The latter will take a new start from the roots and stems that escape serious injury.

To prevent the pest from spreading, great care must be taken to put in nothing but clean seed. Never cut any infested crop for seed, but mow it before the dodder can mature, and burn it.

We shall be pleased to learn the result of our correspondent's efforts.

## THE GARDEN.

## Seasonable Suggestions.

EDITORS PRESS:—Now is the time to begin our garden operations for the coming year. We should get our ground cleared up and plowed, if not already done. Harrow down smooth, haul out manure and work it over or spread on the ground that has just been plowed. Plow again, so as to turn under the manure, and harrow down again. This gives the manure a chance to rot, if it is fresh right from the barn, as no vegetable does as well on fresh manure as on older, well-rotted manure. After the manure is plowed under, and has stood awhile, give the ground a good harrowing over a few times at intervals, to kill the weeds that may start; and when planting-time comes, plow again, and the ground will be in good condition to receive the seed.

## What Seed Shall I Plant First?

Some one may ask. Turnips may still be sown and make a fair crop, and the best kind is purple top strap-leaf. Turnips sown now will last way into spring, and be tender and crisp. Sow lettuce now, and we can have fine heads in January—crisp and tender, if ground is made rich. Cabbage may still be sown, and will make fine heads early in the spring. Spinach and kale may be sown any time this month and next.

If hot-beds are to be used to force vegetables early, as soon as the leaves fall rake up a good supply and save them, and when the time comes to make the beds, fork in the leaves with the manure and we have a more gentle heat, and a hot-bed that will retain the heat a much greater length of time than when all manure is used. For early vegetables, everything depends on getting ready in time.

## Cantaloupes.

In our talks about the garden some time ago we spoke about the Montreal green citron cantaloupe melon that we were trying. They are certainly the finest cantaloupe that we ever raised—large, sweet and luscious, and they command a ready sale in the market and remunerative prices. Those who have never raised this melon will find it to be the best melon they can raise for home use or the market.

## Asparagus.

A neighbor asked me a few days ago, when is the time to cover the asparagus bed with manure? Well, said I, if your asparagus bed is clear of weeds, give it a good salting first of all, and as soon as the tops are dead apply the manure, and in the spring fork it well in and salt again, would be my method of doing it.

## Onions.

"How about your onion crop?" said a neighbor to me yesterday. The crop was good for what I had in, said I. Now, why he asked me this question was this: late last spring he came into the garden where we were setting out young onions, and after looking at us awhile made the remark: Onions set out so late as this won't do anything, or in other words, won't make a crop; but nevertheless, we had a pretty fair crop of onions, and I am inclined to believe late-sown onions make the best keepers for winter use. Onions sown in February will make good onions before the season is over and will keep well, especially if Yellow Globe Danvers' seed is used.

## Lettuce.

The Hanson lettuce is the largest-headed lettuce we have ever grown. It heads up solid and is like little cabbage, crisp and tender, and stands a long time before running up to seed, which makes it a valuable variety. In connection with this we are going to try the Deacon lettuce this coming season for forcing extra early, said to be better than the Early Tennis Ball.

## Manuring.

One thing is certain, if we want fine, large, crisp and handsome vegetables we must manure highly. About one cord of good stable manure to every 30 square feet of land (a cord of manure would be about a good two-horse load) will bring garden crops along in good shape. Our mangrel-wurzel beets were a partial failure, so we set cabbage where the seed failed to come, and they, like the beets, showed the land to be poor and worn out. As a Chinaman said to me, "Too much poor ground; work hard all the time and get nothing; makee ground heap fat, get too much big crop."

## Good Seed.

The first step toward a good garden is good seed, true to name and not mixed up with a dozen different varieties in one package. Fresh seed, too, is of the greatest importance, and when one sows his seeds there is nothing so vexing as not to have the seeds germinate. This season I had a piece of ground prepared for turnips, purchased my seed and sowed them, waited 10 or 12 days, and not a turnip showed itself. What was the cause? Simply the seed was old. A seedman that will send out old seeds, of which the vitality is all lost, ought to lose his trade and patronage; so it is of the greatest importance that we look well to our seeds, try them and see if they are good before sowing them, that there may be no failure, for it often happens that 10 or 12 days' delay in a crop will make a good many dollars difference in the sale of the crop; so it would be well to secure our seeds early and test them in advance.

of seeding time. No matter how well our ground is prepared or how highly it is manured, if the seeds are not good there will be a failure. Too many seedmen practice mixing old seeds with their fresh ones and put them on the market for good seeds, when, the truth is, not over one-third of the seeds come and a partial failure results. "None but good seeds" should be the motto of every one that makes a garden. I. L. DICKINSON.

Lone Oak Farm, Sonoma, Cal.

## THE DAIRY.

## The Largest Milk Record Ever Made.

We have received from Smiths, Powell & Lamb, of Syracuse, N. Y., a printed statement of the milk record of the Holstein-Friesian cow Clothilde (H. H. B. 1308). Calved March, 1879. Milk record, 26,021 lbs. 2 ozs. in one year, commencing at six years five months old. We quote as follows:

Clothilde was selected by us in person in North Holland as an unusually fine specimen of the breed, and imported in October, 1880. She dropped her first calf on January 24, 1881, when but 22 months old and just out of quarantine, and gave that year 8964 lbs. 2 ozs. in 11½ months.

This cow, as a three-year-old, was first brought prominently before the public by her record of 15,622 lbs. 2 ozs., surpassing all former records of cows of that age.

As a four-year-old she again made a high mark by giving in one year 17,930 lbs. 3 ozs., or, by omitting two days when sick and adding two at the end of the year, she gave 18,004 lbs. 4 ozs. in 365 days, far surpassing all previous records for that age.

Her six-year-old record, 26,021 lbs. 2 ozs., this year, surpasses that of Echo, much the highest record before known, by 2245 lbs. 10 ozs., and excelling all other records that we have seen published by over 5000 lbs.

Clothilde is a cow of unusual vigor, constitution and substance, with remarkable digestive organs, a capacious chest, very large barrel, and has the broadest and straightest back and hips we have ever seen on a Holstein-Friesian cow. Her head is long and clean, her neck is lengthy, clean-cut and fine, her coat soft and silky, skin mellow, her veins and udder large and well developed. Even as a heifer we were very strongly impressed with the remarkable qualities of this animal, believing that she was a cow of great capacity, possessing many desirable, marked characteristics.

Clothilde was awarded the first prize at the New York State Fair in 1883 in a class of 21 very fine Holstein-Friesians.

Clothilde dropped her last calf August 17, 1885, and has made the following record for each month inclusive and the year:

	lbs.	ozs.
Aug. 18, 1885, to Sept. 17, 1885.....	2312	4
Sept. 18, 1885, to Oct. 17, 1885.....	2311	6
Oct. 18, 1885, to Nov. 17, 1885.....	2218	11
Nov. 18, 1885, to Dec. 17, 1885.....	2091	8
Dec. 18, 1885, to Jan. 17, 1886.....	2238	7
Jan. 18, 1886, to Feb. 17, 1886.....	2237	7
Feb. 18, 1886, to Mar. 17, 1886.....	1967	4
Mar. 18, 1886, to Apr. 17, 1886.....	2110	1
Apr. 18, 1886, to May 17, 1886.....	2195	15
May 18, 1886, to June 17, 1886.....	2222	3
June 18, 1886, to July 17, 1886.....	2180	5
July 18, 1886, to Aug. 17, 1886.....	2045	11
Total.....	26,021	82

Average per day for the whole year, 71 lbs. 4¾ ozs. Highest day's yield, 88 lbs. 4 ozs. on her second month in milk.

Smallest day's yield, 57 lbs. 14 ozs. on the third day in milk.

The next lowest day, 58 lbs. 12 ozs. on the fourth day before the close of the year.

## AVERAGE YIELD PER DAY FOR EACH MONTH.

Month.	lbs.	ozs.	Month.	lbs.	ozs.
1st.....	74	4	7th.....	70	4
2d.....	77	8	8th.....	68	1
3d.....	71	9	9th.....	75	3
4th.....	69	11	10th.....	71	10
5th.....	72	3	11th.....	69	5
6th.....	72	2	12th.....	65	15

Her record for the whole time has been carefully and accurately kept, each milking being carefully weighed and recorded at the time. We have spared neither time nor expense in having this record carefully verified by gentlemen who are known by all breeders of dairy stock in the United States as experts in all matters pertaining to the testing of cows. The high standing of all these gentlemen will satisfy all parties of the fairness and accuracy of the record.

OLEOMARGARINE LAW.—The Acting Secretary of the Treasury has asked the Attorney General for an opinion as to whether the oleomargarine law imposes a tax on the different ingredients used in the manufacture of oleomargarine, and also a tax on the article when finished and placed on the market, or whether the law contemplates a tax only upon the finished article. The question has been raised by the opponents of the measure, and its determination will make considerable difference in one way or the other to persons dealing in oleomargarine. Commissioner Miller has received proofs of the new oleomargarine stamps, and announces that the stamps will be ready for shipment to collectors about the 15th inst.



## THE IRRIGATOR.

## The Water Question Again.

EDITORS PRESS:—In your issue of Sept. 18th Mr. Webster criticises my article in the PRESS of Aug. 21st. In the heat of argument we are apt to forget the circumstances which called for the discussion. Although I used Mr. Webster's name rather freely in my former article, it was not from any personal proclivities, but rather because from the position Mr. Webster had held he might well be looked to as a representative man and his ideas as the embodiment of those of a considerable number of his fellow-men. His nomination since that time as Lieutenant-Governor shows that I rightly judged.

I will not stop to discuss the question of "perversion" of Mr. Webster's arguments, as this is not a war of words or any contest for superiority of argument, but will just leave it for your readers to judge. I frankly admit that I have not read the judge's opinion in the case of *Lux et al. vs. Haggin et al.*, but when I saw how much paper it covered I felt like using the language of an old writer, wherein he says, "Who is this that darkeneth counsel by multitude of words without knowledge?" However, I find, judging from Mr. Webster's analysis of it, that I had not misjudged its purport.

I will correct Mr. Webster where he disputes my statement that the Constitution of the State (and the laws also for that matter) makes it mandatory on the part of Boards of Supervisors of the several counties to annually fix the rates to be paid for water for the ensuing year. In my statement I am supported by the Superior Courts of Los Angeles and San Bernardino counties. The political code on the duties of supervisors in defining their powers and duties uses exactly the words used in Section 1 of Article 14 of our Constitution. The members of the Constitutional Convention, in their address to the people of the State of California on submitting the new Constitution for their action, also say in regard to their action about water: "The peculiarities of our climate necessitated the adoption of stringent provisions for the use and control of water." But whether Mr. Webster's opinion or the opinion of the Superior Courts of Los Angeles and San Bernardino counties be the correct rendering of the provisions of the Constitution, the present method will stand until set aside by a higher court. Riverside, according to the new rendering, will stand as it is until the Constitution is changed, all of its cultivated lands being in the city limits. Los Angeles occupies a nearly similar position.

Section 2, Article 17, of the Constitution, which I am charged with misquoting, I quote with the misquoted word in brackets:

"The holding of large tracts of land, uncultivated and unimproved by individuals [and] or corporations is against the public interest, and should be discouraged by all means not inconsistent with the rights of private property."

Mr. Webster calls the attention of the State Board of Equalization to the discrepancy between the assessors' and the owners' valuation of property in Riverside. In reply I would say that action on that matter would be entirely satisfactory to us down here, providing that they will apply the same ruling throughout the State. Considering its area of less than 6000 acres and its assessed valuation of over \$1,500,000, it is safe to say that no 6000 acres in the State which is entirely dependent on its own resources carries any such high valuation.

If owners' views as to the value of their property should be the basis of the assessors' estimates both in city and country, Riverside would be benefited by the change. Vacant lots in towns and large ranches in the country would be less common than under the present system. Indeed, had this rule prevailed in the past, it is doubtful whether we would have ever heard of the suit of *Lux vs. Haggin*.

If the Supreme Court had been at all unanimous, or nearly so, in the matter of riparian rights, we might have had much less to say; but considering that four are for, and three against, it should not by any be considered as a settled question, and, under the circumstances, an appeal to the people as to the question of the reorganization of the Supreme Court and an amendment to the Constitution in this regard was far from an unreasonable proposition. One of the fundamental principles of both National and State Constitutions is that "all political power is inherent in the people," and when laws fail to benefit the people it is their "right to alter or reform the same."

Excepting the proposition to reorganize the Supreme Court, all of the leading measures talked of in the late session of the Legislature were well discussed at its first session, and nothing seemed in the way of passing them but lack of time. The newspapers of the State also were almost all in favor of the proposed amendments recommended by the State Irrigation Convention. It was felt all along that such proposed action in favor of irrigation was important and necessary, but not as imperatively requiring immediate action. Until the decision of the Supreme Court, there was no need for Haggin & Carr to supply any incentives to action in their favor, for no one down this way doubted that we would have all necessary legal action in the near future. We would like to ask Mr. Webster or the advocates of riparianism why this sudden change on the part of

some of the leading newspapers of the State? We would further ask riparianists what do they mean by State ownership and control of water? Does it mean that the State shall buy out all riparian owners? Do the advocates of State ownership know that it would take from \$5,000,000 to \$10,000,000 to buy up the waters of the Santa Ana alone? The waters of the irrigated portions of the State practically represent the total value of all lands which are irrigated with improvements thereon—towns included.

There are some propositions on the water question that it might be well to submit for the consideration of your readers which apply to Southern California as things are now conducted.

1st. That the users of water are also the supposed owners of the same—in other words, the people own and control the waters in Southern California.

2d. That rates for water are fixed by Boards of Supervisors or other governing bodies.

3d. That in Riverside every member of the Board of City Trustees is a stockholder in the Riverside Water Co.

4th. That up to this time no corporation has made any money by appropriating water, making ditches to lands and afterward selling the lands.

5th. That every court in Southern California, to the present time has recognized the custom of appropriation of water and decided in accordance with usage and custom.

6th. That general custom makes law that cannot be ignored.

7th. That until the recent decision of the Supreme Court no riparian claim was ever made in Southern California.

8th. That under the custom of appropriation riparian owners have always had the same rights as appropriators—no more, no less.

9th. That such a custom is right, justice and common sense.

JAMES BOYD.

Riverside, Cal., Oct. 8, 1886.

## HORTICULTURE.

## Fig-Growing in Los Angeles County.

Several excellent horticultural essays were read at the last meeting of the Los Angeles Pomological Society, and we expect to find space for all of them. At this time we give a brief essay on the fig by James Stewart, of Downey:

I have been for the last 15 years in the experimenting and the testing of different varieties of figs and the soil best suited to their growth. My observations have been that they do well on almost any kind of soil. I have some growing on high, dry, sandy soil, where it is 20 feet down to water; also some on a rich sandy loam, about 10 feet to water. Again, I have them growing on stiff adobe, not more than five or six feet to water, and they all grew vigorously and well. In starting the fig to make a tree its head as high as that of an apple or peach tree, say three feet from the ground, be careful to keep off all sprouts that may start from the root, and especially as much so in clipping off all limbs that may put out on the under side of the first limbs that you let start for the head of your tree. Should they be allowed to grow they would soon, after commencing to fruit, have the most of the tree spread out on the ground. Young trees, well cared for, will commence to ripen fruit the second year, and will begin to pay the third year. They will increase in value yearly without failure for a period I am not able to say.

My trees are 12 years old. They increase in quantity of fruit as they grow older. No blight, no scale nor insects of any kind interfere with the figs. There are many kind of figs now being placed on the market, the most of which are turning out to be worthless. The true fig of commerce of all countries has always been credited to the White Smyrna variety, which we have in Southern California. It is further acknowledged, and has been proven, to be superior to the imported fig, for the following reasons: 1. Its thinner skin; 2. Its finer seeds; and, therefore, it is more sought for and brings a much better price in all Eastern markets than the figs imported from the old country.

In curing and packing I gather my figs when fully ripe, just as I would other fruit, leaving all the stem on the fig, and being careful to soil the skin as little as possible. When gathered, I place them on trays similar to those which are used for raisins. I then place one tray above another in my fumigator, and let them remain one hour. I then remove them to a place in the sunshine, placing the trays at an angle of about 45 degrees, facing the sun, with the blossom end pointing to the upper end of the tray, and leave them in that position for six or eight days, when, if the weather has been favorable, they will be ready for the sweat-box, using sugar barrels or boxes for the occasion. In case of foggy mornings it may take 10 days or two weeks for them to dry. When in the sweat-box I let them remain until such time as I am ready to pack them for the market. I use 2½-pound, 5-pound and 25 pound boxes. The Brown Ischia dries as readily as the Smyrna, and is much more sought for than the other varieties before being packed, and is preferred by a great many to any other when packed.

The New Pacific is a choice fig, before being

packed and after. It will dry in less time than any fig of which I have any knowledge. Why not grow figs in preference to any other fruit? One company in this county fell short this season 200 tons of getting as many figs as they advertised for.

## SHEEP AND WOOL.

## Angora Goat-Breeders' Meeting.

The second annual meeting of the Angora Goat-breeders' Association was held in Sacramento, on Thursday, Sept. 16, 1886. The chairman of the last meeting being absent, Mr. C. P. Bailey was called to the chair, Julius Weyand to act as secretary. The minutes of meeting of Sept. 15, 1885, were read and approved.

The committee report on reduction of freight rate of mohair to Eastern points was presented and accepted.

On motion, a constitution for this association was presented and adopted, and signed by the members present, and

Resolved, That the secretary shall enter the names and postoffices of new members paying to him the fee of \$2.50.

The following is the Constitution of the Angora Goat-breeders' Association of California, adopted Sept. 16, 1886:

1. This association shall be called "The Angora Goat-breeders' Association of California."

2. The object of this association shall be to advance the interests of Angora goat-breeders in this State, to exchange information on the breeding and handling of goats, the marketing of mohair, and to secure and maintain, through proper legislation, a protective tariff thereon.

3. Every person residing in this State, or engaged in the mohair industry in the United States, may become a member of this association by paying the sum of two dollars and fifty cents, entrance fee, as member, and signing his name to this constitution.

4. The annual meeting of this association shall be held on the last Thursday of the State Fair at the city of Sacramento, when the annual reports of the officers of the association shall be presented by them, and the officers for the incoming year shall be elected.

5. The officers shall be a president, a vice-president, a secretary and treasurer.

6. The duty of the president shall be to preside at all meetings of the association, to consult with the secretary, call meetings of the association when directed to do so, upon request of a majority of the members of the association.

7. The duty of the vice-president shall be to take the president's place during his absence at all meetings.

8. The secretary shall keep a roll of the members of the association and their postoffice address, keep the minutes of all the meetings and proceedings of the association, and shall act as treasurer, receiving all moneys, keep accounts of necessary expenses, conduct all correspondence and publish all information to the members of the association tending to advance their interests.

9. Order of business adopted: 1, calling of the roll of members by names or counties; 2, reading of the minutes; 3, payment of dues by members; 4, election of officers; 5, report of officers and committees; 6, unfinished business; 7, other business; 8, adjournment.

Proceeding with the election of officers, Mr. C. P. Bailey, of San Jose, was elected President; T. H. Harland, of Venado, Colusa Co., Vice-president; Julius Weyand, of Colusa, Cal., Secretary and Treasurer; to serve one year and until their successors are elected.

Mr. Bailey, on taking the chair, addressed the members in an instructive and interesting manner.

Address of C. P. Bailey.

Gentlemen of the Angora Goat-breeders' Association of California: I thank you for the honor you have conferred in making me your president. It affords me particular pleasure in meeting you here to-night organized as a body for the promotion of the industry I have so many years given my best efforts to establish as one of the leading branches of stock-raising.

It is a time-honored custom among men in all generations to band themselves together to maintain and protect their own interests. Our friends, the cattle, sheep and horse men, have long had their associations, and owe much of their success to the deliberations of their national gatherings.

At first many, perhaps the most of us, invested in goats as a side issue, because they were pretty or as pets for our wives or children; but as they increased and a good goat was readily sold and brought as much as a cow or a horse, we began to get more in earnest in the matter. When our goats had so increased that we had some mohair to sell, and our own factories sent us their circulars soliciting our consignments and admitting their preference for our fleeces when compared with imported mohair, then we commenced to wake up, and the butcher got our surplus cattle and the salesyards got our surplus horses, and the more honorable goat got a better division of the farm products and did not have to climb quite so high among the rocks to gain a living.

We found that though a goat could sustain life on as little and in as rough and poor a range as any living animal, yet when we wanted pounds of mohair and good large percentages of kids, it paid, when necessary, to feed the goats well on hay and grain, and to provide dry sheds for them on rainy nights after shearing and when they had young kids.

We found that we could raise a pound of mohair very nearly as cheap as we could a

pound of wool, and that it would bring nearly three times as much in the market.

The first factories in the United States that used mohair made it into dress goods, and we were paid from 80 cents to \$1 per pound for it. But fickle dame fashion suddenly decreed that only soft, lusterless goods should be worn by ladies. Then for two years there was no sale for mohair at any price, and we goatmen had sorry times. Many failed, sold their flocks, and gave up the business disgusted. The accumulated mohair attracted the attention of plush manufacturers, and several good establishments were started and have continued to run with profit to their stockholders and satisfaction to consumers.

Now fine mohair robes and the best quality of upholsterers' plushes are to be found in all our markets. Our ladies of leisure fashioned beautiful scarfs, hoods and shawls from Angora knitting yarn, and the demand for it was so great that a dozen different factories are now making knitting yarns.

Considerable mohair is now mixed with silk in the manufacture of fringes and in the goods for traveling dresses and wraps so popular the past year. The result is that now America does not produce a tenth part enough mohair for the consumption of our own factories, and a good article is in demand the moment it arrives in market.

Experience has proved that goats will do well and can be profitably raised in any locality where sheep thrive; but the best results have been obtained in the dryer, more elevated sections. The low foothill valleys of the Sierras of California, for winter, and high mountain ranges, for summer, cannot be excelled in any part of the world for excellence of pasturage and natural adaptability to the goat. But the steady advance of the agriculturist and fruit-raiser has so appreciated the value of these foothill valleys that goats have had to go farther toward the frontier.

All the Territories are raising goats, and grown goats do well in all; but larger percentages of kids are raised in the southern sections, on account of the milder climate.

It is now nearly 30 years since we first commenced experimenting with Angora goats in the United States. For the first 20 years very little progress was made. Foremost among the causes were the excessively high prices that were paid for pure-bred bucks, and the exaggerated profit that we were led to believe there was in the business. Some of the earliest importations cost us from \$400 to \$500 per head. A report issued by the Agricultural Department at Washington, in 1863, quoted mohair at eight dollars per pound.

The process of breeding up tired out many of us. We thought we were pretty well started in the business when we had gotten together a few hundred Mexican does and enough pure-bred bucks for their service; but when we found from experience that it took six or eight years of this breeding up before we got any grades that would shear a four-pound fleece, then we were again disappointed.

At the Cape of Good Hope, the first Angora goats were imported in 1866, just 20 years ago, and last year they exported half as much mohair as Asia Minor. Instead of commencing the business with a couple of bucks led across the plains as we did in California, they commenced with a shipload of the best pure breeds that could be found in Angora, and men of money and energy took hold of them to make a business of it, and not as playthings or pets. Such men as I. B. Evans, H. Masdorf, W. Edwards, and the two Lees, not only raised pure breeds, but grade flocks as well, showing their faith in the business; and some of these men have made fortunes as rapidly as did the early cattle-dealers in Wyoming. They did not deal in pure breeds only, and when a customer came give him a pamphlet full of glowing exaggerations and untried theories, but they took them out and showed their own flocks of grades, and told them how long it took to raise such a flock, how much wool they sheared, etc. This knowledge from experience, instead of from theory, started their purchasers in the right way. And as years rolled on, and they were able to accomplish what they had expected, they were satisfied and the business prospered.

I do not think we have nearly reached perfection in the goat business on this coast, but we have made some progress. Those of us who have kept and taken good care of our flocks are in a fair way now to make an independent living out of them in time to come.

Again I thank you for your kind attention, and hope our society may be largely increased in numbers and much good accomplished during the ensuing year.

The question of joining the American Mohair Growers' Association of Texas, to establish a standard for a pure-blood Angora goat or a system of registry, was discussed and resolved that action on this subject be laid over until next annual meeting.

It was also resolved that it will be desirable to arouse a spirited competition among breeders to exhibit, by offer of larger premiums at the State Fair, and that a committee be appointed by the chairman to confer with the directors of the State Agricultural Society prior to their April meeting, and urging them to offer more liberal premiums on goats for the fair of 1887 than heretofore. The president appointed T. H. Harland a committee of one to attend to the foregoing. Adjourned.

JULIUS WEYAND, Secretary.



## PATRONS OF HUSBANDRY.

Correspondence on Grange principles and work and reports of transactions of subordinate Granges are respectfully solicited for this department.

### The Farmers in Council.

#### THE STATE GRANGE MEETING.

##### Fourteenth Annual Session.

[CONTINUED.]

We give this week some matter in addition to what we have already published, to complete our record of proceedings.

##### Report of Memorial Committee.

*Worthy Master, Sisters and Brothers of the State Grange:*—We, your Memorial Committee submit the following report:

Since our last meeting, Death has been in our midst, taking some of our brightest and best. Vacant chairs are sad mementoes of past presences, and painfully silent though they be, are most effective signs of that change that awaiteth us all.

Sister T. T. Hooper, of Montezuma Grange, who served so well and acceptably for one term as Lady Assistant Steward of the State Grange, and one of our oldest as well as most faithful members, and Sister Lou H. Blackmer, of National Grange, have answered the call of our Divine Master. The presence of Sister Blackmer in State Grange has not been one of our privileges, yet her life has left footprints not easily effaced. Through the *Patron* and the press generally has her mind left its impress upon every Grange heart, and her last written words, which we quote in full, are injunctions that should make us strive to attain the truly beautiful:

##### STRIVE FOR THE BEAUTIFUL.

Strive for the beautiful! though clouds arise  
To dim the brightness of the coming day.  
Look far beyond, where clearer, brighter skies  
Shine ever radiant in the far away.  
Strive for the beautiful.

Strive for the beautiful, the true, the brave,  
Bid useless doubts of God's great plan depart;  
To tyrant custom be no more a slave,  
Let love to all mankind possess the heart,  
Strive for the beautiful.

So live the beautiful, who walk the earth  
As ministers to man bowed down with care,  
Whose souls transplanted by immortal birth  
Shall bloom anew with richer sweetness there,  
Strive for the beautiful.

Strive for the beautiful by works of love,  
And bearing each day's sorrows as they come;  
Nor leave thy duties, lest they burdens prove,  
If thou wouldst win a happy spirit home,  
Strive for the beautiful.

The crown is not for him who knows no thorns,  
The sun shines not for him who knows no night;  
The glow of noble purpose never warms  
The heart that knows, yet fears to do the right;  
Thus saith the beautiful.

Thus has her quiet, unassuming and suffering life left words of living light, which admonish us that living aright and performing well the little duties that daily fall to us, or, in other words, in striving to live a beautiful life, is our highest duty.

The passing away of these sisters is not only a home loss, but as well a sundering of the family ties of the Grange household; therefore be it

*Resolved*, That the sympathy of our brotherhood at large is tendered these stricken families, and midst and back of these funeral drapings throb hearts that are with them in prayers, hopes and regrets. These death strokes are vital clippings from our body, and only the Divine Healer to whom we are commended can temper His goodness and mercy to the one great refrain of renunciation and reliance and to which we hope all respond: *All is well, rest thou in peace; therefore be it*

*Resolved*, That this report be spread upon the minutes of the State Grange, and that copies be sent the families of the deceased, also to the *California Patron* and *RURAL PRESS*.

Bro. B. R. SPILMAN,  
Sister A. T. DEWEY,  
Sister MARIA B. LANDER,  
Sister W. L. OVERHISER,  
Sister A. P. ROACHE,  
Sister N. MERKES,  
Sister MINNIE PLUMMER.  
Memorial Committee.

##### Resolution Adopted on the Heath Amendment

Inasmuch as the so-called "Heath Amendment" is in the interest of and partial to the railroad corporations of the State, and as, in case of its adoption, the railroad people would virtually be their own assessors, and contribute to the State's expenses what they are "minded to pay," or in other words, two and one-half per cent on their gross earnings, according to their own accounts; therefore, it was

*Resolved*, That we advise all Patrons and farmers to vote against said amendment.

##### Pomona Grange Delegates.

The committee recommended that delegates of Pomona Granges be admitted under the same regulation that delegates of subordinate Granges are, viz.: That their dues shall be paid to the same date as is required of sub-Granges, and where they have elected alternates they shall be the accepted delegates in the absence of the regular delegates, provided that no delegate shall represent both a subordinate and Pomona Grange at the same session; and that when the

same person is Master of a Pomona and subordinate Grange at the same time, said person shall be required to represent the Pomona Grange, and the subordinate Grange shall elect a delegate. It was further recommended that the Master call the attention of the National Grange to this matter.

The report was adopted.

##### Poisonous Adulterations.

The following preamble and resolutions, introduced by Bro. Frank Dunn, Master of San Jose Grange, having been considered by the Committee on the Good of the Order, were referred to the Committee on Legislation, who reported upon them favorably and they were adopted:

WHEREAS, The crime of adulterating of food and drink with poisonous substances is carried to such an extent and practiced with such impunity, that if not put a stop to by the most stringent legislation it will become a recognized branch of business and will, in the near future, defy all efforts to suppress it; therefore be it

*Resolved*, That the State Grange of California be respectfully requested to exert its influence in favor of the passage of the bill now pending before the National Congress and known as the Wine Bill.

*Resolved*, That State legislation on the same subject is absolutely necessary and that the State Grange use its influence with the incoming Legislature in support of the measure.

*Resolved*, That a large proportion of the drunkenness with which the country is now cursed is directly attributable to the poisonous adulteration of liquor.

##### Representatives Present at the Session.

Alhambra—Dr. J. Strentzel, Master; H. Raap and wife, alternates.  
American River—J. E. Beach, Master.  
Antelope—H. A. Logan, Master.  
Bennett Valley—Don Mills, alternate.  
Ceres—Vital E. Bange, Master.  
Danville—D. M. Sherburne, Master.  
Eden—O. Dennis and wife, alternates.  
Elk Grove—Dr. Caples, alternate.  
Enterprise—A. A. Krull, Master.  
Florin—C. Towle, Master.  
Franklin—Wm. Johnston and wife.  
Grand Island—J. R. Totman, Master.  
Grass Valley—J. W. DeGolia, Master.  
Lodi—A. J. Woods, Master; J. D. Huffman, alternate.  
Magnolia—W. Cunningham, Master.  
Montezuma—T. T. Hooper, Master.  
North Butte—W. T. Lam, Master.  
Pescadero—L. C. Steele, Master.  
Plumas—R. G. Hamlin, alternate.  
Placerville—J. C. Marsh, Master.  
Roseville—N. Mertes, Master; J. C. Cross and wife, alternates.  
Sacramento—G. W. Hack, Master, and wife.  
Santa Rosa—E. W. Davis, Master, and wife.  
S. T. Coulter and wife, alternates.  
San Jose—Frank Dunn, Master; H. G. Keeling, alternate.  
South Sutter—Mrs. M. L. Jones, alternate.  
Social—Wm. H. Atkinson, Master, and wife.  
Stockton—Mr. Bowman and Mrs. Ashley, alternates.  
Temescal—A. T. Dewey, Master, and wife; Mrs. Renwick, alternate.  
Two Rock—W. D. Freeman and wife, alternates.  
Valley—G. P. Loucks, Master.  
Vallejo—J. F. Deming, Master, and wife.  
Walnut Creek—N. Jones, Master.  
Watsonville—J. D. Pagnall, Master; A. P. Roache and wife, alternates.  
Wheatland—D. A. Ostrom, Master, and wife.  
Woodbridge—G. N. Ashley, Master.  
Yuba City—B. F. Walton, Master, and wife.  
Sutter Mill—Wm. Nichols, alternate.  
Including alternates, Past Masters and their wives (who are honorary members), members of Pomona and subordinate Granges who were accorded the privileges of the floor, it is estimated that over 300 Patrons were present at different meetings.

### The Lieutenant-Governorship.

Letter from J. V. Webster.

EDITORS PRESS:—Hoping that some solution of the difficulties surrounding the "Farmers' Ticket" would be reached by the leaders of the movement, I have remained silent since the meeting of the convention at Sacramento, last September. It is true, I have received no official notice of my nomination for Lieutenant-Governor by said convention; nevertheless, since the fact has appeared in the public prints, and since the date of the election is so near at hand, I feel constrained to define my position.

First, I will say that I have ever been opposed to independent political nominations by the farmers of the State—not because I do not fully indorse the reforms demanded by them, which appear impossible of attainment under the old party management, but because it is manifest to me that nothing substantial can be accomplished by the farmers of the State, in their present disorganized condition, by putting forward an independent State ticket.

The time, in my opinion, will surely come when the emergencies of the case will demand an organization in the rural districts sufficiently strong to direct and control political action, and the making of men and measures. That time has not yet come, and it appears to me inopportune to waste our energies in a fruitless endeavor, which must be barren of practical results. To continue our State ticket in the field, with the affinity of the farmers substantially divided between the old parties, will witness our inevitable crushing between the

"upper and nether millstone." A few hundred votes for the ticket will falsify our actual strength, consequently bring contempt and ridicule upon our ill-advised efforts.

Until such time, when the farmers' organization shall be in a measure complete, with its ramifications in every county and town in the State, I have advocated their holding the balance of power between the political parties, by meeting in convention and indorsing the least objectionable nominees of the existing parties. By such a course, it occurs to me, the farmers can easily gain sufficient political influence to virtually control the whole field; for in such a movement a few hundred, or at most a few thousand, votes would give us control of men and measures and virtually break down the trickery and party machinery under and by the direction of which improper men are nominated and elected to responsible positions.

While sincerely thanking the members of the Farmers' Convention for the honor conferred in mentioning my name in connection with the position of Lieutenant-Governor of this great State, I respectfully beg leave to withdraw my name from said ticket, for the foregoing reasons.

J. V. WEBSTER.

East Oakland, July 20, 1886.

### The Heath Amendment.

EDITORS PRESS:—There seems to be an idea prevalent in the minds of many fruit-growers that the adoption of the Heath amendment would conduce to a more equitable assessment of orchards and vineyards than is obtained by the present system of assessment. Granting that it would, the question arises, in the event that the Heath amendment should be rejected by the vote of the people, cannot the law of assessment of property be so amended, under the Constitution as it is, as to secure an equally equitable assessment as could be had under the Heath amendment?

The Constitution now directs that cultivated and uncultivated lands of the same quality and similarly situated shall be assessed at the same valuation, and that improvements shall be separately assessed. The idea pervading the minds of the framers of the New Constitution was to provide for the equal assessment of like value and situation, whether improved or otherwise, and to such a valuation the value of the improvements was to be added to such lands as were improved. There is not a line or word in the Constitution looking to dividing up the term "improvements" into classes, listing buildings, fences, etc., in one class, and orchards, vineyards and shrubbery in another class, and fixing to each class a separate valuation.

The assessor is required by law to assess all assessable property at its true cash value. To do this he is in duty bound to affix a cash valuation on every distinct parcel of land not exceeding 640 acres, and valuation must include the value of the improvements; but the value of the land and improvements must not together exceed the cash value of the property, and of that the assessor is the sole and proper judge, subject to review by the county Board of Equalization. The Heath amendment does not change this rule of value in the least. If an orchard or vineyard on a man's farm has increased the value of the farm, the assessor, in estimating the value of the farm, under the Heath amendment, must make a mental note of its increased value by reason of such orchard or vineyard located thereon, but always fixing the total value of the land, orchard, vineyard and other improvements thereon, at a reasonably fair cash valuation. That, and neither more nor less, is the assessor required to do under the Constitution as it now is.

An honest, intelligent assessor, acquainted with the values of lands in his district, cannot go far amiss in making the valuation, whether improved lands or otherwise. Complaint is sometimes made that valuable timber tracts are assessed at a nominal valuation, while improved properties are assessed for all that they are worth. If such is the fact the assessor is derelict in his duty. Timber tracts are usually valued for the timber standing thereon, and have cash market values, which may be rated by the section, half or quarter section, and for taxable purposes should be assessed at such market cash valuation, the same as other lands are.

The whole trouble and complaint in the minds of fruitmen touching the assessment of their fruit trees, I apprehend, has grown out of this habit of assessing in some counties; following too literally the wording of the revenue act, which seems to look to the separate listing of fruit and ornamental trees and vines, separate and distinct from other improvements, instead of classing them in the general category of improvements, as contemplated in the Constitution.

Those who fancy that any rebate will or could honestly be made in the amount of the assessed valuation of their properties under a law like that proposed by the Heath amendment, are greatly in error. The assessor must still list all properties on his assessment rate at their actual cash values, the same as now. The Heath amendment was not devised for the benefit of orchardists or vineyardists, neither would its adoption profit them any. So far as the orchardist and vineyardist are concerned, it is, as I set forth in my article published in the *RURAL PRESS*, April 25, 1885, a delusion and a snare.

WM. C. BLACKWOOD.

Haywards, Oct. 18th.

### Stockton at Marysville.

[Written for the *RURAL PRESS* by Mrs. W. D. A.]

I must speak of my delightful visit to Marysville. Looking from the beautiful farm of H. W. Jones, two miles from Yuba City, where I stayed the first night, I saw a level, fertile valley, 60 miles wide by 100 long, divided into fine farms with good dwellings and orchards that need no irrigation. A new idea to me was fields of fall feed for cows and hogs, of Egyptian corn interspersed with sorghum.

I saw clearly the round, steep Marysville Buttes, bathed in purple light; but otherwise the lands were level, and a mellow loam, held from high water by broad, high levees along the Feather river. Land here in Sutter county ranges from \$60 to \$100, and in Yuba county from \$30 to \$80 per acre. Eucalyptus flourishes and orange trees bear finely, though the crop was late this year.

At the long, covered double-track bridge on the Feather river, where it mingles with the Yuba, a strange scene lay before us. The Feather, now low and partly clear since the act of Congress, rolls into the turbid Yuba, with on either side great flats of white sand, three or four feet higher than the river-bed (which is filled up five or six feet), glittering in barren desolation. Through this expanse of sand, with stubborn growth, willows and brush have forced a stand where homes of promise stood. On the Marysville side a freight boat was moored a mile below the harbor, where gold-hunters in early days landed for points above, and who afterward with monitors and hydraulic pressure rolled the hills down these streams; but they could not crush a plucky people who stood up against enormous taxes to push back incoming debris till the strong arm of national law was made to come to their aid. The mighty floods this people have had to levee against are shown by high-water marks near the roof of the freight sheds 25 feet on the Marysville side, and on the Yuba, above the city, even 70 feet—compelling people to move from their buried homes. Crossing the half-mile bridge over the Yuba, a wider waste of infertile flats, studded with small timber, covered the alluvial lands. It seemed that this white sand might be sent by rail for hard-finish or glass-making. It is said that only the tops of the great Briggs orchard, 25 miles above Marysville, known in pioneer days, are now visible. The large one of Briggs Bros., on the Feather, is nearly dead.

At the head of navigation of the Feather, whose channel it is thought the scour will clear; with the Yuba circling on the other side; with water near the surface and a wide valley at her feet, sheltered from high winds by hills so that the orange grows in every yard; with a substantial people, large and durable buildings, tasteful homes and wide streets shaded with native walnuts—Marysville is beautiful, with a bright future outlook.

The kindness shown the State Grange, as a body, will make this fourteenth session memorable. Mayor Greeley's wife sent a lovely basket of flowers with the compliments of the city government. Young ladies, whose names I did not learn, sent floral pieces on behalf of the citizens—delicate offerings of good-will. We all appreciated the convenient Masonic hall—80x40 feet, elegantly finished—as the finest hall that we had ever had, and the best to hear in. The hotels were near, and board excellent at \$1.25 per day. One could go from Stockton Tuesday and stay till Saturday for \$10. The Good Templars sent greetings to us, and Yuba City Grange was so kind that words cannot repay it—only hard work for the Order by each and all throughout the State.

The session was one of the best I ever attended, not because of the silence of the sisters, but because the brothers expressed their views with spirit and courtesy and lifted the organ they believe to be their life and voice on to firm ground. The W. M. and his officers deserve especial thanks.

Pomona's Feast, from the initiation of candidates to partaking of delicious late fruits and admiring the tasteful distribution of the many beautiful flowers, was the most complete I have ever seen. H. W. Jones, of Yuba City Grange, suggested and carried out the idea of a high-backed floral chair, in which was seated Pomona, dressed in corn color, at the head of the table, with attendants in light attire around.

Enlivening strains of the Yuba City band led us, with invited guests, in a procession of three blocks in length, to the pavilion, 160x80 feet, built in the form of a cross, brilliant with lights, fruits, flowers and happy faces; plates of cake, alternated with late plums, peaches, apples and nuts. The odor of a "Snow apple" or "Detroit Red" reached me, and I was presented with one brought from Grand Rapids, Mich., by C. O. Scott, M. D. This spicy, delicate apple does not thrive in this State. Perhaps it would on the Santa Cruz mountains.

The open meeting was full Thursday evening to hear the entertainment given by Yuba City Grange. Singing by the whole and the quartet was excellent, also the piano duets and solos; but the best number was the "Break in the Dike," by Mattie Walton, only seven years of age. It was so perfectly rendered that I feared the strain on one so young as I looked at the sweet face and heard the baby voice. Very large grapes were abundant from the counties of Placer, Sutter and Yuba, particularly Muscats. Fine orchards grew on both sides of Bear river. Fruit is not irrigated.



## We Have Been to State Grange.

EDITORS PRESS:—Not far beyond the confines of Central California sat the 14th session of the State Grange, and the pilgrims there assembled were made conscious that our great State boasted a northern section as fitting balance to the lately much-quoted southern portion. Marysville was the Patrons' objective point, and the result is proof positive that it was a point well taken.

Left Martinez in the early morning via Benicia, Suisun, Davisville, Dixon, Sacramento, Roseville and Wheatland, reaching our destination at 7 o'clock in the evening, though two hours late owing to a detention down South. On stepping off the cars we were literally waylaid by Grangers, both brothers and sisters; in a twinkling were in hacks filled to overflowing. Hotels also ran over into private houses. This city of slickens and levee fame was now in the hands of Grangers, and quietly, as well as trustfully, succumbed to the power at hand.

Warnings had been numerous of Marysville heat, therefore grumbling and fears on this score were near the surface. We from Alhambra were among the fortunate, falling into the hands of Bro. and Sister Walton and again into those of Bro. and Sister Jones, thus enjoying pleasant rides both in Butte and Sutter counties. At the latter home we thought San Francisco had sent some of her cooling draughts, for, in addition to a plentiful breakfast, was a glowing fire in a good old-fashioned fireplace, said fire not far amies in comfort, though not strictly needed. From both these pleasant, cordial homes we were driven the longest way around to view the country, and were gladdened with fine views of North and South Butte. Dame Nature is capricious, and I wonder of what she was thinking when she set this little string of mountains in the midst of an otherwise unbroken valley, said chain beginning and ending with a Butte and christened North and South after their compass-tending points, one reaching into the sky about 200 feet higher than the other, and each to the other connected by smaller wave-like heights. Thus, sentinel-like, stands this striking Butte cluster, as sole monitors of a grand survey. Surely, in the years ere the paleface became masters of these mountain ranges and valley basins, did these "delectable hills" in scriptural words clap their hands in unquestioned supremacy, whether in sunshine or in flood, and to-day their outlines alone of all these enchanting distances of water, valley and mountain are not marred by the inroads of the gold-hunter, but, imposing and beautiful as of yore, they stand catching the clouds as they fly hither and thither, only to tangle them with the heated sunbeams and weave them into misty veils whose fleecy folds soften those glaring heat rays that otherwise would beat upon these plains with scorching, unbroken force.

Past fields sped we that told of tons upon tons of grain and hay stored away and young growing orchards not yet in the slickens track, interspersed with acres upon acres of devastation and ruin from the hydraulic debris that ranges from 45 feet to fewer in depth—spots upon which not long since flourished and bloomed the grape and orange, now a desert, worthless and perhaps irreclaimable. Hydraulic mining and agriculture, sisters standing as strong opposing exponents of California's wealth—one was gold to the other's ruin, and now the ruined in the farmer's crucible of labor, light, and water has in turn become the destroyer; yet in the Grangeroom Patrons from the hydraulic regions clasp the hand of the valley plowman, and the tiller of the soil from bay districts nudges his mountain and valley neighbor's elbow, asking their combined sympathy for their slickens spoiling streams and harbors, while all wrap their sectional differences with the sheath of Grange obligations and council in harmony "for the greatest good to the greatest number." Always in perfect temper? Of course not; the millennium has not come, and it is too much to expect Grangers, after failure of numberless other organizations for centuries past, to bring about a heavenly atmosphere in little more than a decade.

Yuba City Grange, with her neighboring Granges, were our hosts, and royally did they entertain. A good choir sat patiently from Tuesday morning till 12 or 1 o'clock Friday night ever ready to respond to call, "music," and on Thursday evening, with children and friends, gave an entertainment of recitations, music—both vocal and instrumental—and all of a superior quality. Large hall crowded to its utmost capacity showed their appreciation by perfect silence and loud applause.

Deliberations ranged from governmental through business to social relations; and if sometimes soaring to heights hardly yet fully surveyed, judge not hastily, for perfection cometh not without thought and turmoil; this is but the beginning, and the end is afar off.

On Friday evening the 5th or Pomona degree was given a class of 57, this being, I believe, the smallest class on record; cause: District or Pomona Granges now confer said degree, where formerly it was given only in State Grange. Ten o'clock, left the hall in marching order, with a brass band, passing in couples to the pavilion—a very large hall, brilliantly lighted with Chinese lanterns, beautifully trimmed with flags, flowers and evergreens. Five tables, each 75 feet, all loaded with every fruit,

grain, nut, flower, vegetable and cake that California can boast—the historic Bidwell and Hock farms furnishing their quota. At the head of one of these tables was a raised, flower-clad chair for Pomona Sister Roache, who was priestess of this degree, and who, with her attendants Ceres, Sister Cross, and Flora, Sister Plummer, welcomed—said the *Sutter Farmer*—2000 persons. Flower-artists had cunningly devised bud, flower and leaf into every conceivable form—flower-clad wagons drawing the stately vegetable world into fragrant realms studded and fitted with crosses, pillows, cushions, horseshoes—in fact, it was hard to tell where the poetical and fragrant gems left off and the more staid and, perhaps, more necessary vegetable world began, so fascinatingly was the poetical and useful blended.

From this festal scene of friendly greeting, eating and dancing, pass we to the work-hall for the closing labors of the day, though they had now reached into the long hours of the night. Resolutions, speeches, music and farewell greetings were now in order; morning hours were creeping apace ere the last word and hand-clasp was given. Saturday morning, 8 o'clock, found visitors and hosts at the depot—strangers, save in name, but a week since, now giving the friendly hand of parting to brothers and sisters, with promises and wishes of happy fraternal greetings, one year hence, in the beautiful city of Santa Rosa.

Marysville, the most northern point yet visited by the State Grange, has made a fine record; and the (perhaps) 300 visiting Patrons go to their several homes saying of her, "Well and nobly done!"

MRS. MARIA B. LANDER.

Martinez, Oct. 15, 1886.

## Publications at Headquarters.

The publishers having forwarded files of this paper to the secretary of the National Grange, received the following cordial acknowledgment:

NATIONAL GRANGE, P. OF H.  
Office of Secretary,  
WASHINGTON, D. C., Sept. 10, 1886.

Messrs. Dewey & Co., S. F., Cal.:—DEAR SIRS: Your kind note of September 1st, together with the files of the *RURAL PRESS*, are received. I am under many obligations to you for this generous gift to the office, which is highly appreciated. Faithfully yours,  
JOHN TRIMBLE,  
Sec. N. G.

It is very desirable to have at the National headquarters of our Order a reading-room, supplied with all the Grange and farmers' papers, together with a reference library of bound periodicals and various other works of interest to agriculturists. Bro. Trimble, by his courteous correspondence, is plainly paving the way to such a useful institution.

## The Farmers' Ticket.

At a meeting of the Farmers' Committee, held in San Francisco last week, vacancies by resignation and otherwise in the list of candidates nominated by the Farmers' Convention were finally filled, and the completed ticket stands as follows, viz.:

For Governor, Joel Russell; Lieutenant-Governor, R. W. Waterman; Secretary of State, Frank E. Kellogg; Attorney-General, W. H. H. Hart; Justices Supreme Court, Jackson Temple, Thos. B. McFarland, Wm. H. Patterson; Controller, John P. Dunn; Treasurer, H. S. Graves; Superintendent of Public Instruction, Ira G. Hoitt; Clerk of Supreme Court, J. D. Spencer; Surveyor-General, Geo. B. Tolman; Members of Congress—1st District, L. W. Simmons; 2d District, Geo. Ohleyer; 3d District, W. W. Smith; 4th District, W. W. Morrow; 5th District, Frank J. Sullivan; 6th District, Wm. A. Harris; Board of Equalization, C. E. Wilcoxson, John Beatty, L. D. Moorhouse, M. D. Hamilton; Railroad Commissioners, W. W. Foote, J. A. Filcher, J. W. H. Campbell.

BRO. WM. JOHNSTON, Master of the State Grange, was in town last week in attendance upon the Grand Lodge of the Masonic Order. Bro. Johnston is busy with preparations for his journey to the National Grange in Philadelphia, and will soon start eastward.

V. E. BANGS, a prominent farmer of this county, and Master of Ceres Grange, has been appointed Chairman of the Committee on Irrigation by the State Grange in session at Marysville. Mr. Bangs' views on the subject are sound.—*Modesto News*.

THE SACRAMENTO CITRUS FAIR.—The Executive Board of the Central California Citrus Fair Association held a meeting at the Board of Trade rooms last Saturday, Mr. Gallatin presiding. The subject of arranging for and holding the second citrus fair in Sacramento was considered at length, and much enthusiasm was manifested. The time for holding it was, after full discussion, placed at the third week in December, commencing Monday, the 13th, and closing the Saturday following. It will be remembered that when the citrus fair was opened here on the 11th of January last most of the orange crop was gone. Taking this fact into consideration, and the present condition of the maturing citrus fruits, it was believed that the middle of December would afford the best exhibits to be had of the season's products.

## AGRICULTURAL NOTES.

### CALIFORNIA.

#### Alameda.

A HORTICULTURAL CURIO.—Haywards *Journal*, Oct. 16: Clint King, of San Lorenzo, one of our most enthusiastic horticulturists and solid fruit-growers, has quite a curiosity on his place in the tree line. The original stock came from a peach root, and was then grafted with an Imperial Gage and Bradshaw plum. After this had made good growth he grafted on two kinds of prunes (Gross and Silver), two of peaches (early and late), almonds, two of apricots, white and black cherries, and two varieties of plums. All the grafts are growing finely, and when they are in bearing, all on one tree, the sight will be well worth witnessing.

TULE FOR TREE-PACKING.—Jas. O'Neill, the Haywards nurseryman, has been engaged for a number of weeks with a force of men cutting tules below Barron's Landing and at other places. They are in great demand for placing around trees in shipping.

#### Butte.

PLANTING ORANGE TREES.—Oroville *Register*, Oct. 14: It is evident that the boom in planting orange trees last winter in this vicinity was the beginning of a lasting movement, and not a sudden impulse that will soon die out. Two agents for nurseries have met with encouraging orders. While it is possible that no large orange groves will be set out, yet almost every person that has room in his yard or grounds about town will increase the number of his orange and lemon trees. Also many farmers through the foothills and down along Feather river are making preparations to set out all the way from 10 to 300 trees apiece.

#### Colusa.

ALMONDS.—Sun, Oct. 16: A. M. Newland has just completed gathering his almond crop. He averaged 30 sacks to the acre—300 sacks for the 10 acres. This, at the present wholesale prices for almonds, will net him \$80 an acre.

#### Napa.

GRAPE CROP.—Reporter, Oct. 15: Now that the grapes in most of the vineyards throughout the valley have been picked, it is seen that the estimates of the grape-yield made some time before the picking-season began were not quite true as to the probable yield. Very early in the season a very small yield, hardly half a crop, was predicted. But now it is known from reports around the valley that this year's crop is fully up to the average, if not a little above it. Taken as a whole, the quality of the grapes is excellent.

#### Sacramento.

HAY PLENTY.—Record-Union, Oct. 15: The immense amount of hay brought to the city from Yolo county, lately, has attracted a great deal of attention. Most of it is oat hay, raised on lands lying in the vicinity of Davisville, and between there and Woodland. The ranchers, having no other use for their teams at present, find it cheaper to bring it to the city by wagon—each team hauling two wagons, bearing two and a half tons—than to ship to market by rail. There has also been a large quantity of alfalfa brought to town from the river ranches, but the crop was short this year, owing to so much land having been drowned out last winter and spring. Good alfalfa is bringing a better price than average oat hay.

#### San Joaquin.

FORTIFYING THE DIKES.—Stockton *Independent*, Oct. 17: Andy Willows has entered into a contract with the owners of the Moss tract, west of the city, to repair and strengthen the levee. A new floodgate will be put in near the point where Sister slough empties into Stockton channel. It was at this point that the water broke into the tract last winter. The break in the Roberts Island levee opposite the Moss tract has been repaired and tule farmers predict that the pressure against the levees during the approaching winter will be fully as great as any time last year.

#### Sonoma.

VINTAGE.—Napa *Reporter*, Oct. 15: The vintage in upper Sonoma county is much greater than was expected. Nearly all of the grapes will be crushed by the 15th, many of the cellars finishing this week. The wine made this season will be as good as any made in the State, while fermentation, without a single exception, was easily handled and the grapes went through without any trouble whatever.

#### Stanislaus.

GOOD SERVANT BUT BAD MASTER.—Oakdale *Graphic*: Mr. C. L. Nelson set fire to a stubble field on Mrs. M. A. Lovell's place, some five miles easterly from Oakdale. The fire got beyond his control, and consumed 50 tons of hay, owned jointly by H. Heckman, of Oakdale, and Geo. Holdsworth, of Stockton. The hay was valued at \$300, and the insurance expired September 28th. Mr. John Chambers also lost a hay press, valued at \$400. Mr. Nelson will do his best to make good the loss.

#### Tehama.

TEHAMA HORTICULTURAL SOCIETY.—Sentinel, Oct. 1: The society met in the lodgeroom of United Workmen last Saturday evening, Geo. M. Stoll, presiding. John Clements, secretary, read the minutes of the previous meeting, which were approved. Geo. H. Flournoy addressed the meeting at considerable length, and presented the secretary with samples of Hun-

garian prunes, Bartlett pears, Wager peaches in jars, apples, etc. He also exhibited a hybrid preserving melon grown from a cross between the Colorado preserving and Cuban Queen. It was a very fine specimen, large and well flavored. It was christened the "Tehama." A can of Wager peaches was opened and tested, and proved to be as delicious as any peach we ever sampled. The Wager is a seedling and is true to the pit. Mr. Flournoy says he thinks they are as fine a canning peach as can be found anywhere. Mr. Flournoy next exhibited samples of branches cut from trees grown in his orchard without irrigation, as follows: Limb from apple tree, 8½ feet long, grown since the 15th of April; apricot limb, 8 feet long; cherry tree limb, 6 feet long; branch from Winter Nellis, 8 feet long. He also exhibited evergreen millet, second growth, 8½ feet long; four stalks Egyptian corn, ripe, from one seed, 8½ feet long, planted 8th of June, and irrigated only once. Mr. Flournoy said that he paid no attention to season when he wanted to prune his trees. He always pruned them when they needed it. Mr. Stoll spoke of pruning so as to have four branches and a leader or center branch, if possible, and then cut those branches so as to get four each, about 18 inches above the first fork of body of the tree. A new theory as to the cause of the loss of so many fruit trees last winter was advanced by Mr. Flournoy. He said he believed it was because the ground around the trees was so low that water collected there and stood a long time, saturating the roots so that they were scalded. He threw the dirt in the fall around the trees, so that the water would flow away from the trees during long-continued storms. Much other valuable information was given as to the cultivation, pruning and growth of fruit trees. The society then adjourned to meet again the first Monday in November.

#### Tulare.

THRASHING ALFALFA.—Delta, Oct. 14: Alfalfa seed is now being thrashed; in some places it is turning out well, and in others does not yield quite up to the average. The total amount thrashed will probably be considerably larger than any previous year, and it will be some time yet before the work of thrashing is completed.

PORK-PACKING.—Register, Oct. 15: A number of persons have formed something in the nature of a close corporation and have commenced the erection of a pork-packing establishment near the brick kilns. Mr. Jas. Morton will probably manage the enterprise. The business will not be started in a very large way, but if success crowns their efforts those who have it in charge will incorporate next season, put up a larger building, and do a much larger business. This is a movement in the right direction, and we hope it will become a great industry. It is not profitable for a county to sell hogs and buy ham and bacon.

#### Yolo.

RECLAMATION PROJECT.—Democrat, Oct. 14: G. W. Woodard, who has 1000 acres or more of land at the sink of Cache creek, is attempting to reclaim it by means of extensive levees. A large force of men and teams is working on the south side of the creek raising the bank, and at the same time opening out the channel. The object of this is to prevent the creek from overflowing the Hennigan tract, a large open field of 200 acres, which is well set with alfalfa. Southeast of this farm the levee is being extended so as to prevent the waters from backing in from the tule. When completed the levee will be over five miles in extent, and will vary from three to eight feet in height. Besides this work, the digging of a canal or channel to carry off the surplus water into the old tule canal is a great work. The superintendent is pushing the work with vigor, hoping to get it in good shape before the rains come on. One can scarcely form an idea of the magnitude of this work unless he visits the scene and sees the 75 men, teams, plows and scrapers which are employed. The land is of the best sediment soil, made by the washings of Cache creek. Its richness is fully attested by the alfalfa, vegetables and melons growing on the Hennigan place. The melons grow so prolifically that the ground is now literally covered with them, although hundreds of loads have been hauled away this season. If Mr. Woodard succeeds in his enterprise, he will have done a good act, largely beneficial to himself, and profitable to the county in general.

HONEY SCANT.—Mr. Ibes, who lives near the sink of Cache creek, devotes much of his time to the bee industry. He has 300 stands, and up to the present has marketed about 2600 pounds of honey. The season has been a poor one for bees, and the honey produced much below the usual amount.

SLAUGHTERING THE CHICAGO CATTLE.—It is announced by telegraph from Chicago that the slaughter of the distillery cattle is in progress. The edict of the Health Commissioner prohibiting the sale of distillery milk has discouraged distillery milkmen, and they will dispose of their cows to the best possible advantage. There are nearly 10,000 such cows in the city, and many of them have been fattened for the slaughter-house.

THE PACIFIC FRUIT CO. have removed their constantly increasing business to more commodious quarters at Nos. 316 and 318 Washington street, S. F. Justi, Root & Co., the well-known fruit and produce dealers, are their managers.





### A Pair of Old Boots.

Dedicated to the Corner.

[Written for the RURAL PRESS by MALLIE STAFFORD.]

Look at them! as they stand in the corner,  
With an expression appealing but mute;  
There is nothing could look more forlorn-er  
Than this pair of empty old boots,

Brown and wrinkled, and rusty and faded,  
Silent and still, and void of all stir,  
Yet these boots that are now worn and jaded  
Once belonged to a gay cavalier,

Twirled the waltz or the "german" fantastic,  
And with sole that beat high to the sound  
Of sweet music, with proud feet elastic,  
Kept time to the heart's joyous bound.

'Twas the youth of their happy existence—  
Every step seemed a shout or a cheer;  
In ebony splendor they glistened  
In the light of the gay chandelier.

Ah well, we all have our seasons  
Of youth and sweet hope and pleasure,  
And these boots, by their owner, with reason  
Long ago, were considered a treasure.

For nothing in art or all nature  
Could quite answer or fit in their place;  
They comprised, in their way, quite a feature,  
Indispensable—a wardrobe to grace.

But look at them now, as they idly  
Stand there in the corner alone,  
Run down at the heel, and half sidling  
Seem to sigh, but are dumb as a stone.

Their expression is serio-pathetic,  
A look that is shabby-genteel,  
With a stare that is bland but magnetic,  
From the toe to the turn of the heel.

Their toes are turned in—like a wizard  
They searchingly look in my face  
As if saying "Pon my sole and my gizzard  
[Don't laugh] I haven't the courage to brace."

Well, I did laugh, but somehow the laugh faded  
Into a sort of respect for their age,  
Their expression so weary and jaded,  
So steadfastly wise and so sage;

And what they *had* been, and who carried,  
Where wandered, in places of fame,  
Sighed at funerals, perhaps had been married,  
On their owner was, which amounts to the same.

They really seemed almost to be human,  
Their expression so faded and worn,  
Just like an old man or old woman  
In the corner, alone and forlorn.

And what in humanity's forlorn-er  
Than a man or a woman too old  
To be useful? They, too, are consigned to a corner,  
Alone with their sorrowful souls.

Brown and wrinkled, and rusty and battered,  
By the storms and the tempests long past,  
Old boots and humanity shattered  
Find a rest in the corner at last.

Arcadian Heights, Napa Co., Oct. 4, 1886.

### Woman's Kingdom.

Mrs. Livermore's Review of "Ouida's" Article on Woman Suffrage.

In the current *North American Review* Mrs. Livermore sharply replies to Mme. de la Rame's article on Woman Suffrage in a previous number of that magazine. She begins by scathingly denouncing the immoral tendency of Ouida's novels and says her essay "betrays the same literary characteristics and immoral tendencies that have made both her name and her books an offense."

Concerning Ouida's objections to government by the masses, with no discrimination of the fittest class to rule, the writer says:

"For thousands of years the great heart of the world, groaning under the tyranny of autocrats, has throbbled with prophetic desire for its realization in a government of the people. At last the day has dawned for which millions have prayed, and fought, and died, and the reign of the people is beginning. That there are evils inseparable from popular government, no one can deny, nor that some of them are of alarming portent. The pessimist, who leaves out of his calculations that divine spirit which works for righteousness, and which is abroad in the earth, can easily manufacture from them a prediction of swift coming national ruin. But the same may be said of every government under the sun."

Mrs. Livermore's Opinion

Is, however, that words are wasted in discussing the possibilities of woman suffrage, since in some measure it is an accomplished fact. A limited franchise is granted to women in England, Scotland, the Isle of Man, Canada, and Sweden. In the United States, full suffrage is given to women in two Territories—Washington and Wyoming, and partial suffrage in a number of States.

Twelve States of the American Union have given women school suffrage, which limits them to a vote for school committee, and in others

gives them the right to vote on all matters relating to the public schools, and makes them eligible to the offices of State and county superintendent. The capacity of women for public affairs receives large recognition in the United States. They are elected, or appointed, to such offices as those of county clerk, register of deeds, pension agent, prison commissioner, State librarian, overseer of the poor, school supervisor, school superintendent, executors and administrators of estates, trustees and guardians, engrossing clerks of State Legislatures, superintendents of women's State prisons, college principals and professors, and members of boards of State charities, lunacy and correction. And in all these positions women serve with men, who acknowledge most graciously the practical wisdom and virtue they bring to their duties.

Women act as accountants and book-keepers, physicians and surgeons, painters, sculptors and architects, authors and journalists, clergywomen and lawyers, and when admitted to practice law at the bar of their own States,

### Have the Right to Practice

At the bar of the Supreme Court of the United States. President Grant appointed over 5000 women to the office of postmistress. "And although many women have been appointed to positions in departments of government, and to important employments and trusts," said Senator Blair, of New Hampshire, from his seat in Congress, "as far as your committee are aware, no charge of incompetence or malfeasance in office has ever been sustained against a woman."

"On the other hand," says the Hon. William F. Bowditch, of Massachusetts, "five times as many boys as girls are in reformatories. More than five times as many men as women are prison convicts. More than twice as many men as women are paupers, and about 70 times as many men as women are engaged in the manufacture and sale of liquor—the nurse of pauperism and crime. \* \* \* Men drink and women suffer. With manhood suffrage we spend for drink six times as much as we do for education every year. Cannot we prudently call on women to help us by their votes, so that we may at least expend as much for education as we do for dissipation?"

The fairness of man in legislating for women Mrs. Livermore asserts to be a recent development, and quotes Gibbon, who wrote over 100 years ago:

"In every age and country the stronger of the two sexes has usurped the powers of the State, and confined the other to the cares and pleasures of domestic life." This injustice, backed by the teachings of the medieval church, not yet entirely obsolete, has perpetuated the contempt for women, begun in barbarous times, when every woman was the slave of some man. It succeeded at last in the breaking down of women, and leading them, as Michelet has observed, "to distrust and despise themselves, and to look upon themselves as inferior and half-cursed beings." Out of this subject and abject condition they are lifting themselves today, aided by men who have attained almost divine development in justice and manliness.

Ouida's oft-repeated assertion that woman is inferior to man stripped of all verbiage means only she is unlike man. This we frankly admit, and upon this very difference between the sexes base an argument for the enfranchisement of woman. It has been the error of the past, as it is yet too largely the blunder of the present, to assume that man is the standard, and that the civilization which he has created embodies whatever is best and most permanent in human excellence. But man is only one-half the integer we call humanity. Woman is the other half, possessing a more complex organism and a larger total of functional powers. One is the masculine half and the other the feminine half. Each is endowed with aptitudes and capacities that the other, in some measure, lacks. Each is the complement and supplement of the other.

LADY RIDERS.—Austin Reville: One of the most attractive features of the Nevada State Fair is the contest of the lady riders. A dozen or more ladies, who ride like centaurs, compete, and the skill displayed is great. This writer has witnessed a number of them and been surprised at the grace and ability displayed. The riding of Miss McKissick, of Sierra valley, is well worth going far to see. Mounted on a coal-black horse which she broke from a colt and which she fully understands, she is simply superb. To see her coming down the homestretch on an easy gallop is the poetry of motion, but to see her jumping fences, whirling like a flash, dancing, cavorting and plunging with no saddle and always firmly seated and as graceful as a fairy, is simply wonderful. Good a rider as she is, she finds keen competitors, and the judges often find difficulty in deciding who shall have the first prize.

CARRIAGES IN YE OLDEN TIME.—In the early part of this century, in London and Westminster, carts were not permitted to carry more than 12 sacks of meal, 750 bricks, 36 bushels of coal, etc., on pain of forfeiting one of the horses. By the laws of the city, cartmen were forbidden to ride either on their carts or horses; they were to lead or drive them on foot through the streets under the penalty of 16s for each violation of the statute. By a statute of George III there was a duty of £1 4s a year to be paid on all carts or carriages with less

than four wheels, to be drawn by one horse, without any other than a titled covering, and without any lining, springs, or ornament whatever, except a paint of dark color, with the words, "a taxed cart," and also the owner's name, written upon it; and the price of such a cart was not to exceed £12. In the light of the present day it seems curious to revert to the old-time custom of doing things in London about the beginning of the present century. The ways of the world have made considerable progress and many changes since then. The drivers of the present day not only sit on their carts, but they load them for all they can carry.

### A Forest Idyl.

[Written for the RURAL PRESS by MELO.]

An October morn, dreamy, golden and warm as summer's balmy breath. A purple haze like a fleecy veil envelops the distant mountains, which stand like giant sentinels in grand and rugged beauty, and encircle a lovely mountain valley beautiful as a dream of Arcadia. The autumn sun shines warm and the air is bland and gently kisses cheek and brow.

"The wandering breeze through the forest trees,  
A dream of a perished glory brings."

Bountiful Mother Nature is donning her autumn robes, and already here and there bright gorgeous tints are seen, now a cluster of flaming scarlet leaves and yonder a bunch of yellow ones. The graceful fern is taking on more somber tints, while the red seedpods of the wild rose and the snow-white waxberry lend their beauty to the scene. The air is laden with the mingled perfume of the dark-green towering redwood, pine and fir, and the ground underneath the pines is thickly strewn with the needles and cones. The comic cry of the quail is heard in the woods, and the monotonous drum of the woodpecker tapping some distant forest tree, while ever and anon some bright bird wings its way from tree to tree, pouring forth its melody of song. Overhead, the sky is one grand meadow of azure, not a cloud in the horizon as far as the eye can reach. A winding mountain road, romantic as any novelist could wish, bordered with pines, redwoods and the beautiful manzinitas and madroñas, and fringed with wild roses, ferns and the poetical "golden rod," winds its way up the sides of the mountain till suddenly, at length, a little brown, vine-covered cottage bursts upon your view, perched far above, as if ambitious to look down from its exalted position on all this beauty and glory below—as an eagle from his lofty perch.

Three ladies come tripping down a lovely woodland path, and enter the heart of the forest. One is laden with fruit and flowers, one has a volume of her favorite poet, while the other has a bundle of papers and the latest magazine. They are, evidently, ladies of culture, refinement and taste, seeking to charm away the hours. They enter a romantic, shady glade of the forest, and selecting a spot under a giant pine tree, where the ground is thickly carpeted with leaves and moss, they recline in sweet abandonment and give themselves up to the witching influence of this dreamy morn. It is a time for idleness and ease, a time for poetry and song; and they while away the long golden hours in conversation, in eating the luscious fruit, and sometimes one reads aloud from her favorite poet. One, too, is nature's own true poet, who now and then quotes some glowing sentence, or weaves sweet melody of rhyme. One exclaims, "Oh, what were life unless such moments threw bright gleams, like angels' visits, over its gloom!" while the poet sings from the recesses of her own heart:

How oft, when far in distant lands I roam,  
My heart will turn to thee, my own loved mountain home.  
Each green and flowery nook, each shady glade and dell,  
I love ye, dear familiar haunts, oh, passing well!  
The vine-clad hills, the orchard and the fern-fringed spring;  
The garden and the ruined house, 'round which the vine doth cling;  
The winding road through forest dim, down to the waterfall;  
The hum of bees, the flower-scents and the sweet wild-bird's call;  
The cottage porch, o'erhung with fragrant flower and vine;  
And best of all, the warm, true hearts which are forever mine.

Lidell, Oct. 4th.

MRS. STOWE'S HEALTH.—It is hardly surprising, in view of the many reports circulated of late concerning the present health of Mrs. Harriet Beecher Stowe, that many of her friends should feel some anxiety to learn whether the statements as regards her "shattered health" are true. For the benefit of those of her friends who have written asking to corroborate or deny these reports, the Brooklyn Magazine takes pleasure in printing the following extract from a personal letter to the editor, written by Mrs. Stowe only a few days ago: "Concerning the repeated reports of my ill health, let me say that, as I am now in my seventy-fifth year, and as, after a year of lingering and painful illness, I have seen my husband laid to his final earthly rest, it is not surprising that I should feel that an interval of rest is required. I do not consider my health as 'shattered' by any means, but only enfeebled and requiring care. I am now seeking restoration by daily open-air exercise."

### A Choir Member's Death.

[Written for the RURAL PRESS by JET.]

One Friday evening the little choir assembled, as usual, to rehearse the sacred songs for the following Sabbath. The dark-haired, brown-eyed girl who sung alto, the blue-eyed, blushing fairy who occupied the second soprano's chair, the young man who sung tenor, and the middle-aged man who chanted the low bass—all were there. The leader rose to open the exercises; books were handed around, and all were ready to begin.

"Where is Emma?" This was anxiously asked by the second soprano, who was always shy when compelled to sing alone, and who found the seat beside her vacant.

Emma was the first soprano. When there was a solo of difficult execution to be sung, nobody but Emma could sing it. Was the organist sometimes perplexed, Emma always kindly volunteered to help her over the difficult passage. In all, Emma was the good spirit of the choir, and was fondly loved by all.

But where was she now?

A young man hurriedly entered the half-open door, and going to the leader, whispered in his ear. The music-teacher turned pale, and, with a startled whisper, said to the visitor: "Is it, then, so bad?"

"So bad!" solemnly answered the man, and left the church.

We all crowded around our leader and involuntarily whispered: "It's Emma!"

"Emma is very ill," began the leader slowly, and pausing to steady his voice. "She was taken down suddenly to-day, and to-night is dangerously ill. She wants us to meet with her instead of here. Shall we go?"

"Yes, yes!" we all exclaimed; "but the excitement may make her worse," said somebody.

"No; dear friends," said the leader, "she can never grow worse, but will be better soon—in heaven! The messenger says she cannot live until to-morrow."

We said no more. On the way to the place where Emma lived, not many words were said. As we passed up the walk from the gate to the door, odor of roses and heliotrope was wafted by the gentle breeze, and we thought of how she loved her flowers which she had cared for so tenderly, and now they would be laid upon her silent bosom and perfume her cold and narrow bed. Silence reigned supreme in the cottage, as if the inmates were afraid to stir, lest the darling of the household should move her lips but once and they might not catch the passing word.

Our entrance aroused her from a lethargy into which she had deeply fallen.

She smiled upon us all—a smile of inexpressible sweetness which God places upon the dying lips to mutely testify of the glory which beams upon the dying Christian.

We one by one went to her bedside. The first to go was the second soprano.

"My dear," whispered the dying girl, "I will never sing with you again on earth; but when you come to heaven I will have been there long enough to know all the sweetest music, and will teach it to you. We will then be so happy. When I am in my coffin, please have the choir sing the sweet old hymn, 'Asleep in Jesus.' It is only sleep, dear, from which I shall awake in the morning beyond the reach of sorrow. Meet me there—there." She lifted her trembling hand, and with her closing eyes gazing upward, she pointed toward heaven.

We all gathered around her bedside to watch the last struggle. Soon she roused herself slightly and said:

"I am soon to go. I can hear music sweeter than we ever sang or heard; it sounds like the murmur of many purling streams flowing over shining beds of pearls. When you carry my body to the little graveyard behind the church and leave it there alone, through the sunny summer and the cold winter, with no companions but the chirping cricket in the summer and the meek little rabbit in the winter, do not think of me as being there; I will be in heaven, and be very, very happy. My chair in the choir will be vacant. You will look at it and sigh for one who was taken away from those who loved her in the springtime of her life; you will gather to practice the hymns, but I will be in heaven singing the 'new song.' I want to kiss you all before I die. Gather around me quick, for I feel the cold tide slowly creeping toward my heart."

We all tenderly clasped her cold hand, and kissed the lips that were now growing, oh, so cold! She smiled faintly, raised her arms toward heaven in happy anticipation, and then sank to rest, even as an innocent child sleeps on its mother's bosom.

Sad, and was the funeral! When the choir arose to sing "Asleep in Jesus," they gathered around the coffin and could only sob aloud. No eyes were dry as they were turned toward the gray-haired preacher when he said: "God, in His wisdom, has called our beloved Emma from her preparatory lessons here on earth to the choir of golden angels in heaven. We will meet her there. Some time you, dear members of the choir, will all meet over yonder, and Emma will then have her usual place by the side of the soprano who now feels her loss so greatly; some time we shall all enter into that heavenly rest, to go out no more forever."

We laid her away in a flower-lined grave. The cypress grows at her head, and upon the lit-



the mound the rose and heliotrope bloom in the summer; and the snows are gently removed from it in winter, that fresh flowers may be strewn upon her last resting-place.

### Darning Stockings.

I.  
A pretty girl sits in a rocker at ease,  
And sways to and fro;  
Now fast and now slow,  
While her thoughts wander far as they please.

II.  
She holds in one slim hand her needle and thread;  
It flies in and out,  
You'll see what about,  
As her thoughts fly within her bent head.

III.  
A romance I tell, and don't think it shocking;  
She smiles, then she sighs,  
Soft shine her sweet eyes,  
As she daintily darts on her stocking.

IV.  
Each stitch holds a dream of the future so sweet,  
As they back and forth wend  
In the stocking they mend,  
Go to the rhyme of her heart's happy beat.

V.  
What story is weft in the swift-flying thread?  
As weaves her bright dreams  
Of the future, it seems  
Both to weave them with hand and with head.

VI.  
Ah! sweet, dainty form, so gayly you're rocking!  
Is your dream at an end?  
Or does it depend  
On the last threads weft in the stocking?

### A Judge's Estimate of Rumsellers.

Hon. F. M. Hubbard, Judge of the Eighth Judicial District of Iowa, in passing sentence upon some liquor-dealers for violation of the prohibitory law of the State, said: "While there are greater crimes known to the law, which are punishable with greater severity, there are none which involve more of those qualities, known as despicable meanness and audacity, than the selling of intoxicating liquors. There is something in the taking of human life instantaneously that shocks and terrifies the minds of all; and yet we look upon the man who takes human life quite as surely, but by a slow, lingering process, if not without condemnation, at least without horror. You, who stand before the court for sentence, are in every moral sense murderers, and you are within the spirit, if not within the letter, guilty of manslaughter; for the law says that whoever accelerates the death of a human being unlawfully is guilty of the crime. Your bloated victims upon the witness-stand, who undoubtedly committed perjury to screen you from the law, not only abundantly testify that you are accelerating death, but that you are inducing men to commit still greater crimes than your own. You still maintain the appearance of respectability, but how morally leprous and scrofulous you are inwardly. The ruin, poverty and idleness which you are inflicting upon this community declares, as from the housetops, that you are living in idleness and eating the bread of the orphan, watered with widows' tears; you are stealthily killing your victims, and murdering the peace and industry of the community, and thereby converting happy, industrious homes into misery, poverty and rags. Anxious wives and mothers watch and pray in tears nightly, with desolate hearts, for the coming home of your victims, whom you are luring with the wiles and smiles of the devil into midnight debauchery.

"One can have no adequate conception of a cataract until he has seen Niagara, nor of the terrible fury and grandeur of a storm at mid-ocean till he has witnessed one; so no one can know the utter degradation and total depravity to which his species can be brought until he looks upon the desolate ruin caused by your hellish traffic. You are persistent, defiant law-breakers, and shamelessly boast that, in defiance of the law and moral sense of the community, you will continue in your wicked and criminal practice. It has, therefore, now become the imperative duty of this court to let fall upon you so heavily the arm of the law that you shall either be driven from your nefarious traffic or ruined in your fortunes, or wicked prosperity. You have become a stench in the nostrils of the community, and all good men are praying that you may be speedily reformed or summarily destroyed. By the providence of God and the favor of this court, their prayers shall be speedily answered, by signal and exact justice for your crime. And, finally, let me entreat you, if you are not lost to every sentiment of humanity, to desist from your criminal vagabond traffic, and betake yourselves to some honest calling for a livelihood, that you may yet become virtuous, useful citizens, and entitled to the respect of a Christian community. If you persist in this way, your ruin is certain, and you will receive, as you deserve, the execution of mankind. You may think that the sentence of the court is harsh and unjustly severe, but the court assures you that, compared with your crimes and the desolation you have already brought upon the community, it is mild in the extreme."

### YOUNG FOLKS' COLUMN.

#### Mr. Tungken Tell.

Katie's baby brow was puckered under her golden bangs in a deep study.

"Please, Brother Tom," she said presently—"don't you know pretty near everything?"

"Yes, pretty near," said humble Tom.

"Can you tell me who Mr. Tungken Tell is?"

"Tungken Tell!" repeated Tom. "Don't know the old chap—who is he?"

"Why, he is the one who loves every one so much," answered Katie.

"I'm sure I don't know what you are talking about," said this big brother.

"Why, you know when we want to say we love any one very much, we say we love them more than 'Tungken Tell,'" explained Katie.

Tom stared for a moment at his little sister, then broke into his loud, boy's laugh, and rolled over on to the lounge with his head in a pillow in his excess of merriment.

"What is the matter?" asked Katie in a pained tone; "isn't he a good man?"

"Good enough sometimes," answered Tom, trying to smother his laugh, "and bad enough sometimes, and makes an awful lot of mischief."

"Where does he live?" persisted Katie.

Tom laughed again in a way that tired the patience of his sweet-tempered little sister.

"Oh! he lives in a little red house with a white gate to it," and away went Tom to join his twin companion, Bob Wilson, who had just called him.

These were trying days for Katie; her mamma had gone to the city and left her in charge of nurse.

"She is very good, but it is so different from your own yelations," said Katie, who still had a little trouble with her r's.

And, to-day, cook was cross, and wouldn't give her a little piece of dough to make bread with; and nurse had a dreadful face-ache, and she flew at Katie that afternoon, and told her if she made any more noise all her teeth would jump out of her mouth into the fire.

And Katie trembled as she thought how dreadful it would be to look at poor nurse without a tooth in her head, and know she had done it by being naughty.

And now Tom had laughed at her, and the world looked very dreary.

"I'm going for a long walk, all by myself," she resolved, "and maybe they'll think I'm lost and feel sorry at the way I've been 'bused.'"

No one saw the little figure, wrapped in mamma's camel-hair shawl.

"It will make me look poor and distressed," thought Katie, as she pinned it under her dimpled chin.

She ran a square, then walked on, and on.

"I'm miles and miles away," she said, with a quiver of her lips, as it was beginning to snow, and her hands were cold without the accustomed mittens.

Poor, bewildered little girl, in the fast-falling snow, and the dark coming down like a great curtain.

She looked timidly at the houses all around her; just then she caught sight of a small, red, brick house, standing back, a yard, and—

"Yes! there is a white gate, and it's just where Mr. Tungken Tell lives, and I'm going in and ask him to take me home. I feel most acquainted with him," and Katie walked bravely down the path and rang the bell. A trim, little housemaid answered it.

"Please say to Mr. Tell I want to see him," said the little snow-covered figure at the door.

"Mr. Tell doesn't live here. Such a little mite ye are to be out sich a night," said the girl, kindly.

"Who is it, Nannie?" asked a pleasant voice in the hall. Then a lady came to the door and told Nannie to take the poor child to the kitchen and give her some supper.

But when the little beggar was led into the house, and the camel-hair shawl was taken off the golden head, the lady exclaimed:

"Oh, Alfred! come see, it is a lost child!"

Then Katie buried her tearful face in the kind arms open to her. But I need not tell you how she was petted and undressed and put into a soft flannel gown, and held in the kind lady's arms before the fire, nor how they all laughed—"Just like Tom"—when she told them why she thought Mr. Tungken Tell lived there.

And word was sent to the station that a lost child was at 23 Langley avenue.

And one hour later Mr. Somers burst into the cozy parlor and held his darling to his thankful heart.

And a muffled sound was heard in the hall, and it was poor Tom, with his hat pulled down over his eyes, and "crying like a baby," he said, as he kissed his dear little sister over and over again.

And father, brother, sister truly felt they loved one another more than tongue can tell.

Mary L. Pratt.

RENEWING ITS VIGOR.—Vesuvius furnishes an example of a volcano whose activity has been increasing instead of diminishing during the last 2000 years. At the beginning of the Christian era the mountain's fires seemed to have been long burned out forever, and the eruption which buried Pompeii and Herculaneum in the year 79 was the first known. The next outbreak was not until 1036, and thereafter several came at intervals of a century or more, but since 1631 the eruptions have been very numerous.

### GOOD HEALTH.

#### A Word to the Wise.

[Written for the RURAL PRESS by JEWELL.]

For the foolish will not heed my words; they are wise in their own estimation already. This is the season when sickness prevails, because the people do not take the precaution to keep warm. A sudden change in the temperature demands a change in the clothing also, so as to keep up a normal action of the skin. Fires should be kept also in sitting-rooms, and no member of the family be allowed to sit with cold feet or to go to bed chilled. If the pores of the skin are allowed to become closed, making "goose flesh," as the old saying is, there is likely to be a determination of blood to the lungs or to the bowels, causing an attack of pneumonia or bilious fever, or other sickness, which could have been avoided by care and warmth. Then, too, when a cold snap comes, after weeks of warm weather, and all are used to the breathing of pure, fresh air, if no fires are started to warm the living-room every door and window is of necessity closed, and all are obliged to breathe confined, unoxygenized air, thus vitiating the blood and so weakening the lung tissues, making them less able to resist disease germs that are floating in the atmosphere ready to be absorbed by just such organizations as described. Mothers should look to their young children, especially those liable to throat-ailings and croup. See that they are warmly clad and go to bed with warm feet, and are happy, not cross or peevish, which is a sign of ailing. If they are going to school, see that their lunches are composed of solid, wholesome food; cake and pie are bad food to study on. Sweet bread and butter, with a taste of jam or jelly, eggs, or some cold meat or oysters for a change, are all easily digested, greatly enjoyed and easily prepared. Adding an apple or pear or grapes to the bill of fare gives the meal a hearty relish if it is cold, supplying good brain food and requiring but a simple supper of bread and milk perhaps at early bedtime. Children should never be allowed to eat later than five or half-past at night, and always a light meal. Any parent or guardian can test the truth of this by trying to sleep with a child after it has been eating a late, hearty supper.

It is the duty of every teacher, school trustee or parent to see that there is a stove in the school-room, ready for a fire on cold days. All danger of sickness is thus averted, by keeping the room agreeably warm, and having the door or windows open. No child old enough to go to school is too young to understand a few of the simple laws of their being necessary for health, and all teachers, parents or guardians are culpable if they are not thus instructed.

Indeed it is a grave mistake of our State Normal schools that there is no "Chair of Hygiene." What wonder that so many of the brightest and best of the classes receive their closing honors and diplomas, either physical wrecks of their former selves or else go home to die of diseases the seeds of which were most surely implanted in their systems during the years they were so earnestly striving for the pearl of great price, an education, and losing their life in its attainment?

Is this necessary, think you? Parents, are you willing to sacrifice your girls and boys on the altar of an education? Do you not believe God's physical laws equally as important and binding upon us as His moral laws? Who is to be the one to demand of the faculty that the students intrusted to their care be instructed in all that pertains to their physical welfare?

Physiology does not teach it, anatomy does not teach these laws. Hygiene alone, practically studied and obeyed, will reach these living questions.

Los Gatos.

POISONOUS PLANTS.—It is very important for people to know which plants are poisonous and dangerous. One of the most popular groups of plants is the buttercup, but many of these are sufficiently acrid to produce blisters when applied to the skin. The poisonous sumac is probably the most dangerous of all our native plants which poison through contact. Avoid all sumac which has not red berries, and you will be safe from poison. The common horse-chestnut is used in Europe as food for horses and cattle, and yet the small horse-chestnut of the South, "Buckeye," is claimed to be poisonous. The laburnum or gold chain, a common garden plant, has roots that taste like licorice and which thus tempt children to chew it. It is, however, a dangerous poison to eat. Water hemlock, fox-glove or digitalis, aconite, Jamestown weed or stramonium, common poke weed, skunk cabbage, poison ivy, and various other common weeds or shrubs, including some mushrooms, are rankly poisonous and should be avoided.

A PROFITABLE DENTAL PRACTICE.—The enormous wealth of the famous Parisian dentist Evans—not less than \$10,000,000 he is said to be worth—has been acquired not so much in the course of his regular practice as from the huge fees given him by distinguished personages in various parts of Europe who request his services from time to time. Thus he is always flying about from capital to capital, pulling a tooth from one crowned head and filling a "cavity" in another.

### DOMESTIC ECONOMY.

#### "Death in the Pot."

EDITORS PRESS:—Kate Field has just issued the following bulletin: "Let our women leave off talking nonsense and learn to cook." It is about time the despised art of cookery had its turn at glorification. What's the use of aesthetics in the parlor when dyspepsia rules the dining-room? The Greeks we so much admire were athletes before they were aesthetes, and don't any of you ladies forget it!

A man or woman with a sickly stomach is going to be a poor, miserable, unserviceable creature just so long as the stomach's condition is unchanged. The old feminine satire, that "a man's heart is reached through his stomach," is, after all, no such terribly biting innuendo. What enters the stomach debilitates or nourishes not only the heart, but the brain.

#### Food Makes or Mars the Man.

The science of feeding (if you want a long-tailed word, call it "gastronomy") is the foundation of all science, biological or otherwise; and, as some one remarked in your columns a week or two ago about sanitation in general, why don't the doctors preach thereupon? Fact is, they are not paid to! They live on people's follies! Educate humanity aright and the doctor's occupation is gone! Parents who are so solicitous that their offspring should be trained in all the 'ologies forget to apply the most obvious and needful 'ology to their own children's stomachs, and permit their ruination by candy. Fetid breath, rotten teeth and lifelong dyspepsia be my witnesses! Now I'll allow the doctors—the really philanthropic doctors—to enlarge on my text in your ensuing numbers.

EDWARD BERWICK.

WASHING FLANNELS.—If flannels are not properly washed they very soon lose their delicate softness and become so shrunken that they are almost useless. There are so many methods given for washing flannels that one might well become puzzled in trying to decide which to follow. After trying the various ways recommended, I have now fixed upon one which is quite satisfactory to myself. This is my way: Have plenty of clean, soft water, hot, but not scalding; make a strong suds with nice bar soap. Put in flannels, let them soak a few minutes; then begin with the cleaner, and wash and squeeze with the hands. Do not put soap on the garments, or rub on a board, as this fuls them. If, after washing in the first water, the flannels are not clean, make another suds and wash as before. Then rinse well in clean water and wring very dry. It is desirable to dry flannels very quickly, as it is the long dampness that shrinks them. To hasten the drying, lay each article separately in a strong white towel and wring again. By this means they become nearly dry. While damp they should be ironed on the wrong side until quite dry. If flannels have become yellow and stiff by bad usage, dissolve a little borax in the rinsing water, but never use blueing, as this makes them harsh and unsightly. After washing knit articles, such as shawls, clouds, babies' shirts and socks, spread a folded sheet on the table and arrange the things on it in the shape they are desired to be when dry. If served in this way, they will neither stretch nor shrink. Choose a good drying day for washing flannels which must be hung out of doors, and be careful to bring them in when still a little damp, and iron immediately until they are quite dry.

EGG BISCUITS.—One quart of prepared flour, a tablespoonful of lard and twice as much butter, a teaspoonful of salt, two cups of milk, the yolks of two eggs, beaten light. Salt the flour and sift it twice in a bowl, rub in the shortening thoroughly and lightly; mix yolks and milk together, and pour into a hole in the flour; work into paste with as little handling as possible; roll into a sheet half an inch thick; cut into round cakes and bake in a floured pan. Eat hot.

CORN FRITTERS.—Cut the corn from the cob and mince with a keen chopper, bruising as little as may be; allow two eggs to a heaping cupful of the minced grains, a half-cupful of milk, a tablespoonful of prepared flour, a salt-spoonful of salt and a teaspoonful of melted butter. Beat the eggs light, add the milk, butter, salt, finally the flour. Bake on a griddle and send in very hot.

CELERY SAUCE FOR TURKEY.—Boil a head of celery until quite tender, then put it through a sieve, put the yolk of an egg in a basin, and beat it well with the strained juice of a lemon, add the celery, and a couple of spoonfuls of liquor in which the turkey was boiled; salt and pepper to taste.

QUINCE MARMALADE.—Take the quinces that you have boiled for jelly and mash them with a spoon; to a pound of quinces take a pound of sugar; boil them together until they are well softened; then strain through a coarse sieve and put in a small jar.

LUNCH CAKES.—One cup of green corn pulp, one tablespoonful of sugar and enough fine oatmeal to make the mixture sufficiently stiff to drop it in spoonfuls on the pan. Bake for 15 minutes and serve cold.





A. T. DEWEY.

W. B. EWER.

Published by DEWEY &amp; CO.

Office, 252 Market St., N. E. cor. Front St., S. F.  
Take the Elevator, No. 12 Front St.

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DEWEY &amp; CO., PATENT SOLICITORS.

A. T. DEWEY.

W. B. EWER.

G. H. STRONG

SAN FRANCISCO:

Saturday, Oct. 23, 1886.

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## The Week.

Since our last issue there has been a general rain, the first which has brought an appreciable amount of water over a wide area of the State. In some parts the rain of Friday and Saturday last amounted to a thorough drenching, and is reported by residents as exceptionally wet and heavy. The north end of the State was, as usual, best soaked, and the counties just north of the bay had a good share. On the east shore of the bay loose soil was moistened to a depth of four inches. We have not heard of the effect upon the portion of the grape crop still out. There was rain enough even in some of the raisin districts to show raisin driers that their safety requires some artificial arrangements for sheltering and drying to supplement the deeds the sun does for them. So far as we have heard there was not much grain out in the wet. The rather short crop has enabled growers generally to sell or get to warehouses with their product. Since the rain there have been lurking northers, though not of great force or small temperature. We have had a clear air, bright sunshine and dustless roads, which usually combine to make the autumn the most delightful season out of doors in California—if, indeed, there be any

best season where the whole rounded year is so delightful.

Political matters are becoming more and more complex. Fortunately there is but one whole week remaining before election. The style of warfare being waged is demoralizing, and the return of quiet and a milder disposition as to one another's political throats will be very acceptable.

## Take Care of the Senses.

It may seem quite commonplace to remark that the senses are the special avenues of communication between the mind and the outside world. And yet the importance of these organs is strangely overlooked. Their constant misuse proves that their full value is not appreciated. The windows of the house are kept clean and transparent, but the windows of the soul are often dim and soiled. Every one knows that the sense of touch is dulled by misuse, but it is diffused over so wide a surface that few are much inconvenienced thereby. Only those engaged in some special walk of life—physicians, for instance—need extreme delicacy of touch. But the senses of sight and hearing demand special care. They are not only more important than others but are more easily deranged, as they depend on more complicated mechanism. That this care is not given is proved by statistics. A very large proportion of mankind have more or less defective hearing, a still larger and constantly-increasing proportion possess eyesight below the normal standard. And yet it has been ascertained that a majority of this class came into the world with the organs of vision and hearing perfect. Some have lost the acuteness of these delicate organs by disease, some by accident, but the larger part from misuse and neglect. The alarming increase of myopia among school-children and the prevalence of astigmatism have caused some attention to be given of late years by teachers and school boards to the eyes of the young. Schoolrooms are now arranged so as to give each child as good a light as possible, and some endeavor is being made to have the rays of light come from such a direction that it may fall upon the work instead of the eye. Still there exist, even in this State, many schools in which no attention is paid to what political or conservative school boards and teachers regard as a trivial matter. But there is a movement in the right direction, and it is gaining so much force that we may hope it will continue, and in succeeding generations spectacled boys and girls will be less and the number greatly increased that can perceive the beauty of a landscape or picture.

Our attention is called to this point from recently seeing a statement in a Philadelphia paper, that out of 1874 applicants for a position on the police force in that city the last two years, 420 failed to reach the normal standard of vision. As no blind or one-eyed persons would apply, and as men consciously dim-sighted would not be likely to offer their services, the average of defective sights must be greater than these figures indicate. While the number of deaf-mutes, persons born unable to hear sounds, is comparatively small, the number of persons who are more or less hard of hearing is very large. A little observation will verify this statement. Notice how often you have to repeat your words to one who is listening to you. Ask the man or woman sitting next to you in the theater what the audience is laughing at and the chances are he does not know. It is only very recently that attention has been called to the hearing of children. In some French schools it has been shown that many children regarded as stupid were really hard of hearing. They seemed stupid for the simple reason they did not hear fully or correctly the explanations of the teacher. A similar examination among our own schools would most likely develop some cases of the same kind. It might be found that some of our stupid boys were dull through no fault of their brains, but from defective hearing. Then many children and adults are a little hard of hearing without being conscious of the fact, and the consequence is that many an admonition or piece of information has been given and incorrectly heard, when both speaker and hearer believed it was heard and rightly apprehended.

The RURAL commends this subject to the attention of our schoolteachers, and any observations they make we would be glad to learn.

## The Advance of Science.

Sir John Lubbock, in an address before the British Association for the Advancement of Science, not long ago, attempted to show how discoveries in physical science are gradually changing the whole aspect of civilized society. The subject is a profoundly interesting one, and would require a volume instead of a newspaper article. Still we are assured it will be agreeable to our readers to glance at a few salient points.

In no field of research has science made greater progress than in that of biology. Fifty years ago nothing was more surely believed than the immutability of species. The hypothesis of Lamarck, which traced all species, including man, to creatures of lower organization, was regarded as little better than a craze which no one having respect for his reputation would heed. But the heaven was at work, and since the publication of Darwin's "Origin of Species" a complete change has taken place, and now few having any claim to be considered authorities venture to uphold the ancient doctrine of separate creation and immutability of species. "Natural selection" and the "struggle for existence" are phrases which have become as familiar as household words, and even those who hesitate to accept the evolutionary theory as promulgated by Darwin and his followers do not hesitate to acknowledge that it is more in harmony with ascertained facts than the opinions regarding the permanence of species which it has so rapidly displaced. There can be little doubt that the progress of the science of embryology and the results of careful investigations made into the relations between plants and insects have contributed greatly to recommend the views of Darwin to scientific experts. Another branch in which great strides have been made is that which deals with the ancient condition of man, not so much as to the period when he first appeared on the earth as to his antiquity and material condition in prehistoric times.

Geology as a science has only taken shape within recent times. Many can remember when the received opinion was that the phenomena of geology could only be explained by violent convulsions and a higher intensity of energy, culminating in frequent catastrophes. To Sir Charles Lyell belongs the honor of convincing geologists that the forces now in silent operation are powerful enough to produce those results which were at first attributed to violent interferences with the established order of things. In the meantime we have learned much of the wonderful part played by glacial action in forming of mountains and valleys and deposit of rocks on the surface of the globe.

The advance made in the practical sciences within recent times strikes the popular fancy more readily than the results of purely theoretical investigation. It is not every one who can appreciate the wonderful extra-telluric discoveries that have been made by means of the spectroscope, or estimate at its proper value what is meant by the liquefaction of oxygen and the solidification of hydrogen; but all can form some idea of the advantages which have been derived from the practical application of science. Recent investigations have shown that many old principles have a far wider application than was suspected by those who discovered them. For instance, the formula of the law of gravitation, it is now known, applies to electricity, and probably to other modes of force. It is by the discovery of a vast number of new combinations and applications of force that the science of this century will be remembered. The invention of dynamite and the other nitrogen compounds as a destructive force promises to play an important part in the history of civilization. Chemistry has yielded a large number of compounds to prevent disease and alleviate pain, and for the use of the arts. In connection with the sciences of heat, light and sound, much has become known, the application of which has greatly increased the comforts and pleasures of life. It is to electricity, however, that we owe the largest number of useful inventions. It is the marvel of the age. To it we are indebted for telegraphic communication with Europe and the whole world, that 50 years ago would have been laughed at as an idle dream, and the deprivation of which to-day would be regarded as an irreparable calamity.

The telephone is a thing of yesterday, but

has already become an inseparable part of the furniture of every business house and office. The microphone and the phonograph possess amazing possibilities that as yet sleep in prophecy. In the appliances of electricity to purposes of illumination, science has achieved a startling triumph, and the electric light will certainly be the light of the future. And yet we may confidently look for greater things. As Sir John Lubbock has said, "By the electric transmission of power we may hope some day to utilize at a distance such natural sources of energy as the Falls of Niagara, and to work our cranes, lifts and machinery of every description by means of sources of power arranged at convenient centers."

## Alien Land-Owners.

There was a deal of talk last winter in Congress concerning the forfeiture of certain unearned railroad lands, but nothing of any moment came of it. Some time since the Secretary of the Interior Department decided that no land-grant road had earned its grant until it had filed the completed plat of its whole road and the land donated. Under this ruling it is reported that the general land office is preparing a case against the Northern Pacific road. However this may be, the question of alien land ownership has come to the front, and is just now exciting considerable attention. It is not a new question. For a dozen years or more observing people have been talking about it. The great cattle industry came into existence soon after the close of the civil war, and furnished a fine opportunity for profitable investment. Enterprising foreigners were not slow in taking advantage of the opportunity, and have purchased vast tracts of land at extremely low prices. According to a report of a Congressional committee appointed to investigate the matter, it appears that about 20,000,000 acres of land are now owned by aliens—an area more than equal to one-third of the State of Kansas. It is alleged that one-eighth of Texas and one-sixth of Colorado are owned by aliens. Most of the large tracts of alien lands lie in that part of the domain we acquired from Mexico, and were originally Spanish or Mexican grants. Change of national allegiance does not affect vested rights. Hence all the lands owned by private citizens before the treaty of Guadalupe Hidalgo transferred them to the United States never became public lands. The government acquired no proprietary right to them, and they could be sold by their owners. In this way was laid the foundation of that great monopoly of land that has seriously crippled the prosperity of the country. It is a serious problem, and its solution is not apparent.

The chief objection to alien ownership of lands is that a foreign system of management is implanted in our midst—something not in harmony with our political institutions and not in sympathy with our habits and ways. This is a very large country we are in; it has a North where the snow never melts and a South where the snow never falls; lakes into which a European Kingdom might be flung and drowned; but, large as it is, there is not room enough for the transplanting of foreign customs. Large land holdings are objectionable in the hands of citizens, but in that case we have no fear of anything not American being planted here; but when men owing allegiance to other governments come into possession of large bodies of land and begin to lay the foundation of a system of foreign landlordism, the matter becomes far more serious. The majority of these alien owners do not live on the lands and have no intention of ever becoming citizens of the United States. Many of them do not even admire the system of government that protects their property. It certainly is not desirable that any considerable tracts of land should pass into the hands of persons more interested in the welfare of another country than the one that gives them the hospitality of a home and shelter—that owe allegiance abroad and never care to participate in advancing the glory and prosperity of our country.

**SUFFERERS FROM EARTHQUAKES IN SOUTH CAROLINA.**—We have received from Fayette, Miss., a printed circular respecting measures for the relief of sufferers by the late Southern earthquakes. We presume it is genuine; yet, in the absence of anything like official verification, feel obliged to withhold it until we can make further inquiries.



### The State Schoolbooks.

A part of the new series of schoolbooks published by the State and furnished to public-school pupils at the cost of publication are now ready for distribution. The first order for these books has been sent in by the trustees of the school at Los Gatos, and it may be said that the enterprise provided for by the Legislature of 1885 is now bearing its first fruits. Such being the fact, we deem it timely to present the subject to our readers.

The legislative act (approved Feb. 26, 1885,) stated how the books shall be prepared and sold by the State. It also appropriated \$170,000 to carry out the work. Of this, \$150,000 was to equip the State Printing Office with suitable machinery and printing material and to pay the wages of those employed in this work; the balance (\$20,000) was devoted to the literary work of compiling the books, by persons employed by the State Board of Education.

The law requires the State Board of Education to compile, or cause to be compiled, (1) a series of three Readers, (2) one Speller, (3) one Arithmetic, (4) one Grammar, (5) one History of the United States, (6) one Geography.

The Board very wisely decided to proceed first with the Readers and Speller, the money expended for these books by the patrons of schools being more than double that expended for any other series, and nearly equal to that expended for all the others combined. The largest saving, by State publication, is, therefore, in this series.

The series of Readers is to comprise three, denominated first, second and third, and the three combined contain 928 pages. The First Reader has 128 pages, and we will give our youngest readers a sight of the book which will soon be in their hands, by using a few sample pages in our Young Folks' Column next week. The Second Reader is not quite finished yet. The Third Reader, of which we give sample pages herewith, prescribed by the Legislature as the highest book of the series, is necessarily graded to occupy about the field of the Fourth and Fifth Readers in series heretofore in use. The reading matter of this book embraces selections from more than 100 standard authors, being such selections as experience has shown to be best adapted for use in school Readers. The limited number of specimen pages which can be given here cannot properly represent the variety and quality of these selections. Their character may be inferred from the names of some of the authors. Representing writers of the sixteenth century, we have Shakespeare; from the seventeenth century, Milton and Addison; from the eighteenth, Pitt, Dr. Johnson, Gray, Goldsmith, Beattie, Barbauld, Grattan, Aikin and others; from the nineteenth, Scott, Hogg, Webster, Southey, Irving, Campbell, Story, De Quincey, Poe, Pierpont, Drake, Sprague, Mitford, Byron, Halleck, Sigourney, Hemans, Everett, Bryant, Holland, Mitchell, Dickens, Tennyson, and some 50 more of the most distinguished literary names in England and America.

We select sample pages to reproduce in our columns not with a view to show the quality of the selections, but to display some of the new features embodied in the work. Page 14 will be seen to open a treatise on elocution, and page 59 introduces drawing as an aid to description by the pupil. Other pages, if we had

of the Readers, the selections for which were made by H. C. Kinne, of San Francisco, and donated to the Board. The preparation of a Speller was also assigned to Superintendent

### CALIFORNIA SERIES.

## THIRD READER.

### 1. AMERICA—NATIONAL HYMN.

S. F. SMITH—1808—\* \*. MASSACHUSETTS.

#### PREPARATORY EXERCISES.

[See opposite page.]

Questions. What do you know of this author? Was he a lawyer? A clergyman? [See Cyclopaedia.] Can you ascertain who wrote the following lines in relation to him?

"And there's a nice youngster of excellent pith,  
Fate tried to conceal him by naming him Smith,  
But he shouted a song for the brave and the free,  
Just read on his medal, 'My country—of thee.'"

Where is Massachusetts? V. 1. Who were the pilgrims? V. 2. "Templed hills"—who wrote the line: "The groves were God's first Temples?"

Words often Mispronounced. Răpt ūre (răpt'yūr); sŏng; ěv'ēr y.

\*Articulation Drill. (2) Sī'lence; (4) freedom's | holy; rocks | and | rills; freedom's | sŏng; templed | hills.

For Definition. Rapture; templed hills.

1. My country! 'tis of thee,  
Sweet land of liberty,  
Of thee I sing;  
Land where my fathers died,  
Land of the pilgrims' pride;  
From every mountain side,  
Let freedom ring.

2. My native country! thee,  
Land of the noble free,  
Thy name I love:

\*It will be noticed that the letters likely to be dropped, or incorrectly sounded, are printed in a distinctive type. Care should be taken that, while they are adequately sounded, they be not made prominent. Unless this is done the object of these drills will be defeated. The teacher should be vigilant lest, while leading the child to avoid the fault of a careless articulation, he force him into a labored preciseness in the utterance of obscure sounds.

### CALIFORNIA SERIES.

### ELEMENTS OF ELOCUTION.

#### CHAPTER I.—ARTICULATION.

Articulation is the act of uttering the elementary sounds of the language in words and syllables.

Good articulation is the distinct utterance of these sounds.

Perfect articulation may be described as the delivery of words "from the lips as beautiful coins are issued from the mint, deeply and accurately impressed, neatly struck by the proper organs, distinct, sharp, perfectly finished."

Untiring attention to this element of good reading is the price of perfect articulation, but the pupil is urged to be content with nothing less.

Imperfect articulation arises, chiefly, from errors, or carelessness in the following particulars:

#### 1. Omitting the vowel sound in an unaccented syllable; as,

'nd for and;  
wel't'ring for wel't'er-ing;  
ev'ry for ev'er-y;  
Sat'ur-d'y for Sat'ur-day;  
no't'cing for no't'ic-ing;  
re-mark'ble for re-mark'a-ble;

ev'dently for ev't-dent-ly;  
clam'rous for clam'or-ous;  
mur'm'ring for mur'mur-ing;  
miz'rable for mis'er-a-ble;  
neigh'b'ring for neigh'bor-ing;  
con'sid'rable for con-sid'er-a-ble.

These sounds are sometimes called *obscure*. They should not be given so fully as the vocals in accented syllables, but care should be taken that they be not dropped.

#### 2. Giving an unaccented vowel the sound of another vowel, improperly; as,

pock'it for pock'et;  
ea'glits for ea'glets;  
work'mūn for work'men;  
har'vist for har'vest;  
ear'nist for ear'nest;

wūz for was;  
si'lunt for si'lent;  
cur'runt for cur'rent;  
de-pend'ūnce for de-pend'ence;  
jack'its for jackets.

### SPECIMEN PAGES OF THIRD READER JUST PUBLISHED BY THE STATE OF CALIFORNIA.

space for them, would show excellent biographical sketches of authors in connection with the selections from their writings, etc. The Third Reader contains 512 pages.

At a meeting of the State Board of Education, Oct. 1, 1885, there was assigned to State Superintendent W. T. Welcker the preparation

of the Readers, the selections for which were made by H. C. Kinne, of San Francisco, and donated to the Board. The preparation of a Speller was also assigned to Superintendent

the series; W. L. Willis was employed by Prof. Welcker upon the compilation of the Speller; and Frank Morton is employed by Prof. Moore in the compilation of the Arithmetic.

The books now complete are the First and Third Readers, to which we have alluded, and the Speller, a book of 200 pages, of which we will give specimen pages at another time. The other books of the series are in various stages of preparation, some almost ready and others will occupy some time yet. Of the Third Reader, an edition of 25,000 was printed.

The law provides for the sale of the new schoolbooks in this way: The county superintendents make requisition upon the State Superintendent for such books as the schools in their district require, and the State Superintendent shall make requisition upon the Superintendent of State Printing, who shall ship the books to their destination. The State will not do a credit business, and orders the money to be sent with the requisition in every case. For this purpose it is necessary that the county superintendent shall be in funds, and we notice that Superintendent Moulder, of this city, has called for the laying by of \$10,000, subject to his order, when he wishes to make a purchase from the State. There is other information on the subject of the State schoolbooks which we will give, in connection with the sample pages of the Speller, at another time.

THE CAUSES OF HARD TIMES.—Col. Carroll D. Wright, in his last report on labor, says that no less than 134 separate and distinct causes have been assigned for the present depression in business and "hard times." Among them are given the following: Causes which induce money-lenders to refuse loans, change of administration, failure of banks, aggressiveness of capital, attitude of capital versus labor, timidity of capital, competition, want of confidence, corners, creation and monopoly of large corporations, the credit system, decrease of gold, dishonest currency, decrease of home demand, presidential elections, investments in unproductive enterprises,

want of confidence in the government, enforced idleness, immorality, importation of what should be manufactured at home, erroneous industrial system, high rates of interest charged the producing classes, attitude of labor versus capital, foreign contract labor, prison labor, surplus of labor, extravagant living, labor-saving machinery, dealing in margins, want of foreign markets, increase of manufactures, overproduction, importation of paupers, inflation of prices, reduction of prices to cost of production, decreased building of railroads, overbuilding of railroads, too much capital invested in railroads, higher rents, strikes, high protective tariff, low rate of tariff, want of proper tariff protection, enormous taxation, unequal taxation, the overdoing of trading, the liquor traffic, underconsumption, reduction of wages, failure of the wage system, war, consolidation of wealth, etc. These ought to be

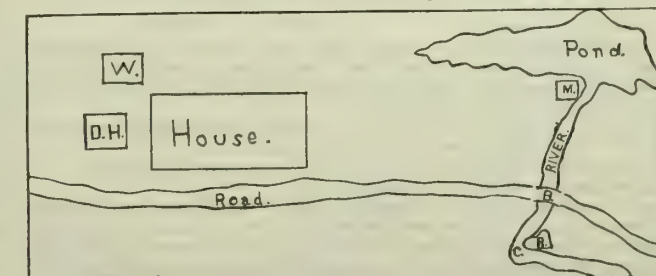
enough to satisfy the inquiries of every one, and are sufficient to prove that a Bureau of Industry, Statistics, etc., is the best authority in such matters.

An ocean steamer left Boston, the other day, for Liverpool with 10,000 barrels of apples.

### 1. As seen, and told in writing, by a second grade pupil.

I see, on a hill, a farm house, a little way back, a dairy house. A mill is just in front, and near by, on the left, a river, crossed by a bridge, flows into a pond, beside which is a mill. Over a rock above the bridge falls a cataract.

### 2. As seen, and told in diagram, by a first grade pupil.



### 3. As seen, and told in picture, by a first grade pupil.





## FRUIT MARKETING.

### California Fruit at the East.—No. 4.

How Mediterranean and Florida Fruits are Sold—A Plan Proposed.

(Special Correspondence RURAL PRESS.)

"How do you explain the present unsatisfactory condition of the Eastern market for California fruits, and what, in your judgment, is the remedy?" This question was addressed by your correspondent while in Chicago not long ago to Mr. Hixson, an old and experienced California commission merchant. He replied by saying: "The present unsatisfactory condition is brought about by California fruits being in the hands of too few. This idea of trying to make a monopoly of California fruits won't do, and the sooner the growers find it out the better it will be for their interests. The remedy lies in free trade. If you can get the railroad companies to accept fruit shipments of any size, so that anybody West may ship any quantity to anybody East, the difficulty will be solved. You want to get your fruits into the greatest possible number of hands and channels, and until you do that your market will be choked and limited."

The same question being asked Mr. Washington Porter, of the firm of Porter Brothers' Company, agents for the California Fruit Union, his answer was as follows: "The present unsatisfactory conditions are the result of California fruits being placed in too many hands. When the Fruit Union was organized it was done with the idea of concentrating all California fruits into one hand, so that they could be evenly distributed through the country as you would distribute butter over bread, and so that the fruit being brought into competition with itself might be prevented. Unforeseen circumstances have, however, arisen since the union was organized that, for the present, destroyed this idea of concentration, and hence the unsatisfactory results. Until Eastern shipments of California fruits can be placed in the hands of one house who will have supreme control, there is a likelihood of the present conditions continuing to exist. In proportion as the fruit is sent to more houses, so in proportion is the competition likely to grow keener and keener, and, of course, always at the expense of the shipper or grower. There are also other reasons for the present unfavorable conditions. Much inferior fruit has been shipped that has arrived in bad shape, and that realized but little more than freight charges. Beside, the crop of native fruits has been very large and has come into the market earlier than usual, and was strong competition to California fruits. It is a mistake on the part of California fruit-growers to think they have an unlimited market in the East for any and all fruits which they may send here." Continuing his remarks, Mr. Porter said: "My judgment is that the Eastern market for California fruits is limited, and anything that is sent here beyond that limit must depress prices and bring unfavorable returns. The best evidence of my sincerity in the belief that the Eastern market for California fruits is limited is in the fact that while I have made very large investments in Chicago real estate I have made none in California fruit lands. Had I faith in the idea that the East can consume all the fruit California can raise, you may rest assured that I would long ago have made liberal investments in California fruit lands."

Mr. Dudley, of the firm of Dudley, Clapp & Doe, who were appointed by Porter Brothers' Company, of Chicago, as their agents for New York City, was asked by your correspondent how much California fruit the New York market could stand. Here is his reply: "This is a peculiar and deceptive market. It would appear that a city the size and magnitude of New York could use unlimited quantities of stuff. But this is not so, at least so far as my experience with California fruit would show. We find that there is an exceedingly limited demand for California fruits, and the moment the supply exceeds this limited demand, down go your prices."

"What have been the average weekly receipts of California fruits in the city of New York?"

"Not over a carload a week."

"Then I am to understand that in your judgment the city of New York and vicinity cannot use more than a carload of California fruits a week?"

"No, sir; not to advantage."

"But supposing that California fruits could be laid down in the city of New York at a cost to the retailer not to exceed 10 cents a pound, enabling him to sell them, with a fair profit, at 15 cents a pound, would not the consumption be very largely increased?"

"I don't think the fruit can be brought here so as to retail at 15 cents a pound with a profit to all concerned. You must remember that thus far we have not been able to bring carloads of California fruit to New York in good condition. There has always been a large percentage of loss by decay while in transit, and, therefore, what good fruit reaches New York must bring a high price to compensate for that which is lost."

Mr. Merritt, President of the Merritt Fruit Company, of New York City, who are among the largest fruit commission houses in the

trade, said: "There is an unlimited market here for first-class California fruits. Thus far the amount sent us is, but a drop in the ocean. There is no reason in the world why carloads of fruit, and if need be trainloads, cannot be sent direct from California to the city of New York and sold at prices that must insure satisfactory returns to the grower. This idea of one carload of California fruit a week being as much as New York City can stand is absurd. Why, this market has used as many as 500 carloads of peaches in one week, as well as millions of boxes and vast shiploads of Mediterranean fruits and grapes; and to think that a market of this sort would stagger under more than one carload of California fruit a week, is laughable. The difficulty thus far has been that the California fruit has been concentrated into the hands of a few whose interest it is to keep the market bare and to sell small quantities at high prices, instead of large quantities at moderate prices. You cannot hope to market the vast fruit yields of California in that way any more than you can hope to force an ocean of water through a one-inch pipe. Once get your fruits down to a price within the reach of the thousands and you need never fear of overloading a market like that of the city of New York."

A New York Retailer.

"How much a pound are those California grapes?" asked your correspondent of a Broadway retail dealer in fine fruits.

"Thirty cents a pound, or \$1.25 for that five-pound basket."

"Is not that rather high?"

"No; we have sold them as high as 40 cents a pound."

"Do you find the demand for California fruits on the increase?"

"We can sell all the good California grapes that we can get. The trouble has been to get a sufficient supply. But why do you ask these questions?"

"Because I am a California fruit-grower, and am deeply interested in the future of California fruits in the East."

"Well, you just send plenty of good fruit, and we will find no trouble in disposing of it."

"You are in an excellent location and seem to be doing a thriving business; now, about how many crates of California grapes do you sell, on an average, a week?"

"About 20 crates a week, though I could use more if I could get them as needed."

"What if they could be brought to this market so that you could retail them, with a fair profit, at 15 cents a pound, how many more could you sell?"

"Not very many. While it is a good plan to send plenty of first-class fruit to this market, I don't think it would be well to send so much of it as to force the retail price down to anything like 15 cents a pound."

"Why not?"

"Because, if you send too much of it, it will get into the hands of all the fruit-stands and fruit-hucksters and will become common and cheapened, and will lose caste among the finer trade who buy it now at a fancy price because it is kept only in first-class places."

"But, so far as the grower is concerned, don't you think it is for his interest that the fruit shall become, as you choose to call it, 'common'? Will not ten pounds be eaten where one is now consumed?"

"I think not. My opinion is that it is better for you to send as much as the market can use at a high price and to stop right there. It seems to me better for the grower to get a good, round sum for a reasonable quantity than a very low price for a great quantity."

A Brooklyn Retailer.

"Do you find much demand for California grapes?" said the writer to one of the largest retail and wholesale fruit dealers in the city of Brooklyn.

"Yes; the demand this season has been fair, and I might say on the increase."

"Have you sold very many this season?"

"About 34 crates."

"I should judge, then, that you are the largest dealer in California fruits in the city of Brooklyn, because I have canvassed the city and have found but two others who have handled any California fruits this year, and between them they have only used 16 crates this season—making, together with yours, a consumption of 50 crates for the entire city of Brooklyn. Now, why is it that a city of this magnitude cannot use more California grapes?"

"First, because we have not always been able to get them; secondly, because at the price we must charge the demand is limited."

"What do you get for good California grapes?"

"Twenty-five to thirty cents a pound; sometimes we sell a five-pound basket as low as one dollar."

"Well, do you call that a high price?"

"No, when the superiority of the California grape is considered; but you know the people of Brooklyn are not, as a rule, extravagant, and will not pay fancy prices—more especially if they can buy good native fruits at from five to ten cents per pound."

"Do you sell many Mediterranean or Malaga grapes?"

"Yes, a great many, more especially during the holiday season, when they are in great demand."

"At what price do the Mediterranean grapes retail?"

"At about 15 cents a pound, although we sometimes get as high as 20 and 25."

"If California grapes were sold at the same price as the Mediterranean or Malaga grapes, which would be in greater demand?"

"California grapes, by all means, as they are better, sweeter and much handsomer in appearance."

"If I could furnish you first-class California grapes at 10 cents a pound, could you afford to sell them at retail for 15 cents a pound?"

"Yes, because I do a popular trade, and with the volume of business I do here I should consider five cents a pound a very fair profit."

"Now, if you could retail them at 15 cents a pound, how many could you use?"

"I cannot answer that question with figures. I can only say that I could sell a great many—many more than I have thus far sold."

"Do you think that at that price the city of Brooklyn, as a whole, could use on an average half a carload a day?"

"I should consider that a very low estimate. I have no doubt the city would consume a carload a day, and possibly more."

A Boston Retailer.

"What is your price for California grapes?" The question this time was asked of a prominent Boston retailer.

"Thirty-five cents a pound."

"Have you been able to get all the California grapes that you could use this season?"

"No, not always. To-day, for instance, there are none to be had in the market, nor were there any here yesterday, though I have orders on my book from several customers."

"Have they been arriving here in good condition?"

"As a rule, yes, though I have known of some lots coming here in very bad condition, and were sold as low as \$1 a crate."

"I am informed that you are the principal dealer in California fruits, and use more than any other house in town."

"Yes, I have made a specialty of it and have worked up a nice trade."

"Do you keep posted on the receipts of California fruits in Boston?"

"Yes, I don't think any man in this city is better posted upon that subject than myself."

"How many grapes, so far as you know, have been received in Boston per week?"

"I should say about half a carload."

"Can you explain why it is that the city of Chicago consumes two and a half to three carloads a day and Boston only half a carload a week?"

"It must be a matter of price. I presume California grapes in Chicago are sold very much cheaper than here."

"Yes; they have been retailed there at 10 cents a pound this season."

"Well, there lies the explanation. Supposing grapes were retailed in Boston at 15 cents a pound, what then?"

"That, of course, would make a wonderful difference; however, I would rather not see that condition of affairs."

"Why not?"

"Because, doing a first-class business, I should prefer to handle limited quantities at a large profit rather than large quantities at a small profit. Beyond that, I am free to admit that if the retail price was reduced to 12½ or 15 cents a pound, the consumption would be very much greater than now."

The Fruit not Popularized.

Mr. Snow, of Snow & Co., Boston, said: "I was present at a meeting of the fruit-growers, held in Sacramento, last winter, and from the discussions that then took place I inferred it was the purpose of the California fruit-growers to popularize their fruits in the East and to distribute them into the greatest number of hands possible. Thus far this has certainly not been done. The Chicago agents of the California Fruit Union have in my judgment failed to carry out that part of the fruit-growers' program, at least so far as Boston is concerned. California fruits are no nearer being popularized this season in Boston than they ever were, and never will be unless radical changes are made in the policy now being pursued."

"I am informed that early in the season you received a cargo of apricots from Porter Bros. Co., the returns for which were very unsatisfactory."

"Yes, we unexpectedly received a carload of apricots, which are not a popular fruit in this part of the country. That carload should not have been sent us at that time. It is true there were some peaches in the car, but by the time they reached Boston they were nearly all rotten. The freight charges also were over \$1200 on that carload to Boston, which appeared very excessive, but we could get no explanation concerning it from the R. E. Co. or Porter Bros. The car realized about \$1300, which, after the commissions were deducted, left nothing for the grower. But if the charges had not been over \$500, the returns would have been about 75 cents a box to the grower. I believe there is a field in Boston for carload lots of fruit, provided you can get concessions in freight rates and in the time of transit, and provided you ship none but first-class stock."

"Is it true that the receipts in Boston for California grapes have not exceeded half a carload a week?"

"So far as I know that is about all that has been received here this season."

These Views Representative.

Your correspondent has selected the above interviews from among a great number that he has held during the past few weeks with very many of the wholesale and retail fruit dealers

in the leading Eastern cities. The opinions expressed fairly represent the views of two opposite elements. The careful reader will note that there is a class of wholesale and retail dealers whose interest it seems to be to limit the Eastern market for California fruits, and who are opposed to any plan that will bring California fruits within the reach of the masses. Whatever plan may be adopted to popularize California fruits is sure to meet with strong opposition from this element, who dread the loss of fancy profits and an exclusive trade. A feature that was very noticeable to the writer, and that forced itself upon his attention in all the cities that he has thus far visited, was the

Thorough Distribution of Mediterranean Fruits.

It seemed strange that fruits coming from a foreign country, laboring under the disadvantage of 20 per cent duty and inferior in appearance and quality, should have become so popular and should have found its way into so many hands. The question presented itself, how was this brought about, and what method for marketing their fruits in this country do the Mediterranean growers and shippers follow that evidently is so successful? Why not trace out their methods, and if found practicable, why may they not be applied to the marketing of California fruits?

Accordingly, your correspondent devoted considerable time to finding out the manner in which Mediterranean fruits are handled, and he discovered that evidently the growers and shippers of Spain had undergone California's present experience. It would seem that in the early history of their experience they had consigned small lots to a few houses on this side of the water, giving them exclusive control. This plan not proving satisfactory, they enlarged the number of houses and consigned their fruits to a great many. This likewise proved unsatisfactory until finally they hit upon a plan which has worked admirably and which has developed for them one of the finest markets in the world, and has given them millions of consumers for customers.

On further investigation it was found that the Florida orange-growers had likewise undergone California's present experience; that they had also tried the plan first, of consigning their products to a few, then to a great many, but always with unsatisfactory results, and finally, they adopted the plan first introduced by the Mediterranean growers. It now remains for the growers and shippers of California to follow in their footsteps. I cannot think of any better way of illustrating and explaining this most successful method of marketing foreign fruits in the East than to take extracts from a letter of a New York correspondent to a Florida paper, who, it seems, was performing a work similar to that in which your correspondent is now engaged:

A New York Fruit Auction.

New York, February 23, 1886.

By ———  
AUCTIONEERS AND COMMISSION MERCHANTS,  
Store, ——— Street,  
THIS DAY,

At 12 o'clock, within the Salesroom, Fresh Messias, Palermo and Naples  
ORANGES AND LEMONS.

15,182 boxes Oranges.  
13,764 do Lemons.  
Cargo B. S. Russell, Landing, and may be examined at Pier 41, N. R.

ALSO,  
FRESH ALMERIA GRAPES.

9000 barrels, halves and qrs. Ex. S. S. Celtic.

This is an advertisement which met my eyes upon looking over the *Journal of Commerce* the other morning. The quantity of fruit to be sold was large, and it seemed to me that this sale afforded a good opportunity for finding out something of a branch of trade which is becoming more and more important. It occurred to me that I might learn most by figuring in the character of a buyer at Pier 41, North River. A smart walk through the crowded thoroughfares soon brought me to the pier, where the great Mediterranean fruit steamers were discharging their fragrant cargoes of oranges and lemons by steam, and working at both hatchways. As I entered the wide doors I could look down the length of the dock through a long vista of oranges and lemons in boxes, piled regularly in piles of eight and ten, with the brands exposed. There were long avenues lengthwise of the dock so that buyers could examine the fruit. Catalogue in hand, the clerks and porters of the importers were chalking the lot number on the fruit belonging to each, and opening the boxes to show the quality. Colored boys furnished each buyer as he arrived with a catalogue. The catalogue gave the lot number, the brand and the quantity of each. This would give about 20 lots on each page, making 960 lots of various brands, no two alike, of oranges and lemons to be sold. The quantity in each lot varied and ranged from 100 boxes down to one box, with an average of about 30 boxes.

The avenues between these huge piles of fruit were thronged with busy men of all ages, each with a catalogue and pencil in hand, scrutinizing the lots and marking their critical comments upon their soundness and value. There was no time for conversation or loitering. The fruit had been discharged from the steamer all the night previous, and before the sale there were only four hours in which to examine the boxes covering a dock 80 feet wide by 600 feet long. It was a busy scene. Men climbed over boxes and about them; hardly a word was spoken. At 11 o'clock the dock was so full that the steamer stopped discharging. Buyer after buyer rolled up his catalogue and took the elevated railway for the down-town place of sale. The salesroom is near the Battery, the lower point of New York, where are the exchanges for produce, oil, cotton, stocks, and where all the elevated railways converge. The salesroom is at the corner of the



busiest business street in New York. About 50 persons were waiting for the sale to begin. Five minutes before the hour three clerks brought in the books and took their seats upon the platform. A bell summoned the buyers, still below. When they had ascended there were seen 300 men of all ages and conditions present. Just before noon the auctioneer mounts the platform; the hum of conversation ceases; every buyer settles himself for the closest work of purchasing what he noted for his own wants. In a clear, strong, quick voice the auctioneer says: "We will offer you the cargo of the *Burswell*." Opening the catalogue, he calls out the lot numbers of such fruit on these pages as were in the docks, as only such as was discharged was sold. He offers the choice of fruit on these two pages to the highest bidder, and with great rapidity the auctioneer knocks off the lots to such bidder. Not a word is spoken by the company. The auctioneer knows his bidders and they him so well that a nod, a wink, an attitude of the body, is sufficiently understood. Soon as the lots on two pages are sold the next two are taken up. In one hour 300 lots of oranges were disposed of. Two bookkeepers took down the prices and the names of the purchasers, and not an error was made as to either. The auctioneer stepped from the platform, and his partner, taking his place, sold the lemons in the same way. This occupied another hour and the business was over. The buyers folded their catalogues and walked down-stairs in groups to buy grapes.

There is a prevalent impression that the auction in green fruit means a last resort of those who have not been able to dispose of it at private sale—in fact that bidders buy for mere nothing in the "Cheap John" way and sellers are sacrificed. No mistake could be greater. Whatever may be the character of auction sales of furniture, dry goods, etc., fruit sales are something very different. But for these trade sales, fruit arriving in New York could not be disposed of. Prices at private sales would not, by 20 per cent, net as much as they do at auction, for the reason that it would stop the competition of the large and small buyers and of the wholesale and retail buyers, the out-of-town shippers and peddlers.

This competition is the very life and soul of the business. Fruit held for private sale would rot on the dock before finding a purchaser. There are months in which 300,000 boxes are brought to the city of New York alone. There have been weeks in which 100,000 boxes were landed—16,000 boxes per day. The very profuseness of the crop of oranges would tend to hold buyers back and frighten sellers into sacrificing the fruit to save cartage and storage. When, in 1850, the full crop amounted to about 150,000 boxes for the year, it was then found impossible to dispose of it at private sale. Now, when the annual crop amounts to 2,500,000 boxes, any man attempting to sell it at private sale would be laughed at. The word "auction" in the green fruit sales really means regular trade sales, and something very different from auction of furniture and pictures. In the dry goods or furniture auction-houses the goods are sold down in regular order, beginning with lot 1, then lot 2, and so on. In fruit sales the cargo is open for the choice of any lot to the highest bidder. This fact in itself stimulates competition, for 200 bidders may mark 200 different lots of fruit as the best, according to their judgment, and not knowing but somebody else is intending to buy the lot he wants, each one bids against the other—no bidder, as I have said, being sure what the choice will be. This makes the entire sale a competition between all the buyers, who, with their different needs and views, keep the price up and benefit the seller.

The fruit in the hands of the auctioneer does not pass out of the control of the seller. At any time he can withdraw it if the price does not please him. If Florida fruit is to be handled advantageously to the shipper, the true course would seem to be to consign it to some good parties, put it on the dock and then sell it by auction, just as the Mediterranean fruit is sold. It will then bring more money, and the competition at the sale will more than reimburse the charges. Sales and returns will be quick and the fruit go into consumption instead of sinking into somebody's cellar to rot away at the expense of the unfortunate man who shipped it. As matters now stand, the Florida fruit being received and stored by commission men, fresh consignments being received by every steamer, while the old ones are decaying, the receiver is naturally anxious to sell at any price and especially to undersell his competitor in the same business, while, by buying at auction, the jobbers and commission-men supply their own want at the sale and thus stimulate competition. Again, good fruit always sells for all or more than it is worth, and this helps the sale of fruit of inferior quality. There is a class of buyers for decaying fruit for which there is no market at private sale. For this the peddlers and wagon boys compete in the auction-room. I was told by the auctioneers that sometimes the bidding has been so spirited that the price has steadily advanced as the sale progressed, so that the fruit at the end of the catalogue brought more than at the beginning. Moreover, there is in the fruit trade an element of speculation among the large buyers, and a desire to control all the best. Fruit is sold, when a lot consists of 200 boxes of one brand, in lots of 20 boxes or the multiple of 20. Thus a buyer can take 20 or 40, or 60, or 80, or 100 boxes, or he can take the whole line. Receivers who have made big commissions are the only men who now oppose the auction system for Florida fruit. They will soon find out that trade must run in the regular channels marked out by custom. No man and no set of men can oppose the inevitable.

Since the above letter (from which these extracts were taken) was written, the Florida Fruit Exchange have adopted the method of selling their oranges by auction. Last year they tried it in Boston with great success. This year they have made arrangements to have the oranges that will be sent to New York also sold by auction, with every prospect of getting more satisfactory returns than in the past.

#### Can California Do the Same?

The question that presented itself to your correspondent was: Can this plan of selling fruit by auction be successfully applied to California green fruits? Careful inquiry and reflection, together with many discussions upon

the matter with competent judges of the question in the East, has led the writer to the conclusion that the plan is entirely practicable, and, in fact, is the only solution for the question of "How shall we best market our fruits in the East?"

Among the many that were interviewed on this question was Mr. Day, of the firm of Scobell & Day, the largest New York consignees of Mediterranean fruits and the New York agents for the Florida Fruit Exchange. Here is what he said:

"Regarding Malaga grapes, imports from Spain have steadily grown until we have had in one season 112,000 barrels—50 pounds net—arrive in this city. Last year and the year before, owing to the serious rains in Almeria, Spain, during September, which utterly ruined the half crop left on the vines, the receipts here were only about 50,000 to 60,000 barrels; but this season's crop being early and no rain at all up to the 26th inst., as per our cable from the American Consul at Almeria, we believe receipts will run over 125,000 barrels, if not 150,000.

"This, of course, is provided no rains come up to, say October 15th, when crop will be a gathered. Boston receives about one-eighth of what comes here, and Philadelphia and Baltimore, say one-eighth between them.

"This fruit is always packed in barrels made of oak sent out from the Southwest via New Orleans, and packed in fine cork-dust, which preserves it. We have kept Almeria or Malaga grapes in our storehouses, in fine order, from October until May. It is sent here for account of the growers in Almeria and vicinity, each man having his own mark, and dealing with us here direct without the intervention of anybody. We have now over 115 different parties shipping to us from Almeria, Spain. Prices, in the past two seasons, on prime fruits ranged from \$6 to \$8 per barrel, and \$4 to \$5 on common to fairly good. Fifty pounds of grapes net to a barrel. Duty is 20 per cent on value in Almeria, and freight is about 50 cents per barrel; so the shippers have had returned to them say about 10 to 12 cents per pound on the finest, and 6 to 7 cents on common quality. We know that our returns have been most satisfactory to the shippers, and more will come each year. Still, the more we receive the larger grows the demand, and every grocer in every little town this side of Chicago has a few barrels Almeria grapes always on hand to supply the constantly-increasing demand.

"We are just at the commencement of the new season. First arrivals of any consequence are here to-day, say about 7000 bbls. Arrivals will continue until Jan. 1st, so the whole campaign covers but three months.

"All this fruit is sold at auction here immediately on arrival, and we have buyers come from all points within 100 miles to bid; competition among them does the rest.

"Our buyers scatter the fruit all over the country and they seem never to be full, always willing to bid for more. The auction is the only way to dispose of perishable fruit. We always get the full market value because we have from 100 to 300 of the sharpest fruit dealers daily at our sales, and as we have sold all of our importations in this auction-room for the past 17 years, we think we may venture an opinion of its worth.

"In our opinion the prices will be somewhat lower here this season, because it is probable that we shall have steady and large arrivals all of prime quality, and if our market is glutted the good prices of past two seasons will not be had.

"However, you tell me that notwithstanding California grapes are retailed at from 25 to 35 cents a pound in New York City and elsewhere east of Chicago, the grower will not net over two and a half or three cents a pound. If this is so, then, even with probable lower prices, our Mediterranean shippers will surely realize more than double these figures. Regarding the application of this method to California fruits, I see no good reason why it cannot be done. Of course you must send us good fruits and at the right time, and if you can get reasonable freight rates it is sure to pay. The same trade that buy our foreign fruits stand ready to buy your California fruits. The latter would be sold to the same people, in the same manner, and under the same conditions as the former."

#### The Application to California.

The plan of selling California fruit by auction embraces the benefits of all systems that have hitherto been tried, and avoids the evils attached to past and present methods. It sends fruit through one channel, and in doing so carries out the idea expressed by Mr. Porter; and, again, the fruit is distributed into the greatest possible number of hands, and thus embraces the point dwelt on by Mr. Hixson. It brings about the keenest competition among buyers, and thereby insures the grower or shipper the highest market price. As the fruit is quickly distributed into a great number of retail hands, it destroys the exclusiveness hitherto existing in the retail handling of California fruits, and likewise brings about keen competition among retail dealers which must soon place California fruits within the reach of the masses. Your correspondent would therefore strongly advocate that the following things be done and the following plan adopted:

First—That a State convention of all growers raising fruit for Eastern shipment be held some time the coming month of November.

Second—That all persons engaged in shipping

fruit East, whether growers or otherwise, be invited to be present and to take part in the deliberations of the convention.

Third—That the present by-laws of the California Fruit Union be amended so as to admit on a par all persons engaged in shipping fruits East, whether growers or otherwise.

Fourth—That the combined influence of all growers and shippers be used to gain concessions in rates, in time and in facilities from transportation companies. That the number of cars to a train should not exceed 10, and, if possible, even less. That the kind of fruit cars used shall be adapted to the purpose, and that the time of transit shall be much nearer passenger time than has been made this season. The rates from California to New York and Boston must be reduced so as not to exceed \$350 or \$400 per car, which is equal to the present rate (\$300) per car from California to Chicago.

Fifth—A thoroughly competent and fearless fruit inspector shall be appointed, whose duty it shall be to examine all fruits submitted for Eastern shipments and to reject without fear or favor all fruits that do not come up to the standard in quality or packing.

Sixth—A reliable house to be selected in each of the following cities: Denver, Omaha, Chicago, New York, Boston, and possibly Philadelphia and Baltimore, to whom as many carloads shall be shipped weekly, semi-weekly, tri-weekly or daily, as the market and other conditions may demand, with instructions that all fruits be sold by auction to the highest bidders.

Seventh—That the privilege be allowed growers or shippers to name the destination of their fruits; but all fruits must be sold by auction and in no other way.

The purpose of calling a State convention is to submit to the judgment of the growers and shippers of California this and such other plans for remedying existing evils as may be offered, and in order that their combined influence may be used to back whatever plan may be adopted.

The reason for extending an invitation to shippers who are not growers to take part in the convention and to join the California Fruit Union is because there is an ample field in the Eastern market for both—as much so as for the Mediterranean shipper and grower, whose consignments to this market stand side by side, and who do business in perfect harmony. While there are many California growers who prefer to do their own shipping and to take their own risks, there are others who are not prepared to do this, who cannot afford to take risks nor wait several weeks for their returns, and would rather sell at a fixed price for ready cash; to such as these the buyer and shipper is a benefit and ought therefore to be encouraged. The question of reducing trains from 15 to 10 cars lies entirely with the Southern Pacific Railroad Co. The transportation companies beyond Ogden who have been interviewed by the writer have verbally signified their willingness to agree to such concessions, and have explained that the matter lies entirely with the Southern Pacific Railroad Co.

It is of the highest importance that the services of a competent fruit inspector be secured, and that he rigidly reject all improperly-packed or inferior fruits offered for Eastern shipment. This should be done in the interest of the very grower who submits such fruits for shipment, in order to save him from the loss he would inevitably incur if such fruit was allowed to go East, and further, for the protection of shippers of good fruit as well as to maintain the good name of California fruits in the East.

It may appear paradoxical that in aiming to distribute California fruits as thoroughly as possible and into the greatest number of hands, your correspondent should name but six or seven cities to which fruits should be sent; but the experience in Florida and foreign fruits has demonstrated that the fewer points at which such fruits are sold, the better. It brings many buyers to these central points and creates keen competition between the city and the out-of-town buyers.

The reason why all fruits should be sold at auction and not at private sale is because if both plans are followed simultaneously, some sold at auction and others at private sale, the fruit will be brought into competition with itself, while it is yet the property of the grower or shipper, but if it is all sold by auction the competition is between the buyers and must therefore be of benefit to the growers and shippers. If the fruit is brought into competition with itself at all it is only after the buyers have bought their goods, and paid for them with their own money; competition then is not apt to be so reckless as it has been in the recent past when the fruit was the property of the grower or shipper. Finally, the fruit in this manner finding its way into the hands of very many retailers, the competition among them must reduce the retail price to a figure that will bring our fruits within the reach of the masses. This has been the experience in Chicago this season, and this will likewise be the experience in all Eastern cities.

In conclusion, the writer would say he firmly believes that if the above plan is adopted and carried out in the proper spirit the years of adversity for the California fruit-growers will be a thing of the past, and that a new era will open out which will bring with it a state of progress and prosperity unparalleled in the past history of California fruit culture.

H. WEINSTOCK.

New York, Oct. 2d.

It is said that some Sonoma grape-pickers gather as much as 5000 pounds each per day.

## ANOTHER IMPORTATION!

THEODORE SKILLMAN,

PIONEER IMPORTER OF

Norman and French Coach Horses,

IS NOW IN FRANCE

Selecting the Best Horses for the California Market, and will land them in PETA-LUMA about the 1st of December, 1886. HE WILL BRING THE BEST.

### PRICE LIST OF

## Myrobolan Nursery

Haywards, Alameda Co., Cal.

AUTUMN OF 1886-7.

APPLES.	PER 100.
Yellow Newtown Pippin.....	\$8 00 \$10 00 \$12 00
White Winter Pearmain.....	8 00 10 00 12 00
Red Pearmain.....	8 00 10 00 12 00
White Doctor, a large tart apple.....	8 00 10 00 12 00
Yellow Bellflower.....	8 00 10 00 12 00
Red Bellflower.....	8 00 10 00 12 00
Regular, a Red, a good keeper.....	8 00 10 00 12 00
Alexander.....	8 00 10 00 12 00
Pound Pippin.....	8 00 10 00 12 00
Rhode Island Greening.....	8 00 10 00 12 00
San Ramon King.....	8 00 10 00 12 00
Gravenstein.....	8 00 10 00 12 00
Red German.....	8 00 10 00 12 00

### APRICOT ON MYROBOLAN. PER 100. PER 1000

Blenheim, 1 and 2 yrs. $\frac{1}{2}$ to 1 in. diam'r.....	\$6 00 \$50 00
Large Early.....	6 00 50 00
Early Moorpark, 1 and 2 yrs. $\frac{1}{2}$ to 1 in. diam 6 00 50 00	
Late Moorpark, 1 and 2 yrs. $\frac{1}{2}$ to 1 in. diam 6 00 50 00	
Hinde Seedling, 1 and 2 yrs. $\frac{1}{2}$ to 1 in. diam 6 00 50 00	

—Has all the good qualities of the Moorpark, ripens two weeks earlier and evenly all around.

### CHERRIES. PER 100. PER 1000

Black Tartarian, 1 yr., 5 to 6 ft.....	\$10 00 \$90 00
Royal Ann, 1 yr., 5 to 7 ft.....	10 00 90 00
Rockport Bigarreau, 1 yr., 5 to 6 ft.....	10 00 90 00
Great Bigarreau, 2 yrs., 6 to 7 ft.....	10 00
Gov. Wood, 1 and 2 yrs., 6 to 7 ft.....	10 00
Burr's Seedling, 1 yr., 6 to 7 ft.....	10 00
Centennial, 1 yr., 5 to 6 ft., 50c. each.....	40 00

### PEARS. EACH. PER 1000

Howell, 1 year old.....	12 $\frac{1}{2}$ cts. \$10 00
Beurre Clairgeau, 1 year old.....	12 $\frac{1}{2}$ cts. 10 00
Kieffer Hybrid, 1 year old.....	12 $\frac{1}{2}$ cts. 10 00
Bartlett, 1 year old.....	12 $\frac{1}{2}$ cts. 10 00
Winter Seckle, 1 year old.....	12 $\frac{1}{2}$ cts. 10 00
P. Barry, 1 year old.....	20 cts. 18 00
B. S. Fox, 1 year old.....	20 cts. 18 00

### PLUMS and PRUNES ON MYROBOLAN. PER 100. PER 1000.

Kelsey's Japan Plum, 1 yr., 4 to 5 ft.....	\$10 00 \$90 00
Kelsey's Japan Plum, 1 yr., 3 to 4 ft.....	8 00 70 00
Washington, 1 and 2 yrs., 5 to 6 ft.....	6 00
Yellow Egg, 1 and 2 yrs., 5 to 6 ft.....	6 00
Jefferson, 1 and 2 yrs., 7 to 8 ft.....	6 00
Early Golden, 1 and 2 yrs., 6 to 7 ft.....	6 00
Hooling Superb, 2 yrs., 6 to 8 ft.....	6 00
Royal Hative, 1 yr., 6 to 7 ft.....	6 00
Hungarian Plum, freestone, 1 yr., 7 to 8 ft.....	6 00
Hungarian Prune, a cling-tone, 1 year, 7 to 10 feet.....	6 00
Ickwith's Imperatrice, the latest, 1 year, 6 to 7 feet.....	6 00
Coe's Golden Drops, 1 yr., 6 to 7 ft.....	6 00
Silver Prune, 1 and 2 yrs., 6 and 7 ft.....	6 00
Summer Prune, 1 and 2 yrs., 6 to 7 ft.....	6 00
Bulgarian (good for all purposes), 1 year, 6 to 7 feet.....	6 00
Robe de Sargeant, 1 and 2 years, 6 to 7 ft., good for drying.....	10 00
Petit Prune, 1 and 2 yrs., 6 to 8 ft.....	6 00 50 00
Petit or French Prune, 1 yr., 4 to 6.....	5 00 45 00

### PEACHES ON MYROBOLAN. PER 100. PER 1000

Early Crawford, 1 and 2 yrs., $\frac{1}{2}$ to 1 in. diam.....	\$6 00 \$50 00
Foster, 1 yr., $\frac{1}{2}$ to 1 in. diameter.....	6 00 50 00
Salway, 1 and 2 yrs., $\frac{1}{2}$ to 1 in. diameter.....	6 00 50 00
Seller's Cling, 1 yr., $\frac{1}{2}$ to 1 in. diameter.....	6 00 50 00
Wager, 1 yr., $\frac{1}{2}$ to 1 in. diameter.....	6 00 50 00
Orange Cling, 1 and 2 yrs., $\frac{1}{2}$ to 1 in. diam'r.....	6 00 50 00
Susquehanna, 1 yr., $\frac{1}{2}$ to 1 in. diameter.....	6 00 50 00
Hale's Early, 1 yr., $\frac{1}{2}$ to 1 in. diameter.....	6 00 50 00

### ALMONDS ON MYROBOLAN.

Soft Shell, 1 yr., per 100.....	\$6 00 to \$8 00
---------------------------------	------------------

### QUINCE. PER 100.

Apple Quince.....	\$10 00 to \$12 00
Pear.....	10 00 to 12 00

### CURRENTS. PER 100. PER 1000

Red Cherry, 1 yr.....	\$1 50
Red Cherry, Cuttings.....	\$1 00

### GOOSEBERRY. PER 100. PER 1000

Dwarf (extra early).....	\$20 00
Houghton Seedling, No. 1, 1 yr.....	1 50
Houghton Seedling, No. 2, 1 yr.....	1 00
Berkeley, No. 1, 1 yr.....	8 00
Berkeley, No. 2, 1 yr.....	6 00
Berkeley, No. 3, 1 yr.....	5 00
Swiss Gooseberry Cuttings (double bearer, don't milder).....	5 00
Champion.....	5 00

### RASPBERRY. PER 100. PER 1000

Cutbort.....	\$1 00 \$9 00
Red Antwerp.....	50 4 00
My Cherries are on the Mazard Root, My Peach, Apricot, Plum, Prune and Almond are on the true Myrobolan. All my trees are true to name, raised without irrigation and free from insect pests.	

JAMES O'NEILL, Haywards, Alameda Co., Cal.

### TO OWNERS OF HORSES, COWS, ETC.

Convince yourself by trial that the most speedy and effective cures are made by the use of **Homeopathic Medicines**, and that this is by far the CHEAPEST treatment. Horse-car companies in New York who have adopted this treatment have found their losses by sickness and death very materially diminished. We can give the highest references in this State to prove the superiority of this treatment over any other. Send for our "Guide" and "Veterinary Index," pamphlets of 64 and 42 pages, respectively, containing most valuable information. Sent FREE by mail upon application to  
**BOERICKE & SCHRECK,**  
234 Sutter St., San Francisco 'Cal.



## Lands For Sale and To Let.

### CHEAP LANDS FOR SALE.

**5680 Acres** of rolling adobe hills, situated in Tehama County. Well watered by numerous springs, etc. Several thousand acres suitable for cultivation. Good two-story House, Barn and other out-buildings. Seven miles of fine wire fence.

**FIRST-CLASS CATTLE OR SHEEP RANGE.** The Cheapest tract of land in Tehama County. Price, \$6.00 per acre. Fair time and interest.

Also, a tract of 20,000 acres adjoining, can be bought at a great bargain. Title, U. S. Patent.

For terms, etc., apply to

J. E. CROOKS, Benicia, Cal.

N. B.—Upon timely notice, intending purchasers will be taken from Cottonwood to the land and returned free.

### A NEW COLONY

On the new extension of Southern Pacific Railroads, on the lands belonging to R. T. BUELL, Esq., near Los Alamos, Santa Barbara county, Cal. Parties desiring to visit the property now, can go via San Luis Obispo and take the cars from thence to Los Alamos, thence by stage to the Colony. 20,000 acres of the best lands in California, subdivided into 20, 40 and 80-acre farms; \$20 to \$30 per acre. **INTERNATIONAL IMMIGRANT UNION, 401 California St., San Francisco.**

### \$10.00 PER ACRE.

On the C. P. R. R., in Placer county; one half mile from Applegate; one-half hour from Auburn; fine climate; plenty of water; school, postoffice and telegraph near; easy terms; title perfect. Apply to

S. C. OSBORN,  
Applegate, Placer Co., Cal.

## WEST COAST LAND CO.

SAN LUIS OBISPO, CAL.

Incorporated March 27, 1886.

CAPITAL,

\$500,000.

#### DIRECTORS.

GEO. C. PERRINS,  
JOHN L. HOWARD,  
ISAAC GOLDTHRE,  
R. E. JACK,  
C. H. PHILLIPS.

#### OFFICERS.

JOHN L. HOWARD, President.  
ISAAC GOLDTHRE, Vice-Prest.  
R. E. JACK, Treasurer.  
C. H. PHILLIPS,  
Secretary and Manager.

### THE PASO ROBLES, SANTA YSABEL, and EUREKA RANCHES,

Recently purchased by the West Coast Land Company, are now offered for sale in subdivisions.

This immense body of land, including 12,000 acres unsold of the Huer Huero ranch, belonging to C. H. Phillips, comprises 64,000 acres of rich, virgin soil. It lies in a compact body, in the center of San Luis Obispo county, and is within from 9 to 20 miles of the sea coast. It is covered with white and live oak timber, is one of the most picturesque bodies of land in the State, and requires

### NO IRRIGATION.

It has an abundance of living water, and where not sufficient for domestic use, good water can be had at a depth of from 10 to 40 feet. It has an average annual rainfall of 21 inches, exceeding by six inches that of Santa Clara county, one of the most prosperous counties in the State.

The extension of the Southern Pacific Railway from Soledad southward traverses these lands for 15 miles throughout their entire length, placing the property within eight hours of San Francisco.

These lands are offered at from \$10 to \$30 an acre, and are all susceptible of the highest cultivation. In salubrity of climate, productiveness of soil and location as to market, they are equal to lands in Los Angeles and other counties, which readily bring from \$100 to \$200 and upward; and as to price and terms, offer the best inducements to those seeking homes on any part of the Pacific Coast. The survey of the

### PASO ROBLES RANCH

Has been completed. The maps and catalogues are now ready, and will be sent free on application.

This ranch, containing 20,400 acres, has been subdivided into 230 lots. It is 12 miles from the sea coast, and is 20 miles north and west from San Luis Obispo city.

This ranch was one of the earliest granted by the Mexican Government and having been held by the same party for over 30 years, has never before been offered for sale. It consists exclusively of land of the choicest character, and is second to none in the State for the production of wheat, wine, fruits, raisins and olives.

### TITLE, U. S. PATENT.

### TERMS OF SALE.

One-third cash; balance in 4 equal payments at 2, 3, 4 and 5 years; interest, 6 per cent per annum. The mortgage tax paid by the mortgagee makes the interest about 4 per cent net to the purchaser. A deposit of \$25 will be required in all cases to cover expenses of sale.

C. H. PHILLIPS, Manager,

West Coast Land Co., San Luis Obispo, Cal.

Send for Catalogue and Map.

## FRESNO COUNTY.

## BRIGGS' SELMA TRACT.

This most desirable tract, comprising 1280 acres of first-class gray ash and sandy loam land (situated one and one-half miles from the fast-growing town of Selma, the second in the county, and two miles from Fowler, both being S. P. R. towns), has been subdivided and will be sold in 20, 40, 60 or 80-acre farms. The distributing ditches are now being constructed, and convenient roads are laid off. The main canal is 60 feet in the bottom.

### THE WATER RIGHTS

Consist of stock in the canals and entitle the owner to one-eighth of 2 feet 6 inches of water, being  $2\frac{1}{2}$  times the usual amount supplied to colonies. The owner of the water stock has a pro rata vote in the management of the canal, and the expense per year is about \$3.50 on a 20-acre lot.

A school-house is to be erected on the land this year, and it has two within two miles of it at present. Fresno, Selma, Fowler and Kingsburg are good local markets for produce. Opportunities to labor with or without terms are abundant, and land can be rented for wheat-growing in the neighborhood. The health of this region is perfection, and, in common with the plains generally, is an excellent sanitarium for persons affected with pulmonary and rheumatic complaints.

The best raisins in the world, wines unsurpassed, the finest grapes, the best peaches, apricots, plums, prunes, nectarines, figs and olives, and in fact all the choicest fruits and vegetables of the world are grown in this favored region. Raisin vines three to six years old yield per acre from four to seven tons, and increase to eleven. Wine grapes three to six years old yield from four to eleven tons per acre. Alfalfa is cut from four to six times a year, and yields from one to two tons per acre at each cutting.

Two good cows and 100 hens furnish more than half the living for a family, and can be kept, with a team, on three acres of alfalfa, the growth of which is incredible in this favorable combination of soil and climate.

A comfortable house for a small family can be built for \$150.

The low price, taking into consideration water and transport facilities, should especially recommend this to seekers of homesteads.

Price, \$25 to \$37.50 per acre, on very easy terms to actual settlers.

For further particulars call on or address

O. J. WOODWARD, FRESNO, CAL.

L. SHARPE, SELMA, CAL.

## Feed the Land and it will Feed You!

### FERTILIZERS and IRRIGATION.

## THE CALIFORNIA BONE MEAL AND FERTILIZER CO.

—MANUFACTURERS OF—

## CALIFORNIA FERTILIZERS.

### SPECIAL FERTILIZERS FOR ALL CROPS.

Our Fertilizers lessen cost of irrigation, increase the yield, improve the quality of crop, and are cheaper than barn-yard manure.

Circulars containing prices and full information mailed free to any address.

CALIFORNIA BONE MEAL AND FERTILIZER CO.,

Office, 116 California Street,

San Francisco, Cal., U. S. A.

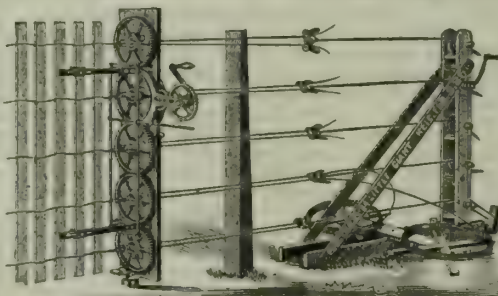
### A Good Opportunity for a Mechanic.

A variety of good Tools, Patterns, etc., with business for sale cheap by a party retiring from business. A splendid opportunity for an enterprising mechanic.

Address A. B. C., care of this paper.

Democratic Congressional Nominee,  
FIFTH DISTRICT,  
**FRANK J. SULLIVAN.**

"I believe that the silver dollar of labor should equal in value the gold dollar of capital."



## THE LITTLE GIANT Fence Loom.

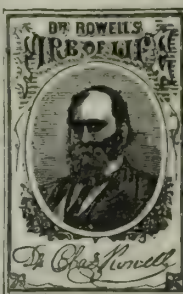
The only machine securely covered by patents.

It Fences Against Rabbits, Dogs, Wolves, and stock of all kinds.

Sold by T. D. POOLE,

Sole Agent for the Pacific Coast

1114 Oak Street, Alameda, Cal.



### A MAGIC CURE

—FOR—

Rheumatism, Neuralgia, Pneumonia, Paralysis, Asthma, Sciatica, Gout, Lumbago, and Deafness.

Everybody should have it. G. G. BURNETT, Ag't 327 Montgomery St., S. F. Price, \$1.00. Sold by all Drug gists. Call and see DR. CHAS. ROWELL. Office—426 Kearny St. San Francisco.

NATIONAL ASSURANCE CO., OF IRELAND.

ATLAS ASSURANCE COMPY, OF LONDON.

BOYLSTON INSURANCE COMPANY, OF BOSTON, MASS.

H. M. NEWHALL & CO.,

GENERAL AGENTS,

309 & 311 Sansome St., San Francisco, Cal.

Mill With Tower and Pump complete, as shown in this picture,

8 ft. \$53.50  
10 " 60.00  
12 " 67.50  
14 " 75.00  
16 " 85.00



### BONDS' ECONOMY WINDMILL

Is the cheapest ever offered to the trade, and as efficient and durable as the most elaborate self-regulators. It is intended to run constantly, and turns on the stand facing the wind, from whatever direction.

The wearing parts are few and cheaply replaced. Requires little or no attention. Will raise 25 per cent more water than any "self-regulator" of same diameter of wheel. Anyone can put it up.

Write for Circulars to

BYRON JACKSON 625 6TH STREET SAN FRANCISCO.



## List of U. S. Patents for Pacific Coast Inventors.

Reported by Dewey & Co., Pioneer Patent Solicitors for Pacific States.

From the official report of U. S. Patents in Dewey & Co.'s Patent Office Library, 252 Market St., S. F.

FOR WEEK ENDING OCTOBER 12, 1886.

350,667.—COMBINED HARVESTER—J. P. Descalzo, Peters, Cal.

350,494.—ROCK CRUSHER—Joel B. Low, S. F.  
350,831.—CLOD CHOPPER, ETC.—David Lubin, Sacto.

350,832.—CLOD CRUSHER—David Lubin, Sacto.  
350,597.—LIFTING JACK—M. C. Meeker, Occidental, Cal.

350,763.—STEAM PUMP—H. J. Oliver, S. F.  
350,600.—FLOUR CHEST—J. Ozenberger, Middletown, Cal.

350,602.—WRENCH—W. J. Pulliam, Chico, Cal.  
350,507.—NEWSPAPER FILE—W. Schulz, S. F.  
350,897.—TAP AND FAUCET—Shaw & Davis, S. F.

350,902.—AWNING FRAME—Toulouse & Delorieux, S. F.

350,791.—KNITTING MACHINE—Frank Wilcomb, S. F.

350,792.—KNITTING MACHINE—Frank Wilcomb, S. F.

350,793.—KNITTING MACHINE—Frank Wilcomb, S. F.

350,794.—KNITTING MACHINE—Frank Wilcomb, S. F.

350,795.—KNITTING MACHINE—Frank Wilcomb, S. F.

13,720.—TRADE MARK—J. J. Mack & Co., S. F.

NOTE.—Copies of U. S. and Foreign patents furnished by Dewey & Co., in the shortest time possible (by mail or telegraphic order). American and Foreign patents obtained, and general patent business for Pacific Coast inventors transacted with perfect security, at reasonable rates, and in the shortest possible time.

## Poultry Premiums at San Jose Fair.

We are informed that the list of poultry premiums at San Jose Fair, which we copied from a local paper, was incorrect, and that the following is a correct list:

E. H. Freeman, Santa Clara, took first premiums on Light Brahma fowls and chicks, Partridges Cochins fowls and chicks, Langshan fowls and chicks, Plymouth Rock fowls and chicks, Black Breasted red Game Bantam fowls and chicks; Wyandotte fowls, Houdan fowls, Brown Leghorn chicks and Buff Laced Polish chicks, also the sweepstake prize for the largest and best collection of poultry.

D. J. Murphy, San Jose, took first prizes on White Leghorn fowls, Minoschi Game chicks, Sumatra Game chicks, Black Breasted red Game chicks, Wyandotte chicks, White Cochins chicks and a trio of Bronze turkeys.

William Fisher, San Jose, Black Breasted red Game fowls and Seabright Bantam chicks.

Adam Smith, Redwood City, was awarded the premium for Brown Leghorn fowls.

## The Fruit-Growers' Convention.

To the Fruit-growers of California: The Sixth Annual State Convention of Fruit-growers will meet in the Assembly chamber, at Sacramento, on Monday, Nov. 15th, at 11 o'clock A. M.

Every arrangement will be made to render this the most important and successful gathering of fruit-growers ever held in the State.

In order to advance the interests of horticulture and with the desire that the convention may be largely attended, the State Board of Horticulture cordially invites all those interested to be present, and participate in its deliberations.

San Francisco, Oct. 21st. A. H. WEBB,  
Secretary State Board of Horticulture.

## Jones' Land-Roller.

An improved land-roller, invented by K. W. Jones, of Lemoore, was patented through Dewey & Co.'s agency, in May, 1884. We are told that it has given satisfaction wherever used, whether in crushing clods on adobe land or for compacting looser soils. As may be seen by turning to the illustration in our advertising pages this week, the machine consists of three rollers, two of which are mounted some distance apart in a wide frame, while the third is pivoted in a peculiar manner in front of the wide frame, and secured to the pole by which it is drawn. The object of the invention is to provide an implement for rolling purposes, which can be readily turned without leaving any of the ground unrolled, and which is at the same time light of draft and simple in construction. The box between the rear rollers serves to carry weight if necessary. The space between them is narrower than the front roller, and thus no land is left unrolled. The advantages of this arrangement will be clear to practical farmers.

## Don't Fail to Write.

Should this paper be received by any subscriber who does not want it, or beyond the time he intends to pay for it, let him not fail to write us direct to stop it. A postal card (costing one cent only) will suffice. We will not knowingly send the paper to anyone who does not wish it, but if it is continued, through the failure of the subscriber to notify us to discontinue it, or some irresponsible party requested to stop it, we shall positively demand payment for the time it is sent. LOOK CAREFULLY AT THE LABEL ON YOUR PAPER.

LOWELL BUSINESS WAGONS.—In the advertisement of the Lowell Manufacturing Company, on page 336 of last week's RURAL, the numbers and descriptions of the pictures of "Plain Body" and "Panel Body" business wagons were accidentally transposed.



HON. W. W. SMITH, OF VACAVILLE.

(Photo by Taber.)

## [ADVERTISEMENT.]

We take pleasure in presenting our readers this week with a portrait of Mr. W. W. Smith, of Vacaville, Solano county, who is pretty generally known by this time as a candidate on the Farmers' ticket for Congress in the Third Congressional district. He was also nominated by the Prohibitionists at their convention in Sacramento last June, and endorsed by the People's Party at their convention in San Francisco. He is a faithful member of the Patrons of Husbandry, and one who has been ready and willing to do his duty as seemed best to him for the good of the whole Order.

Mr. Smith came to California about 21 years ago a poor man, but by energy, industry and perseverance has accumulated considerable property, and is now owner of one of the finest fruit farms in the State, or for that matter, perhaps, in the United States. He is conservative, cool and calculating, of very decided character—one of those men who always looks before he leaps—and does not often make a mistake. Mr. Smith is a man of good, hard common sense—one who, when he hears both sides of a question discussed, can readily make up his mind which is right; and also a man of firmness enough to vote for the right and let consequences take care of themselves. Like many others of the present day, he has become tired and disgusted with the corruption of the two dominant parties, and is now working for a change in our political affairs. He has never sought office of any kind in his life, but at the urgent request of some of his friends, and also of some of the best men in our State, has consented to accept nominations on the tickets above mentioned. If he is not elected we shall always believe he ought to have been. The Democratic and Republican parties both have lawyers on their tickets for the same office, but we are strong in the conviction that a farmer should represent us from the Third district in our next Congress. We would here call attention to the singular fact that we are represented in Congress by something over 300 lawyers, but by only 12 farmers. Farmers, you pay about 62½ per cent of all the taxes of this Govern-

ment. Who, then, has a better right to assist in making our laws than one of your own class? And while the farmers pay so much money toward the expense of running the Government, they certainly have within themselves the power, if they will only exercise it, to secure a majority of representatives in Congress to look after their interests. Mr. Smith thinks it high time that the shackles of the old parties be thrown off, and the people—the farmers and the working classes—begin to think and act for themselves, and that a new party, or new parties, be formed of the honest, industrious, sober-thinking people; and to this end he will work until election.

## An Indorsement at Home.

The Vacaville Reporter, published at Mr. Smith's home and where he is, of course best known, has the following allusions to his candidacy:

When the State convention assembled at Sacramento, June 12, for the nomination of a State ticket, in casting about for a candidate for Congress from the Third District, the convention in its wisdom selected our fellow-citizen, W. W. Smith, as the Prohibition standard-bearer.

In making the selection the convention acted wisely in our opinion, as we consider him to be a conscientious, upright gentleman, whose acts in public and private will bear the closest scrutiny. He is highly esteemed wherever known, and as an evidence of his popularity in the State, we cite the fact with pleasure, that, at the recent convention of the farmers, he received the nomination for the same position at the hands of that body of representative men and tax-payers and more recently was indorsed by the People's Party at their convention in San Francisco, and with the two nominations and the indorsement alluded to, if Mr. Smith is not elected, we shall always think that he ought to have been. \* \* \*

Mr. Smith has been a resident of California for the past 21 years, and of this immediate locality 13 years, and by dint of hard, persistent work, has developed one of the largest and finest fruit ranches in the State. He is a progressive, safe man, and has the best interests not only of this section, but California as well at heart; and while he may be condemned by some because he is supposed to be in favor of the Chinese, yet we are assured that no man would more cheerfully hail the deliverance of our State from their presence than he—though like every other law-abiding citizen, he wishes them to go as they came, legally.

## PACIFIC COAST WEATHER FOR THE WEEK.

(Furnished for publication in this paper by NELSON GOROM, Sergeant Signal Service Corps, U. S. A.)

	Portland.				Red Bluff.				Sacramento.				S. Francisco.				Los Angeles.				San Diego.			
DATE.	Rain.	Temp.	Wind.	Weather.	Rain.	Temp.	Wind.	Weather.	Rain.	Temp.	Wind.	Weather.	Rain.	Temp.	Wind.	Weather.	Rain.	Temp.	Wind.	Weather.	Rain.	Temp.	Wind.	Weather.
Oct. 13-20.																								
Thursday.....	.03	55	S	Cy.	.00	59	SE	Cl.	.00	70	SW	Cl.	.00	63	W	Cl.	.00	79	W	Cl.	.00	72	NW	Cl.
Friday.....	.69	58	S	Cy.	.00	66	S	Cy.	.00	68	SE	Fr.	.00	62	SE	Cy.	.00	78	W	Cl.	.00	68	NW	Fr.
Saturday.....	.05	57	S	Cy.	.45	66	N	Cy.	.38	56	SE	Cy.	.72	58	SE	Cy.	.00	75	SW	Cl.	.00	68	NW	Cl.
Sunday.....	.00	58	SE	Cy.	.91	55	SE	Cy.	.05	62	S	Fr.	.—	61	SW	Cy.	.00	62	W	Fr.	.00	64	NW	Cl.
Monday.....	.27	54	S	Cy.	.27	62	N	Cy.	.03	60	NW	Cl.	.03	59	SW	Cl.	.00	67	W	Cl.	.00	63	NW	Cy.
Tuesday.....	.05	62	NW	Cy.	.00	65	S	Cl.	.00	60	NW	Cl.	.00	64	NW	Cl.	.00	65	S	Cl.	.00	64	SW	Fr.
Wednesday.....	.00	—	—	—	.00	—	—	—	—	—	—	—	.00	—	—	—	.00	—	—	—	.00	—	—	—
Total.....	1.09	—	—	—	1.63	—	—	—	.46	—	—	—	.75	—	—	—	.00	—	—	—	.00	—	—	—

EXPLANATION.—Cl. for clear; Cy., cloudy; Fr., fair; Fy., foggy; — indicates too small to measure. Temperature Wind and weather at 12:00 M. (Pacific Standard time), with amount of rainfall in the preceding 24 hours.

ORANGE-GROWERS' PROTECTIVE UNION.—The directors of the Orange-growers' Protective Union recently held a meeting in Los Angeles. Present—Directors Rose, Dobbins and Chapman, of San Gabriel; H. K. Snow, of Tustin; Congar, of Pasadena; Loop, of Pomona; Bettner, of Riverside; and Secretary Rice. The report of the officers for the season's work was adopted. It was moved and unanimously carried that a vote of thanks be given the President, Mr. L. J. Rose; the Executive Manager, Mr. J. R. Dobbins, and Mr. George Rice, the Secretary of the Orange-growers' Protective Union of Southern California, for their untiring efforts in and their very efficient management of the Union's interest on behalf of the orange-growers connected therewith. It was determined upon to declare a dividend, after paying all the stockholders the amount of money they had paid in, in favor of all members of the Union, in proportion to their several shipments of oranges, under the regulations of the management. With the experience they have had during the past year, the growers have determined on a new policy for the coming season, which will be completely formulated and laid before a mass meeting of the growers, to be held at the association's office Wednesday, November 10th, at 10 o'clock. It is considered by the directors that the expense of attending to the business can be reduced from 2½ cents a box to 1¼ cents a box for the coming season, and that as large a dividend may still be declared as the one of the present season. It is also believed from reliable information that the coming crop can be sold f. o. b.—Los Angeles Herald.

## A Hard Fate

It is indeed, to always remain in poverty and obscurity; be enterprising, reader, and avoid this. No matter in what part you are located, you should write to Hallett & Co., Portland, Maine, and receive free full particulars about work that you can do and live at home, at a profit of at least \$5 to \$25 and upward daily. Some have earned over \$50 in a day. All is new. Capital not required. You are started free. Either sex. All ages. Better not delay.

## Consumption Cured.

An old physician, retired from practice, having had placed in his hands by an East India missionary the formula of a simple vegetable remedy for the speedy and permanent cure of Consumption, Bronchitis, Catarrh, Asthma, and all Throat and Lung Affections, also a positive and radical cure for Nervous Debility and all Nervous Complaints, after having tested its wonderful curative powers in thousands of cases, has felt it his duty to make it known to his suffering fellow-men. Actuated by this motive and a desire to relieve human suffering, I will send free of charge, to all who desire it, this recipe, in German, French, or English, with full directions for preparing and using. Sent by mail by addressing with stamp, naming this paper, W. A. Noyes, 149 Powers' Block, Rochester, N. Y.

## Our Agents.

OUR FRIENDS can do much in aid of our paper and the cause of practical knowledge and science, by assisting Agents in their labors of canvassing, by lending their influence and encouraging favors. We intend to send none but worthy men.

JARED C. HOAG—California.  
G. W. INGLELL—Arizona.  
E. L. RICHARDS—San Diego Co.  
R. G. HUSTON—Montana.  
Geo. McDOWELL—Fresno and Tulare Cos.  
O. F. BERGMAN—Tehama and Colusa Cos.  
J. H. SMITH—Plumas and Sierra Cos.  
J. C. SWEENEY—Sonoma and Mendocino Cos.

## Cheap Money for Farmers.

Farmers in this State will be glad to learn that they can borrow on mortgage any amount, from \$5000 to \$500,000, from S. D. Hovey, 330 Pine St., San Francisco, at 6 to 7 per cent and taxes. \*\*

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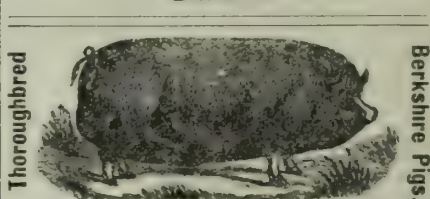
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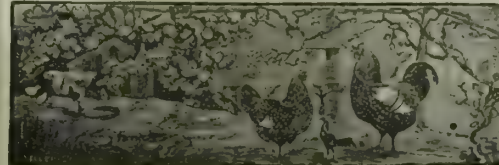
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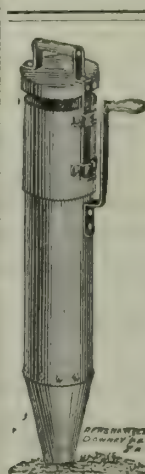
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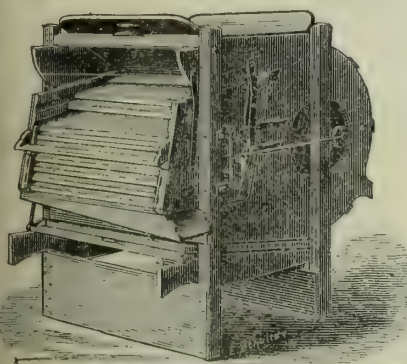
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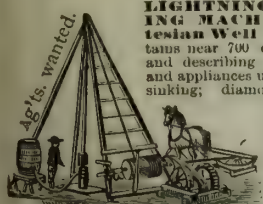


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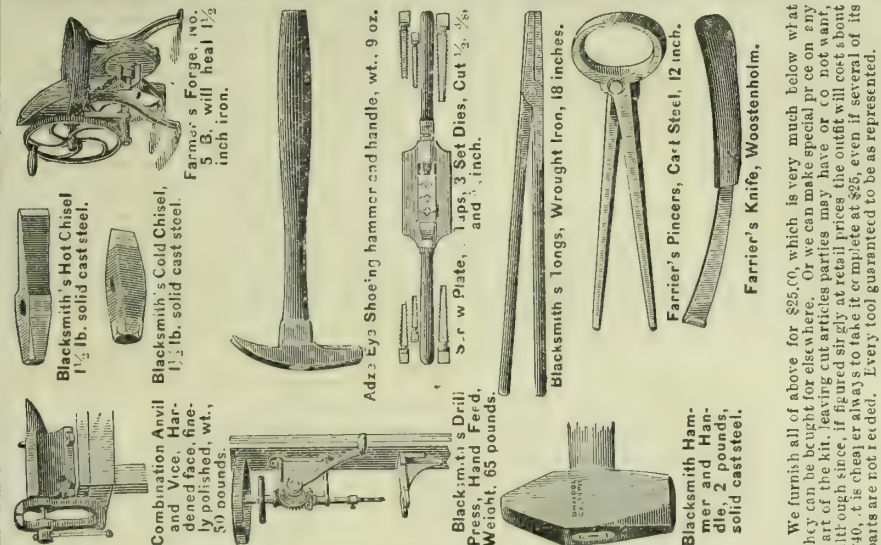
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## S. F. MARKET REPORT

NOTE. Our quotations are for Wednesday, not Saturday, the date the paper bears.

## Weekly Market Review.

## DOMESTIC PRODUCE, ETC.

SAN FRANCISCO, Oct. 20, 1886.

Showery rainy weather on Saturday last, followed by a day or two of cloudy weather, had its effect on the produce market, while a heavy frost on Sunday night had a still further effect on seasonal vegetables and fruits in Alameda and neighboring counties. Under appropriate heads elsewhere, the condition of and influences on each leading article are fully set forth. The English wheat market has been gaining in strength, with a strong tone reported to-day. The following is to-day's semi-public cable:

LONDON, Oct. 20.—Cargoes off coast, firm. Cargoes on passage and for shipment, firm. California wheat off coast, 33s 9d. California wheat just shipped, 34s 9d. California wheat, nearly due, 33s 6d. English country market, firm. French country market, steady. Liverpool wheat, spot, firm. Liverpool wheat, Cal, 6s 6d to 6s 9d. Weather in England, fair.

## Foreign Review.

LONDON, Oct. 18.—The *Mark Lane Express*, in its weekly review of the British grain markets, says: Values of wheat have hardened slightly for good samples. Native average has fallen 4d during the week, and now stands only 3d above the lowest point of last year. Sales of English wheat during the week were 58,348 quarters at 29s 8d per quarter, against 76,092 quarters at 30s 11d during the corresponding period of last year. The barley trade is in its full season, and the finest picked is getting dearer, but the rest is cheaper. Business in foreign wheat is slow, but values are steady. Flour maintains its prices, excepting some American brands, which are lower on account of inferior quality. Three cargoes of wheat arrived, six were sold, three were withdrawn and two remain. At to-day's market values of wheat were very firm for all kinds; buying was limited. Fine malting barley was 2d higher.

## New York Wheat Market.

NEW YORK, Oct. 17.—Wheat opened on Monday heavy and depressed, and continued so down to Wednesday, when a decided reaction took place on reports from Eastern Europe of a warlike character. The low prices stimulated purchases for export, and the bulk party took fresh courage. A quick rise of 2c a bushel was the result, but the advance checked exports, as foreign markets did not respond. The large visible supply impaired confidence, and under moderate sales about half of the advance was lost. Spot closed steady at 1/4c to higher. Options, after narrow fluctuations, closed steady, as follows: October, 83 1/4; November, 84; December, 85 1/4; January, 87 1/4; May, 93 1/4 cents.

## Eastern Wool Markets.

NEW YORK, Oct. 17.—There has been no radical change in business. Holders in nearly all cases maintain a confident bearing, with no open or direct offering of goods under the least modification of prices, and in some cases there is a tendency to mark up rates slightly. Manufacturers are contesting every fraction, and the majority of dealers complain of dull trade. Among sales were 20,000 pounds Spring California at 22 1/2c, 50,000 pounds Eastern Oregon at 24c. The Philadelphia market has ruled comparatively quiet. There has been fair inquiry, but the stiffening views of sellers have blocked business. Dealers having straight lines of desirable wools are generally holding for higher rates; manufacturers are in market at old prices, but generally refuse to submit to any advance. Among sales were 2000 pounds scoured California, at 49 cents; 55,000 pounds California, at 29 cents; 2000 pounds California, at 22 1/2c; 2000 pounds unwashed Territory dead, at 18 cents; 18,000 pounds Nevada fine, at 19 cents; 5000 pounds Nevada medium, at 20 cents. The Boston market has ruled less active. Sales are lighter than for five weeks, but influences have been strong to keep manufacturers out of the market, and some of the sales represent purchases made in previous weeks, but only reported now when deliveries have been made. The feature of the week has been the pressure by St. Louis and Chicago houses of their holdings of Territory wools, and while dealers have not bought any, this has made them weaken in regard to their own holdings. One offer was of 200,000 pounds Montana wool at 24 cents (now in St. Louis) laid down in Boston. Among the sales were 270,000 pounds California Spring and Oregon, at 20 1/2c, and 282,500 pounds Territory, at 22 1/2c.

NEW YORK, Oct. 19.—The wool market is firm and moderately active; domestic fleeces are quotable at from 30c to 38c; pulled wool, 14c to 35c; Texas, 9c to 25c.

## New York Hop Market.

NEW YORK, Oct. 17.—Quite liberal quantities of German hops are arriving, and sufficient stock goes forward in delivery on contracts to keep brewers fairly supplied. The new business is of very moderate proportions. English hops move off very slowly here. In the new crop of Pacifics there is a steady trade with brewers, and prices remain very steady. There is not enough doing in new or old States to make a market. Coast, crop of 1886, good to choice, 30c to 35c. Coast, crop of 1885, good to choice, 17c to 20c.

NEW YORK, Oct. 20.—The failure of the hop firm of Barremore & Co. is not likely to affect the market. The firm is known to have had a large stock on hand, but some of it will not materially affect the present state of the market. The liabilities of the company have not yet been estimated. It is thought they will reach \$170,000. The assets are known to slightly exceed that amount.

## California Products at the East.

NEW YORK, Oct. 17.—Beans—California Lima, \$1.70. California raisins are expected to arrive before the close of the month. The demand has been active and large sales have been completed on samples shown in the market during the past week. Quotations of raisins are \$2 for loose Muscat and \$2.25 for London layers.

Canned Goods—The market is steady, though with no appearance of activity except in the way of deliveries upon back orders. Good grades of tomatoes are scarce and firm, and the same may be said of corn. Other descriptions are without special change. California canned peaches, \$2.50; pears, \$2.25 to \$2.50; plums, \$1.80 to \$2; grapes, \$1.80 to \$2; apricots, \$2.15 to \$2.25; Columbia river salmon, \$1.55; do, Alaska, \$1.45.

## California Fruit at the East.

CHICAGO, Oct. 16.—The receipts of grapes by passenger trains have been large since our last report, and the demand for Tokay and Muscat grapes has been good at \$2.75 to \$3 per 40-pound crate for Tokays and \$2.25 to \$2.75 for Muscats. Some Verdel grapes have been received, mostly in bad order. Quinces have been received in large supply, some full carloads coming direct from San Francisco, and as New York and Michigan quinces are so plentiful they are selling slowly at \$1 per box. Pears are very scarce and firm at \$2.75 to \$3.50 per box, as to variety and condition. Dried fruits remain firm.

NEW YORK, Oct. 17.—Grapes, Muscatels and Tokays, \$2 to \$5 per box; quinces, California, \$1.50 per box.

[Telegram to the Fruit Union.]

CHICAGO, Oct. 19.—Fruits selling fairly, all in good order, and supply ample. Fall pears range from \$3 to \$3.25; grapes, choice Muscat, 20-lb crate, \$1.25 to \$1.50; choice Tokay, 40-lb crate, \$2.75 to \$3.50; choice Emperor, 40-lb crate, \$3.25 to \$3.50; choice Cornichon, 40-lb crate, \$3 to \$4; quinces, per box, \$1.50 to \$1.75.

## The Visible Supply of Grain.

NEW YORK, Oct. 18.—The following is an official statement of the visible supply of grain in store and afloat on October 16th, as issued by the Produce Exchange: Wheat, 53,828,539 bushels; increase, 1,041,104 bushels; corn, 13,755,674; increase, 178,032; oats, 5,135,901; increase, 140,455; rye, 514,215; decrease, 25,433; barley, 2,075,730; increase, 26,009.

## Local Markets.

BAGS—Potato gunnies are stronger at from 9 1/2 to 10 cents. Bean bags continue slow.

BARLEY—Heavier daily receipts, and buyers holding off caused some shading in the prices. The market closed stronger to-day. On call only a moderate business has been done. The following are to-day's Call board sales: Morning Session: Buyer season—200 tons, \$1.04 1/4; 100, \$1.03 1/4 per cwt. Afternoon Session: Spot—100 tons, 94c. Buyer season—100 tons, \$1.05; 400, \$1.05 1/4; 300, \$1.05 1/2; 200, \$1.05 1/2; 200, \$1.05 1/2; 100, \$1.05 1/4. Seller season—100 tons, 93 1/2c; 100, 94c; 100, 94 1/2c; 100, 94 3/4c. Seller 1886—200 tons, 94 1/4; 300, 95c per cwt.

BEANS—It is now conceded that the crop is not half of an average, which causes dealers to remain firm. It is claimed that prices now ruling at the East will not admit of shipping if higher values obtain here.

DAIRY PRODUCT—Butter is weak, but dealers do not press the market except on parcels that will keep. Receipts of fresh roll are light, but the supply of pickled is large. Cheese is very firm at a slight advance.

DRIED FRUITS—Receipts are freer, with a good demand ruling at strong prices for all kind except prunes and plums, which are very weak. Apricots are wanted and an advance obtainable. It is thought that apples will be slightly lower when receipts increase.

EGGS—California eggs are very strong owing to light receipt and a good demand. Eastern eggs are in liberal supply at quotations. There is a heavy supply of pickled, which are almost unsalable.

FEED—The market is strong for all kinds of ground feed except barley, which is weaker. Extra choice hay is more inquired after, and if fairly situated, fetches an advance on quotations. The following is the range for hay: Barley, \$8 to \$11; oats, \$9 to \$12; wheat, \$10 to \$14; with something extra selling slightly higher.

HONEY—The market is very strong, with receipts growing lighter, owing to farmers having marketed the bulk of the crop. There is a strong, steady demand, but it is difficult to get an advance in quotations.

HOPS—The market is quiet but strong, as holders express confidence in future prices.

WHEAT—The sample market has ruled strong throughout the week, owing to light offerings and buyers' necessities causing them to bid up for parcels for stiffening or topping off. The market closed very strong to-day. For a parcel of strictly No. 1 shipping at \$1.36 1/4 at the Nevada dock, Port Costa, \$1.36 1/4 cash was bid to-day. This is equal to \$1.38 1/4 delivered here. The holder expects to get all of the latter figure, if not more, at Port Costa before a fortnight, owing to the lay days of a large number of vessels now on berth expiring soon. On call transactions have been fair throughout the week. The following are to-day's transactions: Morning Session: Buyer season—200 tons, \$1.44. Buyer 1886—300 tons, \$1.38 1/4 per cwt. Afternoon Session: Buyer season—300 tons, \$1.43 1/4; 1700, \$1.43 1/4. Buyer 1886—400 tons, \$1.38 1/4; 800, \$1.38 1/4 per cwt.

[COMMUNICATED.]

## Market Information.

## Cereals.

Immediately following the last review of the market, wheat was advanced fully 1 1/4 to 2 1/4 cts per cental; even the daily press, that play into the hands of exporters, quoted higher prices, but, as usual, did not give full prices paid. The large number of vessels under charter in port to load, together with a large short interest on call, cause holders to remain very strong in asking from 2 1/2 to 5 cts above buyers' bids. The shortage is said to be fully 60,000 tons. The wheat exports in September from all American ports (flour reduced to wheat) aggregated 17,845,000 bushels, which, added to the July and August exports, make a grand total of 45,495,403 bushels, against 18,979,647 bushels for the first three months in the crop season of 1885-86. There never was a season when there were so many influences brought to bear to get farmers to sell, and this, too, in the face of remarkable short crops in every country in the Old World, except Italy. Not only are the crops short, but the normal stocks—carry-

overs from season to season—are at a lower point than known for years. It seems that California farmers are not alone in the panic, for there has been an unusual selling pressure at the West and Southwest. Mail advices from England and also on the continent state that farmers are unusually large sellers. In the face of the heavy selling pressure, the European wheat market does not break but remains up, which ought to go to show that the deficit in crops, heretofore claimed, must be correct. It is now said that the French shortage is much larger than claimed in August last, and this accounts for the strong continental demand for wheat. In writing on the strong selling pressure, a Chicago firm makes the charge that "they are due to the combined efforts of the leading grain dealers which have been to depress prices, discourage foreign buying, and encourage farmers (already in panicky haste to sell) to rush their wheat to market." It is added that "it is one of the curiosities of commerce that such a state of feeling should exist among farmers and speculators in the face of an export movement fully equal to the most sanguine expectations and a state of things in the Old World that justifies the belief that this movement will continue to the extent of all the wheat we have to spare."

Feed barley held up to full and high figures up to Saturday, when a weaker feeling prevailed, resulting in lower prices on Monday, with a weak tone on Tuesday and again to-day. The demand is offish, for buyers expect still lower prices, under the strong selling pressure that prevails. Brewing barley is firm, although the demand does not appear so urgent. Chevalier is without essential change.

Oats, under heavy receipts, weakened off, but toward the close gained in strength with a strong closing at an advance on the lower prices. Choice feed is very scarce and commands higher prices, relatively, than the poorer grades of feed. Choice Surprise are also scarce and high.

Rye and also buckwheat are unchanged. The demand is light, as are the receipts.

Eastern corn is in oversupply, but Californian is in moderate stock. Market for the latter is stiff. It is reported that a vessel has been taken to load feed barley to the West Coast.

## Dairy Product.

Eastern eggs continue to arrive freely, yet they meet with a good market owing to the great scarcity of Californian. Dealers report lighter receipts of the latter than ever before known in the month of October. What can be called gilt-edged or strictly choice fresh laid fetch 45 cts per dozen, but still it is hardly safe to expect over 42 1/2, owing to few dealers being willing to pay 45.

Butter is weak, contrary to the general opinion of one month ago that it would improve. The large supply of choice pickled butter pressing the market is the prime factor in keeping values down. The stock of pickled, it is now claimed, is much larger than before estimated. Until stocks work down closer, it is hardly safe to calculate on better prices. Cheese continues to rule strong at full prices, under a good demand and light stocks.

## Feedstuff.

Hay continues to creep up in price, particularly for the more choice grades, which are not in liberal supply. Poorer grades of hay are offering fairly well, fully up to the demand for that kind. Receipts have been increasing.

Ground barley is not quite so strong, yet no concessions are obtainable. Bran and middlings hold strong, with a report of a slight increase in the consumption. Oil cake meal is meeting with a better demand, but prices are reported unchanged.

## Fruits.

Grapes ruled at the low demoralized prices reported last week, up to Saturday, when receipts slackened off, causing fresh received to fetch a slight advance; on Monday the advance was fully 10 cts a box, at which price they hold, although the tone of the market is far from strong. Wine grapes also advanced under stronger buying, with a firm market at the close.

Poor pears and poor apples continue a drag, with no reasonable offer refused. Even choice selected are heavy, owing to the large quantity of poor pressing the market.

Very few plums and figs are to be seen, causing quotations to be more or less nominal.

A few straggling lots of raspberries come in, but owing to the lateness of the season do not fetch fancy prices. Strawberries have held steady at from \$5 to 7 a chest. Huckleberries have moved slowly. Watermelons are of the past, and canteloupes are also going out. Although receipts of the latter are light, yet prices are no higher, owing to the limited demand.

On Saturday last, Wittland & Frederickson received the first consignment of new crop oranges. The quality was not good, but they sold at \$2.50 to \$3 per box.

## Live-stock.

Mutton sheep are firmer, with a less selling pressure. Beef cattle have a stronger tone, but slaughterers resist any advance as yet, owing to the consumption not being as large as it should be. Hogs continue to be offered freely, in excess of requirements. Farmers, it is claimed, will do well by keeping their stock back until cooler weather sets in. Draft horses are very dull, particularly light weight, owing to the fear that a large number will be thrown on the market soon by the Southern Railway. Roadsters and carriage horses are in good demand.

The following are to-day's meat prices: Beef—Stall fed, 6 1/4 to 7 1/4 cts per lb; grass-fed, extra, 6 to 6 1/4 cts; first quality, 5 1/2 to 5 3/4 cts; second, 4 1/2 to 5 cts; third, 4 to 4 1/4 cts. Calves, small, 9 to 10c; larger, 7 to 8c per lb. Mutton—Ewes, 4 1/2 cts; wethers, 5c. Lamb—Spring, 6 1/2 to 7c per lb. Pork—Live hogs on foot, 2 1/2 to 3 1/4 cts for grain and dairy fed; 2 1/4 to 2 1/2 cts for soft; dressed, 5 to 5 1/2 cts for hard, and 4 1/4 to 4 1/2 cts for soft. Grass-fed stock sell on foot, gross weight, at one-half the price they fetch dressed; stall-fed, on foot, fetch one-third less than they sell at dressed.

## Vegetables.

Receipts of potatoes the past week have been light, barely up to the trade requirements, yet buyers would not bid up, consequently sellers were forced to sell at unchanged prices, although at the close a stronger tone is manifested and an advance is looked for. The crop in the counties is said to be below an average. Market to-day is about 10 cts higher. Sweet potatoes advanced fully 40 cts per 100 lbs, but yesterday (Tuesday) fell back fully 30 cts. The

advance was due to lighter receipts and a good demand.

Onions have ruled very strong throughout the week, owing to receipts barely meeting the demand. Market closed higher.

On Sunday night a heavy frost killed the large proportion of the tomato, cucumber and bean vines in Alameda county, which caused an advance in prices. Tomatoes, after going up to \$1, fell back to 75 cts. String beans, Lima beans and peas also advanced sharply, but cucumbers were marked up only a little, owing to picklers not being in the market.

Green corn is hard to get, as the frost of Sunday night killed the young stalks.

## Hops.

The market is reported dull, with buyers not showing the anxiety looked for by dealers. It is still claimed that brewers both on this coast and at the East are lightly stocked, and as the supply is short, it is only a question of time when higher prices will rule; yet hops deteriorate in value by age.

## Raisins.

The market has a stronger tone, with a better inquiry from the home trade, and also from the East, owing to the near approach of the Holiday season. Samples of new crop raisins show well, and ought to sell better than they did last year. The Eastern market is reported by private telegrams to be very strong.

## Wool.

The market continues to rule strong, with buyers bidding well up for the more desirable; sales have been made at fully 1/4 to 1c per lb on last week's prices. Cross-bred wools appear to be the favorite. The English market continues to be reported extremely strong for the better grades, with no lower prices looked for. At the East, manufacturers dispute every advance, but it is claimed that higher prices will be seen there before the next season opens.

## Miscellaneous.

The tonnage movement compares with last year at this date as follows:

	1886.	1885.
On the way.....	243,708	229,193
In port, disengaged.....	85,115	89,497
In port, engaged.....	82,975	25,080
Totals.....	411,799	343,770

The above gives a carrying capacity as follows: 1886, 658,875 short tons; 1885, 549,984 short tons; increase over last year, 108,894.

Poultry has ruled exceedingly strong throughout the week, with choice fowls scarce and fetching an advance on top quotations.

Game has come in more sparingly, causing a steady and strong market for good conditioned.

San Francisco, Oct. 20, 1886.

## Domestic Produce.

Extra choice in good packages fetch an advance on top quotations while very poor grades sell less than the lower

GRAINS AND PEAS.	WEDNESDAY, Oct. 20, 1886.	Points.	13 @ 14
Barley, old.....	1 40 @ 1 55	Alfalfa.....	13 @ 14
Butter.....	1 25 @ 1 35	Potatoes.....	1 00 @ 1 25
Peas.....	1 70 @ 1 85	Burbank.....	1 00 @ 1 25
Red.....	1 10 @ 1 15	Early Rose.....	65 @ 1 00
Pink.....	1 07 1/2 @ 1 15	Curry Cove.....	1 30 @ 1 25
Large White.....	1 10 @ 1 15	Jersey Blues.....	1 00 @ 1 20
Small White.....	1 75 @ 1 85	Petaluma.....	1 00 @ 1 20
Lima.....	2 00 @ 2 15	Do Malaga.....	3 00 @ 2 50
Field Peas, black.....	1 10 @ 1 15	River Raisins.....	1 00 @ 1 20
do green.....	1 00 @ 1 12 1/2	Humboldt.....	1 00 @ 1 25
do Niles.....	1 25 @ 1 35	do Kidney.....	1 00 @ 1 25
BROOM CORN.		Chile.....	80 @ 1 15
Southern.....	50 @ 70	do Oregon.....	1 00 @ 1 20
Northern.....	50 @ 70	Pearl.....	1 00 @ 1 20
California.....	4 @ 4 1/2	Salt Lake.....	1 00 @ 1 25
German.....	4 @ 4 1/2	do sweet.....	75 @ 1 20

DAIRY PRODUCE, ETC.	WEDNESDAY, Oct. 20, 1886.	Points.	13 @ 14
Butter.....	1 25 @ 1 35	Alfalfa.....	13 @ 14
Cal. fresh roll, B. 20 @ 30		Broilers.....	3 00 @ 5 00
do Fancy.....	22 1/2 @ 35	Chickens, tame.....	4 00 @ 6 00
Pickle roll.....	19 @ 21	do Mallard.....	3 00 @ 3 50
Firkin, new.....	15 @ 18	do Sprig.....	1 50 @ 2 00
Eastern.....	15 @ 18	do pair.....	1 50 @ 2 50
CHEESE.....		do Goats.....	1 00 @ 1 25
Cheddar, Cal., D. 10 @ 13		Wild Gray, do.....	3 00 @ 5 00
Eastern style.....	11 @ 14	do Dressed.....	12 1/2 @ 16
do Swiss.....	10 @ 12	Turkey.....	10 @ 12
Cal. ranch, do.....	40 @ 42	do tail and wing.....	10 @ 20
do store.....	32 1/2 @ 37 1/2	do Common.....	75 @ 85
Ducks.....	18 @ 21	do Doves.....	75 @ 85
Oregon.....	18 @ 21	do Quail.....	75 @ 1 00
Utah.....	22 1/2 @ 27	do Rabbits.....	1 00 @ 1 25
BRAN, ETC.		do Hares.....	2 00 @ 2 50
Barley, ton.....	15 @ 16	do Venison.....	8 @ 10
Cornmeal.....	20 @ 22		
Ground Barley.....	21 @ 23		
Hay.....	8 00 @ 14 00	Cal. Bacon.....	5 1/4 @ 9
Middlings.....	18 @ 20	Heavy, D.....	5 1/4 @ 9
Oil Cake Meal.....	25 @ 28 50	Medium.....	5 1/4 @ 9
Straw, baled.....	35 @ 50	Light.....	1 00 @ 1 25

FLOUR.	WEDNESDAY, Oct. 20, 1886.	Points.	13 @ 14
Extra, City Mills 4 12 1/2 @ 4 50		Lard.....	7 @ 9
do Country Mills 4 00 @ 4 37 1/2		Cal. Smoked Beef.....	11 1/2 @ 12
Superfine.....	3 00 @ 3 50	Hams, Cal.....	10 @ 13 1/2
		do Eastern.....	13 1/2 @ 14

GRAIN, ETC.	WEDNESDAY, Oct. 20, 1886.	Points.	13 @ 14
Barley, feed, old.....	1 00 @ 1 17 1/2	Alfalfa.....	13 @ 14
do Brewing.....	1 40 @ 1 55	Canary.....	24 @ 4
Chevalier.....	1 45 @ 1 55	Clover red.....	12 @ 13
do Coast.....	90 @ 1 25	White.....	17 @ 18
Buckwheat.....	1 00 @ 1 25	Cotton.....	20 @ 22
Corn, White.....	1 30 @ 1 35	Flaxseed.....	2 1/2 @ 3
Yellow.....	1 30 @ 1 35	do.....	4 @ 4 1/2
Small Round.....	1 30 @ 1 35	Italian Ryegrass.....	25 @ 30
Nebraska.....	1 02 1/2 @ 1 12 1/2	do Perennial.....	7 @ 9
Oats, new.....	1 00 @ 1 10	Millet, German.....	4 1/2 @ 5
Choice feed.....	1 35 @ 1 40	do Common.....	7 @ 10
do good.....	1 27 1/2 @ 1 32 1/2	Mustard, white.....	3 @ 3 1/2
do fair.....	1 20 @ 1 25	Brown.....	2 25 @ 2 75
do black.....	1 12 1/2 @ 1 15	Rape.....	1 @ 1 1/2
do Oregon.....	1 25 @ 1 45	Ky. Blue Grass.....	11 @ 12
Rye.....	1 10 @ 1 25	do quality.....	11 @ 12
Wheat milling.....	1 40 @ 1 45	Sweet V. Grass.....	75 @ 80
Gilt edged.....	1 38 1/2 @ 1 40	Orchard.....	20 @ 25
do choice.....	1 38 1/2 @ 1 40	Red Top.....	15 @ 16
do fair to good.....	1 35 @ 1 37 1/2	Free Mountain.....	17 @ 20
Shipping choice.....	1 35 @ 1 38 1/2	Lawn.....	20 @ 40
do good.....	1 35 @ 1 38 1/2	Mosquit.....	10 @ 12
do fair.....	1 32 1/2 @ 1 33 1/2	Timothy.....	5 1/4 @ 6

SEEDS.	WEDNESDAY, Oct. 20, 1886.	Points.	13 @ 14
Alfalfa.....	13 @ 14		
Canary.....	24 @ 4		
Clover red.....	12 @ 13		



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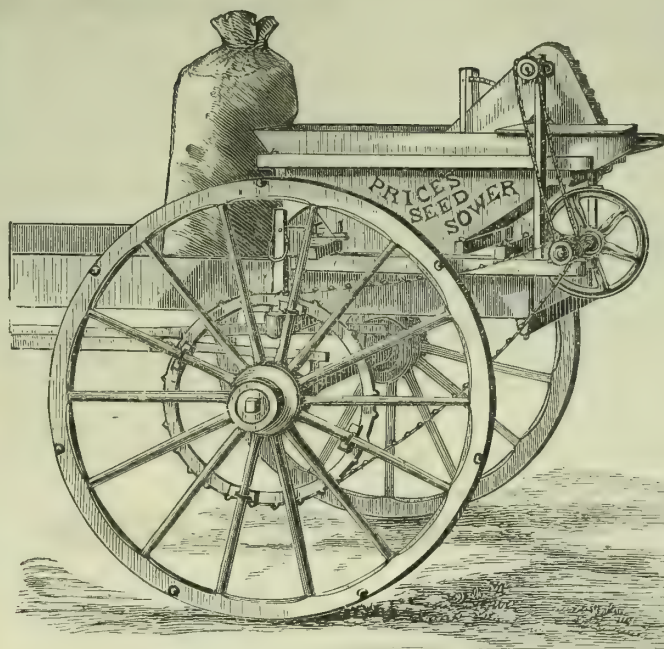


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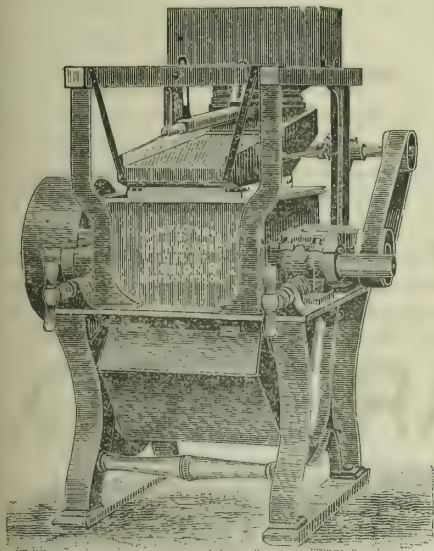
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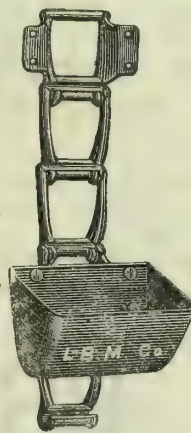
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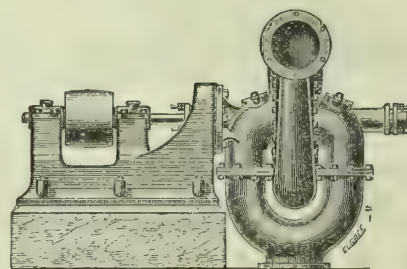
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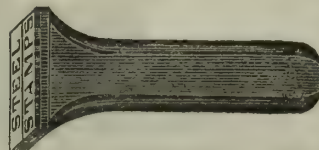
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**SPRINGS.**—Warranted, tempered, best steel.

**AXLES.**—Double Collar, Steel.

**WHEELS.**—Standard Wheel Co.'s "Superior."

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Tops of Extra California Grade Buggies have Steel Bows, Leather Quarters and Back Stays, Rubber Center and Side and Back Curtains. (Boot on all Piano Box Buggies.)

To meet the demand of the trade for a substantial, low-priced buggy, we offer our **CALIFORNIA STANDARD**.

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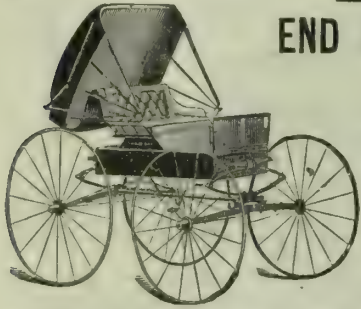
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**NOTICE.**—Why our California Standard Buggies are Superior to all others. Beware of Imitators.

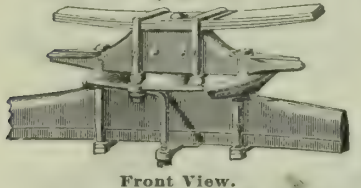
Wheels are dipped in a bath of hot oil as soon as inspected, filling every pore of the dry, seasoned hickory before it is subjected to the moisture of the atmosphere, and preventing possibility of swelling and shrinking, causing loosening of tire and breaking down of best wheels. These wheels could be safely used if paint should be entirely removed, so thoroughly are the pores filled with oil.

**GUARANTEE.**—We guarantee according to capacity, with fair usage, for **ONE YEAR** from DATE of purchase. We agree if Axle, Wheel, or Spring break, caused by imperfect material or workmanship (and the same is returned to us by freight), to return a new one, we paying freight one way on same.

## END SPRING. ALWAYS POPULAR.



No. 503.—Piano Box, End Spring Buggy, with double perch, \$125.



Front View.

By the use of the "Fisher Fifth Wheel" it is hung lower than any other end spring buggy now manufactured.

**Wheels.**— $\frac{3}{4}$ x43x47—"Standard Superior."

**Springs.**—ELLIPTIC, Berlin Head, 36x1 $\frac{1}{2}$ , 3 and 4 leaf.

**Axles.**—1 inch, double collar, steel.

**Tire.**— $\frac{3}{4}$  or 1 inch steel.

**Body.**—Swelled sides, 49 $\frac{1}{2}$ x25x8 $\frac{1}{2}$  inches. Thirty-five inches seat room between rails.

Neatly Trimmed in cloth or leather.

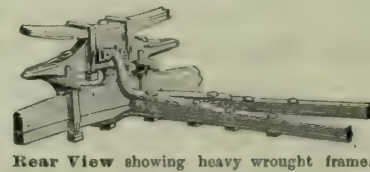
Painted black, with fine line striping.

## THE HORACE FISHER FIFTH WHEEL.

Used in connection with the double straight perch by the Standard Wagon Company on their buggies. No more big repair bills, or aggravating loss of time in case of accident.



No. 512.—Three-Spring Phaeton. \$165.00.



Rear View showing heavy wrought frame.

## THREE-SPRING PHAETONS.

**Springs.**—4 leaf, 1 $\frac{1}{2}$ x36 front, two 3-leaf, 1 $\frac{1}{2}$ x36 inches back.

**Axles, Wheels, Etc.**—Same as two-spring.

Our Phaetons are hung very low, are roomy, neatly trimmed in leather or cloth, handsomely finished, and present an elegant and tasteful appearance, comparable with jobs costing double our price.

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## SIMPLE, NEAT, AND STRONG.

The Fifth Wheel is only 9-inch circle, with ample bearings. The upper wheel has side lips, the head block and axle bed plates are grooved into each other, which together take the strain of the king bolt, besides preventing any sideways slipping. The front guard is an additional safety device.

We are Agents for Biddle, Smart & Co., E. M. Miller & Co., and J. B. Brewster & Co.'s Fine Buggies and Carriages. We have the Finest and Largest Carriage Repository on the Pacific Coast. Send for Catalogue and Prices. All kinds of Agricultural Implements. Agents for David Bradley Manufacturing Company. A full line of Garden City Plows in Stock. Address

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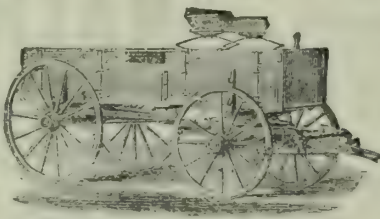
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Made of the best material by experienced workmen, in the most approved manner of construction.

THEY ARE THE PIONEER WAGONS of the Pacific Coast, and especially adapted for the hard usage to which wagons are subjected here.

## OUR "SOUTH BEND" CHILLED PLOWS

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Lightness of Draft, Quality of Work, Ease of Handling and Adjustment, and General Construction.

WARRANTED TO GIVE PERFECT SATISFACTION.

Look for the Name, "South Bend Chilled Plow," on the Beam, and take no other.



THIS CUT REPRESENTS OUR Nos. 1 and 1B ONE-HORSE PLOW.

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SEND FOR SPECIAL CIRCULAR.



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THE LEADING PLOWS ON THE PACIFIC COAST.

We take pleasure in calling special attention to our recent improvements in the construction of Plows, which consist of a brace crossing and WELDED SOLIDLY TO THE STANDARD, extending down and bolted to the landside, affording a firm brace to the standard and giving much greater strength than will be found in any other set-up handle plow. It also extends up and bolts to the handle with two T bolts, producing the best braced and finest plow made.





TWENTY-PAGE EDITION.

Vol. XXXII.—No. 18.]

SAN FRANCISCO, SATURDAY, OCTOBER 30, 1886.

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### Loco Weeds.

This State shares with its sisters of the western division of the country the undesirable possession of loco weeds. The species occurring in California are different from those which make the stock-grower trouble in the Rocky mountain region, though the effects are similar. We have in previous issues described the California species, and upon this page we give the species which is found in Colorado and New Mexico, taking the main part of our text and engraving from a recent report by Dr. George Vasey, botanist to the U. S. Department of Agriculture.

Since the development of the stock-raising industry on the great Western plains and in California, it is well known that animals feeding on the wild grasses and other plants have been frequently attacked with symptoms of a peculiar character, which have been attributed to the effect of certain plants. This disease among cattle and other animals is commonly called "loco." Among the symptoms first noticed are loss of flesh, general lassitude and impaired vision; later the animal's brain seems to be affected; it becomes vicious and unmanageable, and rapidly loses both flesh and strength. Frequently, when approaching some small object, it will leap into the air as if to clear a fence. The animal also totters on its limbs and appears as if crazy. After becoming affected the animal may linger many months, or a year or two, but usually dies at last from the effects of the complaint.

This diseased condition has been attributed to various plants, but mainly to a few which belong to the order *Leguminosae*. Of these, two species of *Astragalus* have been ascertained in California, and in Colorado and New Mexico another species of *Astragalus* (*A. mollissimus*) and a closely related species of *Oxytropis* are generally charged with the trouble in question.

Several analyses have been made of the plants which are said to be the cause of this affection, but without satisfactorily ascertaining what is the peculiar poisonous principle. No antidote has been discovered. If the plants can be ascertained and exterminated the trouble should come to an end; but, even if the plants are recognized, their extermination over large tracts of country will be difficult and expensive.

We give on this page an engraving of *Astragalus mollissimus*, one of the loco weeds. It is a perennial herbaceous plant of the region of the great plains from Colorado to New Mexico, Texas and Arkansas. It belongs to the order *Leguminosae*, or pea family. There are usually a great many stalks proceeding from a large, strong root-stock. They are reclining toward the base and erect above. These stalks are so short that the leaves and flower-stalks seem to proceed directly from the root. They are branching at the base and give rise to numerous leaves and long stems bearing the flowers and pods. The leaves are usually from 6 to 10 inches long, composed of 9 to 15 leaflets (in pairs except the upper one). These leaflets are of oval form, one-half to three-fourths of an inch long, of a shining, silvery hue from being clothed with soft, silky hairs. The flower-stalks are about as long, or sometimes longer, than the leaves, naked below and at the upper part (one-fourth to one-half) bearing a rather thick spike of flowers, which are nearly one inch long, narrow and somewhat cylindrical, the corolla of a velvet or purple color, the

calyx half as long as the corolla and softly pubescent. The flower has the general structure of the pea family, and is succeeded by short, oblong, thickish pods one-half to three-fourths inch long, very smooth and with about two seeds in each.

**DANGER IN SWAPPING GUM.**—This reprehensible practice among children should receive a

two younger children were soon ill of the same fatal disease. This is a matter which should be fully explained to all children, and this method of communicating disease would probably become obsolete.

**THE SACRAMENTO CITRUS FAIR.**—Frequent meetings of the managing committee of the Central California Citrus Fair Association are



COLORADO AND NEW MEXICO LOCO WEED—*Astragalus mollissimus*.

firm opposition from parents. An Oakland boy, 15 years of age, asked a companion one day last week for a chunk of his chewing gum. His friend bit off a piece and handed it to him. The boy who gave the gum had just recovered from an attack of diphtheria, and the piece of gum communicated the contagious poison of the disease to the boy who received the gum. He was taken ill of malignant diphtheria and died in a few days. His parents are in very poor circumstances, and being compelled to live in very close quarters his father, brother and

being held in Sacramento, and preparations for the great fair of December 13th are progressing rapidly. It is intended to offer liberal premiums open for competition to growers within the district from Mt. Shasta to the Tehachapi pass. Circulars are being issued urging the forming of local committees to secure exhibits, and everything is apparently being done to draw out a good display from all parts of the district.

**GEESSE and ducks are unusually plentiful in the tule.**

### The Anarchists.

There is something so unreasonable in the conduct of such anarchists as recently gave trouble in Chicago that one can hardly contemplate it with patience. In this broad land there is room enough for every one to make an honest living. There is nothing in the dominant habits and customs that fetters personal ambition and chains a poor man to a servile destiny. Hence there is not the least shadow of an excuse for lawless violence and conspiracies against social order and the established form of government. So utterly uncongenial is the atmosphere to this form of political heresy that it is not strange that some people should talk of extreme measures. For instance, the *St. Louis Republican* says that "some measures, effective to absolute pitilessness, are needed for them, and if Congress and the Legislatures cannot provide them, it may be well to turn the whole matter over to those vigilance committees which the American people are accustomed to resort to when they want to dispose of scoundrels summarily and cheaply." But this appeal to the authority of Judge Lynch is no way to handle this and kindred questions. The anarchist is opposed to law, and the central idea of all good citizenship in this country is obedience to law. It is a poor example to resort to mob law in order to suppress mobs; set aside our own cherished ideas of social order and propriety in order to punish a class of men who would tumble the whole fabric of government into anarchy and chaos. The proper way is to sternly enforce the existing laws, and if they are defective strengthen them to such an extent that lawless violence, the manufacture or keeping of dynamite or other dangerous explosives without good reasons, and incendiary conduct and language, shall be thoroughly repressed. Let these men know that if they desire to live in this country they must obey its laws as the rest of us do.

**FRUIT SELLING AT THE EAST.**—Upon another page may be seen a fifth letter by Mr. Weinstock, giving more of his researches into the marketing of California fruit at the East, and upholding the auction method of selling, which he so heartily approves. We trust readers will study and think over these propositions, and give their conclusions at the Sacramento Convention, beginning on November 15th, at which, no doubt, much time will be given to fruit-marketing problems, if there is a disposition to discuss them. Mr. Weinstock is entitled to the thanks of our readers for the effort he has made to inform himself on this subject during his Eastern visit, and for the very acceptable form in which he has presented his conclusions in our columns. In his last paragraph in this week's letter he states that he is only wedded to his idea until some one can propose something better, and if all will enter the consideration of the subject with the same disposition, good must certainly result from deliberation.

**THE OLEOMARGARINE LAW.**—The act passed during the last session of the National Legislature regulating the sale of oleomargarine will take effect as law on and from Monday next. On and after that date all retail butter dealers who sell "bull" butter will have to pay a duty of \$48 per annum to the Internal Revenue Collector for the privilege of doing so.



## CORRESPONDENCE.

Correspondents are alone responsible for their opinions.

## From Lake County.

EDITORS PRESS:—After a four-years' absence from Lake county, I seem joyfully welcomed by the sparkling waters of Clear lake flowing down Cache creek, rippling merrily, undisturbed by irrigation problems, riparian rights, legislative tangles, or Supreme Court decisions. Irrigation is not an absolute necessity here, yet no one will deny its benefit who has seen the wonderful growths of fruits and vegetation.

## Climate.

Traveling north from Napa City, the damp south winds and bay fogs are soon left behind; then comes a belt of the most equable climate in the world, growing dryer and dryer as we proceed into Lake county.

The prevailing wind is now west, dry and crisp, with cloudless skies.

## Agricultural Improvement Association.

This company appears to be an outgrowth of the old Clear Lake Water Co., that raised such a commotion in Lake a few years ago. They are fast changing the brown, sere, September hills to vine-clad robes of green, from which hang rich clusters of luscious fruit.

It is to be regretted that they did not make the cultivation of the raisin grape a specialty, as no evaporators would be needed, as there is no danger from rains or dampness.

## Taxation.

It is probable that the only absolute equality of taxation must be upon income, but under existing society and laws the difficulties to that end would be very great. Now I wish to call attention to the uncertain manner of our State Board of Equalization to arrive at real estate values through the real estate transactions. It is well known that the real estate boom goes in waves; now here, then there. Strangers with money coming into the State are almost sure to pay too much for land, more than any methods of production would justify. I have in mind a number of cases where men would sell for two-thirds or half what they gave. Now the transaction has gone on record and serves as a guide for the board and assessors.

## Travel.

Dust is the great nuisance of California travel, but it is greatly increased by the heavy freight on the roads into Lake county. Only just think! three and a half or four railroads into Lake county all at once. It had gained credence that this enchanted land is so hidden by mountain barriers that the neigh of the iron horse would never reach her placid shores.

C. P. SCRANTON.

Lower Lake, Oct. 10, 1886.

## Santa Cruz County Fair.

[Written for the RURAL PRESS by C. L. A.]

October 6th, 7th, 8th and 9th were as beautiful days at Santa Cruz as the most particular admirer of climate could wish. The barometer stood even 30° and the thermometer ranged from 60° to 75° with a clear sky and gentle breeze.

The pavilion was well filled at the opening on Wednesday evening, the 6th, with the products of Santa Cruz county.

Two fairs each year in Santa Cruz—a flower and rose fair in June and an agricultural fair in October—mean considerable work for somebody; and it is wonderful how well each one has been managed and how fully attended and successful they both have been. The managers have no little trouble and thought to give that variety so necessary to make each exhibit a success. To mention each person who has largely aided would make a long list, so we must omit that.

This fair was distinct from horse-racing, and proves that such things, with their gaming accompaniments, are not necessary to a successful and useful exhibit of agricultural products, including the finest stock in the country.

The display of fruit was well worth seeing. It demonstrates more and more each year the splendid adaptability of the Santa Cruz mountains to fruit-growing. Although a little early for the best show of apples, the tables were magnificently loaded with a large variety. Peaches, pears, figs and quinces were not wanting and of the finest quality. But little effort, however, was manifest in bringing these fruits to the fair. For the best display of apples A. Loomis took the first premium and L. H. Comstock the second.

The show of grapes was astonishing. The season has been favorable, and the many tables loaded with tastefully arranged plates, pyramids and mounds of differently colored clusters of ripe and tempting grapes was a sight long to be remembered. The first premium was awarded to W. W. Waterman, and the second to W. H. Galbraith. For wine grapes, H. Mel took first premium, and John Jarvis second. But there were other exhibits not entered for premiums that seemed equally fine.

The show of dairy products was small but very fine. G. P. Laird took the premium for cheese, and D. D. Wilder for butter.

The poultry show was better than usual. All the most prominent pure breeds were exhibited, and the fine stock showed an increased

interest in this department. But few places are more favorable for poultry raising than Santa Cruz.

One excellent feature of the fair was the Children's Room. Here were exhibited the toys, handiwork, etc., of the boys and girls. There were ships, doll-houses, paintings, dolls and their multiform dresses, needlework, collections in natural history, etc. Such a place should be encouraged in every fair. Miss Susan Tyrrell had charge of this room and made the children happy by the devotion of her time and tact to their welfare.

Mrs. Anna Pope and her assistants took charge of the large room specially intended for the floral display. Here the lovers of ferns, flowers, and garden-plants were made happy by the lovely arrangement of wild and cultivated specimens, as well as the many beautiful artistic designs of flowers.

I cannot do justice to the stockyard. There was not much competition, but a very nice show of Jerseys and other cattle, Percheron and other kinds of horses, Southdown and Cotswold sheep, and the various kinds of swine. The premiums, however, were not an inducement for stockraisers at a distance to incur the expense and time of bringing the many pure-blooded animals owned in this county to the fair.

Although this fair did not bring in large sums toward paying the debt on the pavilion, owned by the Fair Building Association, yet the advantage of bringing together the products at least in part of our county, and comparing notes on fruit, farm, and stock, will well repay all the expense and trouble of the occasion.

Santa Cruz.

## Inyo Has a Fair.

About the middle of September some of the people in Owen's valley concluded, all on a sudden, that they would hold a fair; and they did it the first of this month at Bishop Creek.

Considering that the officers of the Eastern Slope Agricultural Society and the managers of this impromptu exhibition had but two days after the initial move was made in which to arrange a program, and get it published in the first paper issued, they feel that the fair was crowned with remarkable success.

The summons was so short that many of the valley orchardists had no time to do themselves justice—W. T. C. Elliott, for example, picked and packed his fruit on four hours' notice, and other like instances could be named; nevertheless, a display was made which Inyo county folks are very proud of. They claim that the State produces no finer fruits, grains and vegetables than were then and there exhibited.

To prove the excellence of the corn raised in Owen's valley, it is mentioned that an Illinois farmer present as a visitor selected specimens of several varieties shown to take back home and use for seed in that corn-growing State. Louis Munzinger, of Bishop Creek, exhibited large and beautiful Gravenstein apples gathered from trees only two years old. Very fine apples and pears shown by J. L. C. Sherwin grew on the divide between Inyo and Mono counties, at an elevation of 6640 feet above sea level. Prunes of the German and French varieties showed how well suited are the soil and climate to their production. W. T. C. Elliott, of Big Pine, made a nice display of figs and several varieties of premium grapes and apples. Among L. P. Vandell's exhibits were found the best figs and Flame Tokays. J. W. Symmes and John W. Baxter, of Independence, the only exhibitors from the lower end of the valley, both had handsome grapes, apples, pears, peaches and prunes. The Kershaw squash seems to be a favorite vegetable in that region. Cocoons and silkworms were entered by Mrs. J. Arrison. Fruit in glass, jams, jellies, butter, honey, and needle and fancy work were not lacking.

The stock show consisted almost entirely of horses. There were thoroughbreds, Norman Percherons, roadsters, carriage and all-purpose horses, to the number all told of some three-score. The Independent thinks that many of the animals would be ranked as first-class anywhere. During the past few years some of the best horse-blood in the United States has been brought to Bishop Creek, and the result was seen in this display.

Gratified and encouraged at the success of their first attempt, the society hopes to hold annual fairs henceforward.

## Wheats in the Salinas Valley.

EDITORS PRESS:—J. B. Freed, in the lower foothills bordering the Salinas valley on the north side, five miles east of Gonzales, on a coarse, sandy soil, is engaged in wheat-raising and considers the Propo as the best variety for the Salinas valley region. It grows tall, has a large head, bearded; its grain is amber-colored, large and heavy. Its straw is large and coarse, harsh and hard and not good for hay. It does well in dry years because of its early maturity—much earlier than the Chili or Australian, perhaps earlier than any other variety raised here except the Sonora. Chili white is considered the next best raised here. The grain is larger than that of the Chili red; it makes fair hay, but the straw being rather large and stiff prevents its making the best of hay. Australian white does not do so well because of its liability to rust, and because of

the small straw being unable to well support the large head in the strong winds of the valley. It makes good hay, as it is not liable to be blown down before ready to cut for hay.

Monterey Co., Cal.

McD.

## San Diego Fair.

The Second Annual County Fair opened at Armory hall, in San Diego, on the 6th, and continued successfully throughout the 9th. The plan had been to close with Friday, but the time was extended to Saturday night, for the sake of accommodating the toilers who could not attend earlier in the week.

The opening address was delivered by Wm. Burgess, of National City, who lauded the resources of the district and gave good counsel to tillers of its soil.

The society finds it a knotty problem to settle when is the best time to hold their fair. In the coast region and the low-lying valleys things ripen early, while most products of the mountain ranches are at their best as late even as November. In trying to suit both sections a date was fixed too late for many of the coast productions and too early for the best fruits and vegetables of the hill country and the raisins of the Cajon. But while for this and possibly other reasons the displays were somewhat sparing in quantity, there was no questioning their excellent quality.

President Asher, of El Cajon, led off with fresh fruits in varied profusion, about 40 kinds of jellies, half a dozen of canned fruits, eight or ten of raisins, sun-dried fruits in great variety, and most beautiful specimens of crystallized fruits, a cluster of dates crowning the exhibit. Chollas valley showed an abundance of choice fruit and vegetables. Paradise, Sweetwater and Poway were credited with luscious contributions. From the Ballena, 53 varieties of grapes were brought by one exhibitor. The largest grapes at the fair were those brought in by George L. Kimball, of National City. "They are the biggest I ever saw," said Mr. Horton, who knows something about San Diego county grapes. One measured four and one-half inches in circumference. Mesa Grande, though chiefly noted for fine stock (for showing which there is no park, as yet), always makes a fine display of fruit, and raises oranges, tobacco and cotton, though more than 3000 feet in altitude. Julian is a thousand feet higher, but one of the finest exhibits of grapes in the hall came from that neighborhood. Tia Juana was represented by mammoth vegetables, marked "without irrigation."

"L. S. C." writes the *Bulletin* that this last fair has demonstrated yet more surely the peculiar adaptability of the county to the culture of the vine, citrus and olive in the lower valleys and the choicest of apples, pears, plums and cherries in the higher altitudes, with grapes that will ripen in season to supply the market after all those in the lower vineyards have been made into wine or raisins.

## The Fair at Downey.

The Los Angeles County Agricultural Association held its third annual fair at Downey, beginning Oct. 5th and lasting four days. Great numbers of people were present from all parts of the county. In his opening address, Col. E. E. Edwards, of Santa Ana, having spoken of the worthy objects of the association, and shown how valuable it is to the farmers, went on to complain that after the Legislature had appropriated funds for the State Fair at Sacramento, the largest portion of the money had been spent on horse-racing. "Everything was horse. The fair grounds were taken up by gamblers and pool-sellers. The agricultural and horticultural departments were shamefully neglected. We all favor the raising of good horses, but we cannot afford to see our other departments neglected as they have been, and in time the farmers will demand that a goodly portion of the appropriation shall be used exclusively in premiums for the agriculturist and horticulturist." The speech was well received and loudly applauded.

The display of live-stock was not only large (there having been 150 horses and 80 head of cattle stalled upon the grounds), but the quality of the animals was excellent. The swine show was rather meager.

The pavilion was handsomely decorated, wherein the ladies of Downey did themselves much credit, and the display of domestic manufactures and fine arts was highly praised.

While the Anaheim *Gazette* says that the exhibit of horticultural and agricultural products was not so large as at the preceding fair, and fruit-growers claim that this is a poor year for them in Los Angeles county, yet to a tyro reporting for the *Times*, the question naturally arose, as he looked at the fine samples of tree products, "If this is a poor year, what would an extra good year show?"

The biggest pumpkin at the fair was grown by Mr. Lovering, of Orangethorpe, whose 210 pounder measured 7½ feet around and overshadowed all competitors. The largest watermelon exhibited weighed 101 pounds, and the next 98 pounds. An excellent exhibit of grapes in variety was made by E. L. Barnett.

We condense a few of the many items in the *Times*. H. Hood exhibited a number of sound sweet potatoes weighing five pounds each which he dug out of the ground a year ago. They were grown on alkali land, without irri-

gation, a half-mile south of Downey. The older these potatoes get the sweeter they become. We understand that they were kept in sand.

James Stewart's output embraced White Smyrna and Brown Ischia figs, green, ripe, dried and preserved. He has certainly attained success in raising and packing figs.

The displays of apples, peaches, grapes, quinces, pomegranates, bananas, pears and plums, were very creditable. It was too early for citrus fruits, and there were no olives. While the apples were large and sound, they did not appear to have quite as fine a flavor as the mountain-raised, but the peaches and grapes were as nice as could be desired.

Downey makes a specialty of English walnuts. They are large, fine and meaty, the perfection of their kind.

There were cornstalks fully 18 feet high, bearing a goodly number of large ears, full of kernels. Broomcorn, Egyptian corn, and other kinds were numerous. A bale of alfalfa showed what the county is doing in the line of clover-hay.

Of melons there were several fine varieties. The "ice-cream" watermelon was especially admired.

The display of beans was good, the Lima, bayo, butter, horse, and common varieties being represented.

Several fine large bolls of bursting, snowy cotton indicated the possibilities of the region.

There were a few fine tomatoes, drumhead cabbages, some very large Chili peppers, onions, and beets.

The exhibit of cheese was limited, but the production of the Alamitos rancho could hardly be excelled.

The award of premiums was said to be very satisfactory, and the fair was deemed a full success.

## POULTRY YARD.

## A Fair Question, at Fair Time.

EDITORS PRESS:—Just about these times the subject of fairs is fresh in the minds of most of the people on this coast, particularly those of an agricultural turn. To such, and to those who are in the habit of reading this column, I would like to bring up a few points for you to turn over in your minds and see if they are not so; and, if they are, what can be done to better matters, unless perchance all is well as it is. Officers and members of agricultural societies are included among those whose attention I request.

In the first place, I don't think we would disagree as to what an agricultural fair should be, or at least what is implied by the name, viz., a place and time for the gathering together of people interested in agriculture in its different forms, and at this time and place are brought together from a given section of country its agricultural products for two purposes—to show the fine productions and the advancement over the year before. To promote an interest in these things, premiums are offered in different classes.

Now, for the benefit of any officer of an agricultural society who may be reading these lines, I should like to know the reason why the following kinds of prominent exhibits at almost, if not quite all, our fairs, are not classified and premiums offered, viz.: Horse-jockeys, gamblers, gin mills, and to what part of agriculture do they belong?

How careful are the management of each fair to prevent (and justly, too,) any sick animal from coming on the grounds, and yet will turn these agents of perdition loose among the people. How long, oh! how long, will ye who are in authority allow these things to be? Why allow and even bid for the presence of those who are the producers of moral disease? It may be that one of your own family may choose a livelihood in this class from being seen at the fair. How would the calling suit most parents?

Now, I want to call attention to the poultry corners at fairs. I wish no one ill, and shall only use names as an example, and that to bring out a thought or two for farmers, their wives and children to think over, and with the hope that at no distant day a better state of affairs may be had at all agricultural fairs on this coast.

For an example, at the last State fair there were 35 classes for horse-races, and the premium in each class exceeded the value of all the premiums offered for poultry in any way or shape; or, in this way, the smallest premium offered in a single race was \$300, the largest \$1200. The whole amount offered in premiums for poultry was \$290. Why this difference?

Is horse-racing so important a branch of agriculture, and poultry culture so small a one, as to call for this distribution of premiums for excellence? Could not a farmer make a fine living without there ever being a horse-race or a race-horse? But how would it figure if the whole poultry interest were swept out of the farmer's yards? Well, just this: It would sweep out the largest product of the farm, only the beef and dairy interest combined being its near rival; and the race horse does not even enter the list of farmers' products.

Now, I don't pretend to say but what a good, honest trial of speed at a fair is all well enough, but why so much of it and such large premiums, while to a much more valuable industry as



little? Why not divide up, at least a little more evenly, and by it bring out a larger showing in the poultry exhibit?

I think the State Fair Association is quite liberal in its poultry premiums, compared with other fairs held on this coast, and is setting a good example for others to follow; there is room for all to improve.

In a majority of the fairs held on this coast, I honestly doubt if two-thirds of small amounts offered as premiums on poultry are taken each year. Why? Because the individual amount is so small that the exhibitor cannot afford to show his birds and comply with the requirements of the society. Who will be first to make a change for the better? E. C. CLAPP.

South Pasadena, Cal.

## ENTOMOLOGICAL.

### Need of Action and Co-operation Against Insect Pests.

W. G. Klee, State Inspector of Fruit Pests, has issued the following address to the fruit-growers of California:

The question how to prevent the spreading of the various insect pests, which have become established in different sections of the State, is becoming every day a more and more serious question, involving large interests, and unless definite and proper action be taken by parties concerned much ill-feeling between the various fruit-growing sections will be the result. The legislation passed on this subject in 1881 provided for the establishment of County Boards of Horticulture, so as to enable the fruit-growers to protect themselves, by appointing inspectors, whose duty it should be to suppress already existing insect pests, and prevent the importation of new ones. These county boards have only been established in a limited number, and many exist only in name. But a few counties, such as Los Angeles, where the people have awakened to a full sense of their situation, have a complete organization. These boards have accomplished much good, and have done their utmost to stamp out and prevent the further spread of the cottony cushion scale, and to prevent the establishing of new pests, such as the aspidiotus perniciosus, which, in many of the upper and central counties, has made sad havoc with the deciduous fruit trees. This scale, unfortunately too well known in certain sections, invariably manifests itself on the fruit where the red zone around the scale makes it quite conspicuous. The scale will live as long as the fruit is sound, and will even propagate here, and is consequently liable to spread from peelings thrown about carelessly, as well as from fruit boxes. This summer quite a number of boxes of fruit, shipped from the northern part of the State, were found to be infested, and were ordered disinfected by the inspectors of Los Angeles county. It appears now that the Southern Pacific Company has been sued by certain merchants for the injury and loss sustained from this cause. In consequence of this move, the railroad company has refused to allow inspection at the depot, and the inspector now has to take his chances of finding the fruit anywhere throughout the city, making it next to an impossibility to find it at all. Of course, the railroad company has investigated this matter from a point of law, and, no doubt, believe themselves in the right. So do the shippers. Morally, the latter undoubtedly are wrong. The trouble arises chiefly from an underestimation of the danger of spreading these pests and of the value of certain crops to certain regions. There are many people in the northern who do not believe that deciduous fruits can be grown with success in the southern counties, and on the other hand, many Los Angeles people ridicule the idea that any citrus fruits can be grown successfully in any of the central counties. Hence the disregard of any of the consequences of shipping infested fruits from place to place. Los Angeles people have not been altogether above reproach. The red orange scale has been sent on fruit to Ventura county, as well as to San Francisco, where the writer, early this spring, saw it on lemons offered for sale in the streets. The so-called black scale has every year been sent on orange trees from Los Angeles, yet this scale is the most formidable enemy of the olive. Indeed, from this source more than one grove, to my own knowledge, has become infested.

According to the law, the various infested districts should be quarantined by the State Board of Horticulture, but if the law was carried out to its fullest extent, nearly every county in the State would be quarantined, as hardly any are altogether exempt from all the pests that are enumerated among the injurious insects that are to be legislated against. But to succeed in having people submit to this temporary inconvenience, it would be necessary to have quarantine guardians. With the present arrangement it is impossible for the board or the inspector to get efficient men; no man capable of performing these duties will work for two dollars per day, taking his chances on collecting through the courts. Only by having the local inspectors appointed quarantine guardians is it feasible to obtain co-operation. But the county boards must be established by the board of Supervisors, on petition from the fruit-growers only. If the latter do not choose to do anything, the inspector has nobody to co-operate with, and cannot therefore maintain

any quarantine. It will be seen, therefore, that public opinion or the interest of fruit-growers must be thoroughly awakened to the necessity of preventing the constant interchange of infested package of fruits and of plants. Infested fruit should be worked off at home. Every grower should have pride enough not to allow infested fruit to be sent to Eastern markets, there running the risk of being condemned as a nuisance. We have been informed that oranges with the red scale will hereafter be refused in Chicago. Still less should deciduous fruits, infested with scale insects, be permitted to go out to advertise the state of affairs in certain sections.

The point here to be made is: Unless thorough co-operation be established between the various fruit-growing sections, unless they set apart sufficient means to suppress existing pests and prevent the new ones to pass from place to place, we shall have all these pests, now bad in certain sections only, so thoroughly scattered that the question of maintaining a clean orchard anywhere will be impossible without constant spraying.

In my travels for the last four months I have found the aspidiotus perniciosus, as well as the cottony cushion scale, scattered far and wide, and in several counties absolutely no organization for preventing their spread. I trust that in these counties I have succeeded in proving to the fruit-growers of these sections the necessity of establishing active county boards. And steps have been taken in Sonoma, Sacramento, Santa Clara and San Mateo. From actual observation in many different counties, I feel justified that there is no locality or climate where, with thorough work, it has not been proved that the very worst pests could be kept completely under control, but their permanent eradication, of course, cannot be reached save by the utmost exertions by all parties concerned. Without this, no amount of money appropriated for the Horticultural Commission will accomplish the desired results. On November 15th, the Horticultural Convention is to meet in Sacramento. All persons interested in fruit culture should be present. A free exchange of opinions should be had, and a thorough understanding should be established between the representatives of the various fruit-growing sections. The workings of the horticultural laws should be thoroughly elucidated, and their defects pointed out, that we may have time before the session of the Legislature to have necessary revisions pointed out.

I submit these thoughts to the fruit-growers of this State, sincerely hoping that the importance of the subject will be shown by the large number of delegates present at the convention. By a thoughtful provision of the last Fruit-growers' Convention, held under the auspices of the State Board, at Los Angeles, men prominent in the different specialties of fruit culture were appointed to prepare essays bearing on their respective interests, and these contributions will no doubt help to make this gathering one of the most interesting and instructive ever held.

W. G. KLEE,  
Inspector of Fruit Pests.

San Francisco, October 14, 1886.

## THE STOCK YARD.

### Safety in Handling Bulls.

The serious injuries that Superasor Edwards, of San Jose, recently received from an attack by a vicious Jersey bull render timely some hints concerning the management of dangerous bulls. A man who is thoroughly experienced in such matters said to a San Jose Herald reporter: "I had cautioned Mr. Edwards about his bull and told him that a Jersey bull is always dangerous, but he insisted that he had brought up the animal and could easily manage him. Mr. Edwards was in the habit of going into the corral without taking any precautions, and I felt almost sure that something would happen to him. He would undoubtedly have been killed outright had it not been for the fact that he had a chain connecting the tips of the bull's horns. This chain prevented the horns from penetrating his body, and was a good protection as far as it went; but there is a better contrivance than that, and one which will enable a man to keep his bull, no matter how vicious, under complete subjection. This plan is: Put a ring through the bull's nose and attach to both sides of this ring a stout iron rod running up to the tips of the horns and about two inches above them, and then run another iron rod between the tips. When a bull shows fight you can render him perfectly powerless by grasping one of the rods running from the ring to the horns, and the rod is so easily grasped that you can seize it at any moment. When once you get your hand upon it the least struggle made by the bull will hurt his nose and make him desist immediately. The rod is preferred to any other device because it is so easily grasped. The ring alone would be just as good if you could get hold of it, but when a mad bull is coming toward you it is next to impossible to catch the ring. The rods perform another service while the bull is in the act of goring, as the least effort of the kind that he makes causes the rods to push against the ring and inflict pain."

The suggestion is worth heeding, as it has been found to be effective, and it recommends itself to any one's best judgment.

Mr Edwards is seriously hurt. The fracture

of his ribs is doubtless a small item compared with the terrible bruising that he received. A friend who visited him recently says that the bull, after knocking him down, rolled him on the ground for a distance of 25 or 30 feet and stopped only at the fence. Mr. Edwards climbed this fence, and was then taken into the house.

## HORTICULTURE.

### A Model Orchard.

Mrs. R. A. Chadbourne, of Suisun valley, Solano county, has one of the finest orchards we have seen in California. It consists of about 14,000 trees planted on 110 acres of sandy loam made from the deposits of the Suisun creek. The soil and climate are admirably adapted to the production of fruit of the finest quality.

The orchard contains about 1500 cherry trees, 2000 apricot, 2400 plum, 1200 peach, 3000 prune, 2000 Bartlett and 600 Nelis pear trees, besides a few other varieties. Thus it will be seen that the various fruits ripen in such a way as to economize time and labor and give constant employment throughout the entire season.

Mrs. C. has four prominent points in her creed as a fruit-grower, viz.:

1st. Do not put all your eggs in one basket. If one or two kinds of fruit fail any year, there is still something left to fall back upon. Sedition is there a failure of more than one out of five kinds of fruit.

2d. Follow one kind of business. Many have a grain and fruit and stock ranch combined. Fruit-growing has generally proved a failure when so combined, as it will inevitably be neglected in bad years, and one year's neglect of the orchard spoils it for the next; but not so the grain fields. Mrs. C. has set all her place to orchard except about 10 acres reserved for pasture.

3d. Do thorough work. Money must be put into the orchard to get money out. She keeps men in the orchard about every day in the year except Sundays. This orchard shows thorough cultivation, thorough pruning, thorough cleaning. Without waiting for the scale bag, or other pests, the whole orchard is sprayed twice a year (probably in December and again in May) with whale-oil soap and lye, using one pound of lye to the gallon of water. [We should consider this pretty strong for use in May.—EDS. PRESS.]

This settles the question of scale bugs very effectively. Nor is this washing attended with any great expense. Under this treatment the trees shine and thrive wonderfully.

The codlin moth comes in for a large share of attention, and is kept under good subjection. A band is placed around every apple, pear and quince tree early in the season. Every Saturday these bands are lifted carefully, and every worm is hit with a hammer. The band is fastened with a tack. Twice in the early part of the season the trees are gone over, and every wormy apple and pear is picked off. Twice a week all fallen fruit is gathered up, scalded, and fed to the hogs. I call this thorough work, and am glad to add that it is found very effective and profitable.

All apricot trees that split or show signs of splitting are bolted together with one-fourth or three eighths-inch bolts. Some trees have three or four long bolts through them, and it seems to agree with them finely.

4th. Square Dealing. This lady comes of good New England blood, and has a reputation among all her neighbors for uprightness and square dealing. She has no use for speculators, nor jobbers, nor sharp practices of any kind in the fruit business.

She proposes to furnish standard fruit, put up in a standard way, and she wants a fair price for it—and generally gets it. When she has refuse-fruit to sell, she sells it as refuse. She belongs to the Fruit Union, but thought it safest and best, this season, to sell her fruit in the orchard, and she has realized satisfactory returns on all kinds of fruit this year. Her orchard has paid her handsomely, and it is the just reward of thorough work and honest dealing.

It will pay any person who is interested in fruit-culture to visit Mrs. Chadbourne's orchard, when passing that way, and study her method.

Napa, Oct. 13, 1886.

W. C. DAMON.

### A Hill Orchard in Monterey County.

EDITORS PRESS:—L. S. Hutebings, living in the hills near and south of the Pajaro valley, in Monterey county, about 5 miles southeast of Watsonville, on a rich gravelly soil, is engaged in fruit-growing and is experimenting on the capabilities of soil, climate, etc., in the planting and cultivation of many kinds and varieties.

He has found that at this place pears, peaches and plums grow and bear well. Cherries do only fairly and apricots bear only about every other season. On some of his lowest ground, which may be irrigated from a spring higher up the little valley, he raises very fine strawberries. His strawberries are in rows three feet apart,

and 20 to 24 inches in the row. Blackberries and raspberries also succeed quite well in the low ground, moistened by the irrigation. Gooseberries are only a partial success. He has different varieties of grapes set out and growing on trial.

Mr. H. believes in ample room between rows for plowing, and so arranges things as to be able to plow from one end of the field to the other, through even different kinds of plants, as time and much labor can thus be saved in the cultivation. Of course when this cannot be done conveniently, alleys sufficiently wide to turn a horse may be introduced, with only losses of so much land and time and labor spent in turning, to which we add the extra care necessary to prevent injury to plants.

His blackberry and raspberry rows are 8 feet apart and gooseberry 5 feet; his plums and peaches 16 feet, and apples and pears 30 feet. He objects to setting fruit trees or plants of temporary growth between fruit trees designed for a permanent orchard, as such a temporary use of the ground between trees would more or less exhaust the soil of the properties which should in time go to the support of the orchard trees. The growth of the young orchard trees may for a few years be rapid and unimpaired by the temporary growth between rows, but when, in the course of a few years, the trees arrive at the period of high productiveness, their roots would strike into the soil hitherto exhausted or partially exhausted by the temporary growth, and thus for the want of proper nourishment their productiveness and value would be greatly impaired.

Mr. H. also condemns excessive pruning, as much pruning seems to injure the life of the tree and give the woolly aphid places in which to harbor and work. The tree should be kept balanced, but the work done before the limbs become large enough to leave a scar. The cutting off of large limbs should especially be avoided as a ruinous method of pruning. After too many limbs grow large choose the lesser evil and let them remain. McD.

Monterey Co.

### Peach on Myrobolan.

EDITORS PRESS:—In your issue of the 9th inst. there appears a communication from James O'Neill, of Haywards, under the above heading. He says:

The question is asked: Is the myrobolan a good stock for the peach? and I say it is. \* \* \* It has taken years of experience to find out the true mode of propagating and transplanting the peach when on myrobolan, and by careful watchfulness I have found out why a large percentage is lost by transplanting. The reason is, the peach starts before the stock and evaporates sap from the root, and consequently the tree dies, and those that live are partly stunted or injured. This obstacle is easily overcome. The peach, when on myrobolan, must be trimmed close at the time when dug, and when they are reduced to a single cane it takes four weeks for the buds to start, and by that time the root has caught and they start to grow at the same time. They do better when planted four inches below the union, as the stock will thicken sooner, keeps softer and makes roots close to the union. This deep planting is intended only for the peach, and not the plum or prune, as they will root above the graft.

Now, while I agree with Mr. O'Neill in the matter of budding, trimming and transplanting, my experience has been altogether different from his in the matter of peach-growth on myrobolan stock. Three years ago I was of the same opinion on this subject that Mr. O. holds at this time. So impressed, I budded quite a number of different varieties of peach on the best of myrobolan stock—so pronounced by W. B. West, of Stockton. The first year's growth from the bud was good—from three to four feet in length. One year ago last January they were, in common with other fruit trees, carefully taken up with a spade, every limb immediately cut off, the tops cut down, and shipped to my farm in San Luis Obispo county, where they were carefully put out and covered three or four inches below the union with my own hands. Afterward they were measured, and all cut down to about 24 inches—leaving only a straight stem without a single limb.

Last year some of them grew fairly; some scarcely at all; while quite a number of them died outright. Last February most of them started for a second year's growth, but many have since died and the remainder look dwarfed and sickly.

My apricots, plums and prunes, budded on the same stock at the same time the peaches were and transplanted at the same time in the same land, have done remarkably well. Now it will be seen from the foregoing that all the conditions imposed by Mr. O'Neill have been strictly complied with in my case, nevertheless my experience in propagating peach on myrobolan stock is a signal failure. My neighbor, Mr. Wm. Earnst, has had a like experience.

It may be conjectured that our soil and climate are possibly to blame for this failure, but such is not the case; for the reason that peach trees, budded on peach, were put out at the same time and place, and have grown better than anything I have ever seen of like kinds.

It is possible that the peach on myrobolan stock may do well in the central and northern portions of the State, but I beg leave to warn beginners who may be proposing to set out orchards in the southern portion of the State, against peach on plum or myrobolan stock.

East Oakland.

J. V. WEBSTER.



## PATRONS OF HUSBANDRY.

Correspondence on Grange principles and work and reports of transactions of subordinate Granges are respectfully solicited for this department.

## The Substantial Bank.

[By L. VIRGINIA FRENCH.]

[This poem, which was recited very effectively by Miss Josie M. Roache at the State Grange, appeared some years ago in the *California Agriculturist*, since merged in the *PACIFIC RURAL PRESS*.]

Good-morning, 'Squire. Well, yes, I'm feelin' purty pert today—  
"I guess because the boys are all at home again," you say?  
Well, maybe so. It surely helps a father, now and then,  
To have his children rangin' round the old home place again.  
Them boys of ourn are (as you say) "a mighty spunky set,"  
But "the panic's" on 'em and I've "took 'em in out of the wet."  
And here the old man chuckled till the overflowing gle  
In his kindly, dark eyes dancing was a pretty sight to see.

Thar's our Billy—he's our oldest, and a banker up in town;  
The only one that's married—and he's brought the Madame down;  
She's as pretty as a picher—looks so cheery, too, and bright,  
That "Mother" took to her at once, and I—well, "right on sight."  
Now Billy's mighty spunky—just the proper kind of stuff—  
But that infernal Wall street business used him purty rough;  
He busted up in bankin' and come down home, he said,  
To straighten out, and wait awhile until the dust was laid.

Then thar's Hal—he had the factory, and he still is on his pegs,  
Which is something when so many more is "shaky in the legs."  
The "panic" took him unawares, and though his credit's prime,  
The boy went under bodily—"suspended" for a time.  
But the fellow's tender-hearted, and he said it broke him down  
To see the mournful faces of his "hands" a-bangin' round.  
When he couldn't stir to help 'em; so he come home for a spell,  
As he sadly said this morning, to see mother and get well.

And George? He's our "professional"—smart chap, too, in his way,  
But he says, "No use in working when it won't begin to pay."  
Their ranks are overcrowded now, and George says that the Law  
Is for the fellow who has "cheek," and longest lease of "jaw."  
The lad's somewhat disgusted with his'n over crimes,  
And so come home (he said) to "wait awhile for better times,  
To get his moral nature strung and 'cruited up anew  
With something that is homelike, honest, genuine and true."

Well, last night the boys was talkin' all together round the fire,  
And Tom (he's just from college) listenin' like he'd never tire;  
They lived their troubles o'er again, and, 'Squire, you would have thought  
That every fellow's work was just the meanest ever wrought.  
The banks all bust, the funds gone up, the country sore in need,  
Taxation "playin' thunder"—till at last they all agreed  
That if man could have a business that could be made to pay,  
Why, the trade of the old Granger "was the one thing made to stay!"

Tom (he's powerful military, and high-mighty, as you know,  
Wanted to go to West Point—be a General or so)  
Says Tom, says he, "Old fellows, now you all have said your say—  
I believe I'll take my life-stock in an honest bank of clay!  
You fellows on the quicksands may shift and shuffle round,  
I'll set my "shares" of iron into more substantial ground;  
I'll deal in gold—the gold of grain—and by and by I'll learn  
To mine it out of 'pockets'—big manure-piles at the barn."

Then Billy's wife spoke up alive—whew! she's the cutest thing!  
(Land! sir, you ought to hear how that young nightingale can sing!)  
Says she, with such a sparkle in her laughing, loving eyes,  
"Ha! you've struck it there, my brother—'tis the farmer finds the prize!  
Look! how this dread financial storm has thousands overthrown,  
And father's trade's the only one that stoutly holds its own.  
If I was just a man like you I'd take the safest rank,  
And draw my gold from out The Soil—the Farmer's Mighty Bank!"

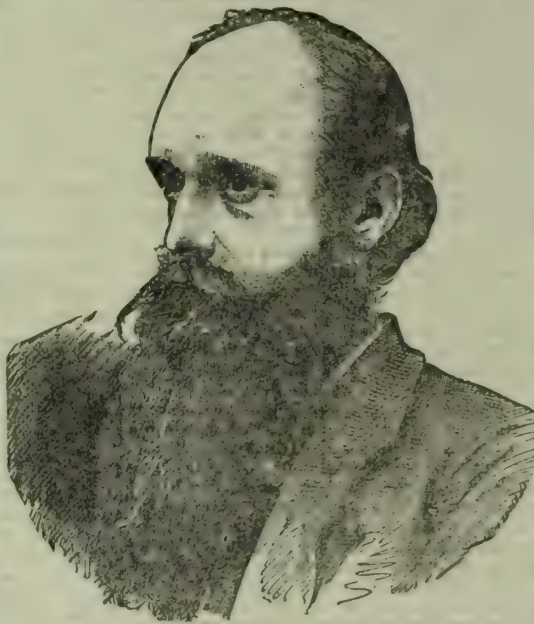
Then Mother, she looked up, and in her softly smilin' way—  
(The wimmin, 'Squire, on every theme will always have their say)

Says she: "God bless my children! and believe me when you come  
To seek that shelter from the world that's only found at home,  
Whatever fate may wait you at the turn of Fortune's crank,  
Your father's and your mother's love's your great unbroken bank."  
Then Billy's arms went round her neck, and thro' the fire-lit gloom  
A shout, "Three cheers for mother!" rang around the cheery room.  
I can't tell how it came, my friend—they all around me pressed,  
The little nightingale that sung was sobbing on my breast;  
I'm half ashamed to tell it now—a Granger of my years—  
But something blinded me awhile—I reckon it was tears.

## Meeting of the National Grange.

As announced in the *RURAL* of October 16th, by the official letter from Bro. John Trimble, secretary, the meetings of the Twentieth Session of the National Grange, Patrons of Husbandry, will be held in the city of Philadelphia, Penn., commencing on Wednesday, November 10th, at 11 o'clock A. M. The sessions of the Grange will be held in Musical Fund hall, Locust street, between Eighth and Ninth streets. Accommodations for the National Grange have been secured at the Girard house, corner of Ninth and Chestnut streets, two and one-half squares from Musical Fund hall. There is every reason to expect an unusually important and effective session this year. Questions of great public moment are pending, and as the membership of the National Grange includes representative minds from the great body of the industrialists of the nation, we expect action which shall be incisive and wise and have the true ring in it. California will be represented by Bro. and Sister Wm. Johnston, who will be found *primus inter pares*

tion of every year. The subject of this sketch was thus brought up to a vigorous outdoor life, and thought it no hardship after his morning's work was done to walk three miles to school.  
He graduated at the University of Mississippi at 20 years of age. He selected farming as a business, and was engaged at that when the war broke out. He joined a battery of artillery as a private, was elected lieutenant, and within a year was chosen captain and commanded the company until the close of the war, when he again returned to the plantation. While thus



HON. PUT. DARDEN, OF MISSISSIPPI.

engaged in agriculture, the advantages of the Grange did not fail to attract his attention.

He joined Phoenix Grange as a charter member, and in the fall of 1873 was elected Master. He was elected Overseer of the State Grange in 1874, and Master of that body in 1876, which office he has held with distinguished credit to himself ever since, and his energy, ability and

## The Farmers in Council.

The State Grange Meeting—Fourteenth Annual Session.

[CONTINUED]

We give this week some matter in addition to what we have already published, to complete our record of proceedings.

Co-operation with Rochdale Co-operative Associations.

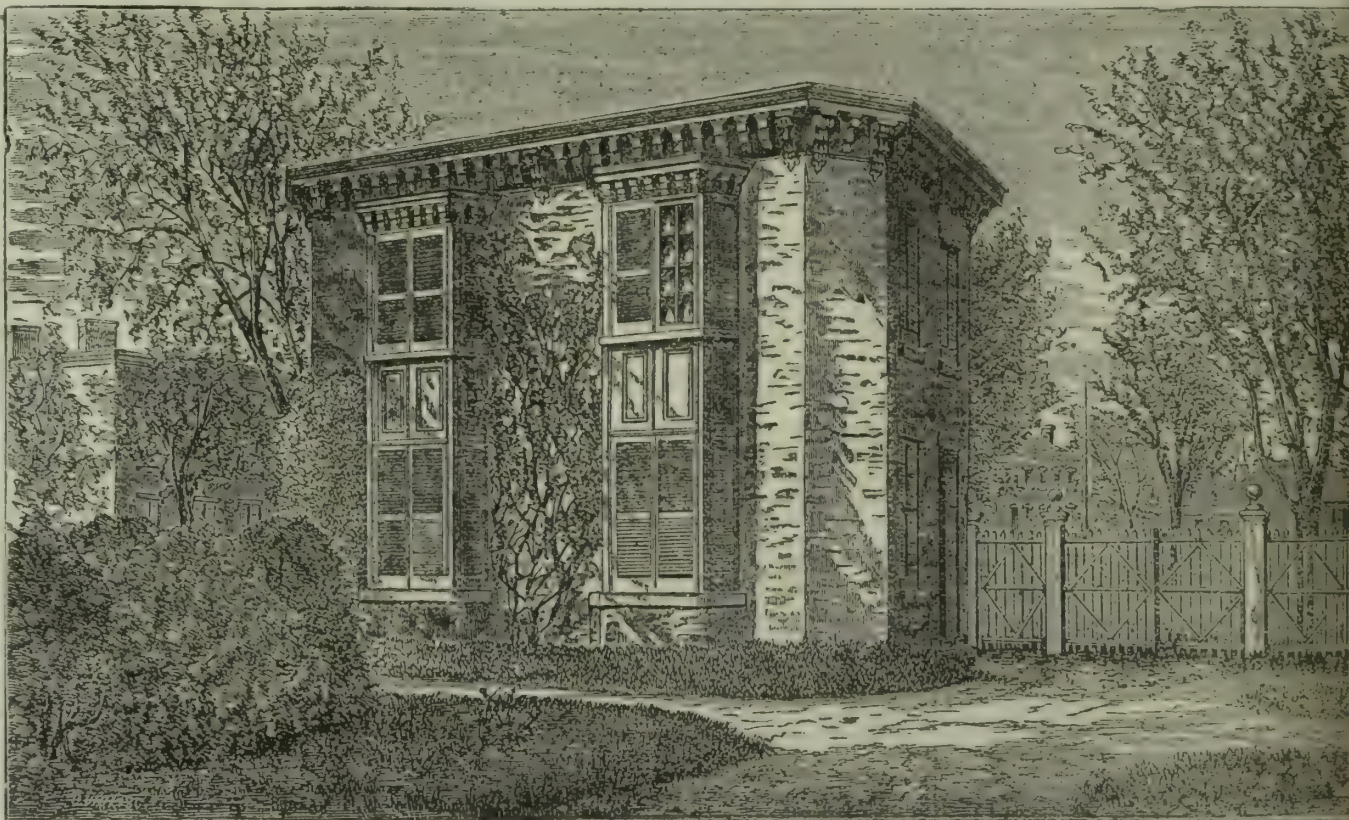
At the State Grange session of 1885, Bros. I. A. Wilcox, D. Flint and S. P. Sanders were appointed a committee to correspond with the extensive system of Rochdale Co-operative Associations of England, with a view of effecting a large and direct trade with them in the disposal of our contemplated large surplus of preserved fruits, honey and other produce. Alluding to the work of this committee, on Friday afternoon of the present session, Bro. A. T. Dewey called attention to a large collection of printed documents received, for the information of the committee, from England concerning the organization, aims, objects and wonderful success of the Rochdale Co-operative Associations in Great Britain. One volume, containing the report of a single annual session of the Co-operative Congress (having 578 representatives present) contained about the same amount of printed matter as the entire New Testament. Bro. Dewey stated that the committee was not prepared to make a formal report, and moved that Bro. B. F. Walton and Sister W. D. Ashley be added to the committee, and that further time be granted for action and final report. The motion was adopted.

From the Chairman.

The following communication was received by the Worthy Secretary, too late for presentation to the State Grange session:

Worthy Master and Members of the State Grange of California: As chairman of the committee to whom was referred the subject relating to the shipment and sale of fruits to the Rochdale corporations of England, I am sorry to say I have nothing definite to report.

I regret very much that I have not found the time to peruse the various documents relating to co-operation in general, so kindly furnished by Bro. Dewey, who proposed this committee. A glance at these voluminous documents will show the extent to which co-operation is being carried on in the old country, in business mat-



BIRTHPLACE OF THE GRANGE—OFFICE OF WILLIAM SAUNDERS, WASHINGTON, D. C.

and will do the California jurisdiction much credit.

As appropriate to the meeting of the National Grange, we give on this page two engravings—one of the present W. M. of the National Grange, and the other of the birthplace of the Order in the city of Washington. The Master, Bro. Putnam Darden, is, we are sure, handsomer than the portrait we have secured of him, and yet the engraving presents lines of nobility and manliness, by the aid of which the reader can form a conception of the man which will do him more justice than the engraver has.

Captain Darden has been re-elected at four consecutive annual meetings Overseer of the National Grange, and served with distinguished ability. He was born in Jefferson county, Mississippi, March 10, 1836. His father, Jno. D. Darden, also a native of that State, was a man of original views and much force of character. He believed that boys, whatever their station in life, should be trained to manual labor, and, though a man of wealth, he compelled his sons to work on the plantation a por-

indefatigable efforts in behalf of the Order in Mississippi for years past have caused his elevation to the highest office within the gift of the Grange, and conclusively proves that merit is its own reward.

As pertinent to the meeting of the National Grange, we give an engraving of the building in which the idea of organization was first embodied in due form. In John G. Wells' book, "The Grange Illustrated," from which we reproduce the engraving, we take the following paragraph: On the evening of the 4th of December, 1867, at the office of Mr. Saunders, then on Four-and-a-half street, between Missouri avenue and the old canal, there were assembled less than 10 persons, and there and then the National Grange was organized, and officers elected for five years. At this meeting no lady officers were elected, although provision had been made for them in the constitution, but at a subsequent meeting the four officers, Ceres, Pomona, Flora and the Lady Assistant Steward, were elected, as well as the Executive Committee.

ters. Necessity has forced this co-operation.

When one gets the legitimate results of his labor, he gets all that legitimately belongs to him. Nothing short of this should satisfy him.

This subject is but little understood by our people, and there seems to be a general disinclination to practice it. It takes the saddest kind of experience to induce the people to work together for their interest.

We all know that the co-operation of the few at the expense of the many is the prevailing practice. We all know, also, that it is only by co-operation of the many that the united action of the few can be resisted.

My time is just now taken up with other matters, or I would pursue this interesting subject further while I am about it. I will add, however, in conclusion, that all systems of human government, save that of absolute monarchy, are founded on the co-operative principle. Ours is the most completely founded on that system of any. The free suffrage principle, that allows every qualified voter to vote, implies a duty so to do, and to do it in the right



manner, in unison with others for the general good and the welfare of each.

Until this union in action shall prevail, all the efforts of the people at reform in any matter will prove failures only.

Adopt the legitimate principles of co-operation, and by united action all the grievances of the people will vanish like dew before the morning sun. Submitted in F. H. C. & F., I. A. WILCOX.

From the Leading Friend of Co-operation in England.

When Hon. George Jacob Holyoake was visiting the Eastern States, the California State Grange, some two years since, invited him to extend his visit to California, and in the hope that he may yet favor us with his presence and able advocacy of the great cause of co-operation, the following private letter to this office will be read with interest by many:

EASTERN LODGE, BRIGHTON (ENGLAND), }  
September 13, 1886. }

MY DEAR SIR:—Had I not been engaged in writing a series of papers in our *Co-operative News*, which I hope you see, I should have written you earlier. The papers I refer to are an exposition of "social ideas" prevalent "in England 100 years ago," which are more diversified and suggestive than any in the minds of the people now. If our co-operative Congress had attained the sense which it is gradually acquiring of the duties of international propagandism it would have made an appropriation to enable me, or some more suitable person, to visit your fair, study your Grange organization, and discern in what way we could promote your objects and your business. I shall be glad when it does this. For myself, I should have pleasure in visiting California. I am satisfied that America will yet distinguish itself in co-operation. The more I become acquainted with the fertility and energy of social ideas in your country, the more confident I am that it will one day excel us in the application of co-operative principles. We have no counterpart among us of your PACIFIC RURAL PRESS. Yours very truly,

GEORGE JACOB HOLYOAKE.

Bro. Flint now has the printed documents above mentioned, and will show them to any persons interested in the matter. We hope he will write and speak freely of this great subject, which we believe can be made to do good service in the cause of the Grange and the welfare of our entire industrial population.

### An Invitation to California.

Our representative at the National Grange bears with him an invitation to that body to hold its next meeting in Sacramento, the capital of the State of California. At the meeting of the State Grange, held in Marysville during the first week of October, this invitation was formally extended and the hope expressed that it would be accepted. We trust it may be. We can assure the officers and members of the National Grange that they would receive a warm welcome in California. Our subordinate Granges have upheld the principles and standard of the Order for the last 12 years, and have succeeded in developing institutions embodying these principles, which it will no doubt be of much interest to the representatives in other States to examine in their practical operation. The journey across the continent is a long one, it is true, but it is becoming shorter because of faster trains and the reduced rates which are available to excursionists. We sincerely hope the National Grange may see its way clear to accept the proffered welcome and hospitality of California Patrons.

TEMESCAL GRANGE had a comparatively good turnout at its last meeting. Bro. J. V. Webster gave a good report of the State Grange session, and Bros. Kelsey, Goodenough and Dewey, and Sisters Dewey, Kelsey, Renwick, Babcock and Brooks followed with interesting remarks. Bro. W. G. Klee, State Inspector of Fruit Pests, gave valuable information and hints concerning the destructive work of and the remedies for the threatening, noxious insects and other pests. Immediate legislation, strong efforts on the part of individual cultivators and a general co-operation on the part of those interested seem to be now necessary to stop the devastating progress of the numerous pests and secure future ample reward to farmers and fruit-growers for their investments and labors. It is hoped that Bro. Klee may be able to give an open Grange lecture on the subject in Oakland on some future evening. By request of the Lecturer, Sister Paine read a gifted and well-received poem. The subject for discussion on Saturday evening, November 6th, will be, in substance, "How to better provide for accomplishing the will of the people through legislation."

THE ORDER IN NEW ENGLAND.—Maine, seven new Granges; New Hampshire, six new Granges; Vermont, six Granges reorganized; Massachusetts, eight new Granges, and Connecticut, twelve new Granges, are the answers to the rollcall of progress in the New England States since January 1, 1886.—*Willamette Farmer*.

PASTERS ILLEGAL.—One of the peculiarities of California's election laws forbids the pasting of printed slips on the face of ballots. Remember, all changes of names must be made in writing with pen or pencil.

### A Word Before Election.

Manly Independence on the Part of the Farmers.

EDITORS PRESS:—Will you grant me a bit of space in your valuable journal to say a few words to the tillers of the soil? I believe it was Mark Twain who said that New Jersey had more atmosphere to the square inch than any place he had ever seen; and Corporal Tanner declares we have more politics to the acre than any State he ever visited. There is a cause for this lack of confidence in the old order of things. The pernicious policy of working the forces of the government in the interest of the monopolists and capitalists has so pinched and oppressed American labor that it is almost everywhere in a state of angry irritation and revolt. The vacillation of the great political parties, their ambiguous attitude on all questions of vital interest to the masses and the disposition of their leaders to wrangle and snarl, like a pack of hyenas, for the spoils of office, is a spectacle that has no parallel in history since Nero fiddled by the light of burning Rome.

It is strange how slow the farmers are as a class to come up to the standard of manly action and independence, and shake off all the manacles of party and demand that the State and Federal Government shall seek to promote the prosperity and progress of the country upon the basis of the industrial and business interests of the people. That the disposition of the public domain and homesteads, and the growing importance of

#### State and Inter-State Commerce,

Be regulated in such a manner as to protect the productive industries of the country, and kindred matters be allowed to come to the front as special objects of legislation. The fact is, the farmers as a class are not conscious of their importance. Let them remember that in war it is the farmer who comes to the support of the Government with shouldered musket and the supplies necessary to do effective service for the country. That it is the farmer, who, in time of peace, has to bear the burdens of taxation and pay the Government debt. That the product of his toil and sweat is the lifeblood of the nation. He cannot shirk his responsibility if he would. He cannot hide his lands, cows, sheep, horses, cattle and the yield of the fields and orchards from the tax-gatherer, while the monopolist may return only his plant and hide the remainder of his vast property in his pocket. Governor Hill, of New York, said the other day in a speech before the St. Lawrence County Agricultural Fair:

"It is evident to every keen observer that the personal property of the State does not pay its just proportion of taxes. The assessment of personal property should nearly equal that of real, and should be taxed, and thereby the present unjust burdens upon real estate be greatly alleviated. The farm and the workshop should bear their proportion, and so should the bonds, the mortgages, the stock and the capital of the millionaires, the speculators and the money-changers. The theory of our present system of taxation, which permits the indebtedness of the owner of personal property to be deducted from its value, while it permits no such deduction in favor of real estate, even though covered by a mortgage, is neither just nor consistent. This presents a proper subject for our Legislature. There are no arguments for the proposition that real estate should alone be taxed."

The principle here inculcated is applicable over a wider area than the State of New York. In this State there is no question that just now so vitally concerns the welfare of the farmers as reasonable transportation of their products to the Eastern seaboard, or between home producers and consumers. That the operation of our

#### Board of Railroad Commissioners

In this direction has been a failure, no one will deny. Its working has been timid, tentative, and more in the interest of capital than the producers. And yet we have no cause of despair. Failure in the past should teach us to be more careful in selecting our commissioners in the future. There is no office of more importance to the interests of the people of this State and to the farmers as a class, and there should be a special solicitude in securing men of the most established integrity, firmness of purpose and invincibility to wheedling seductions. We feel assured that the two men selected from one of the old parties by the Farmers' Convention for this position possess these requirements. We are not so well assured as to the other set of nominees. We are not opposed to the American movement, but the fact that its leaders in this State are well-known railroad men should cause us to view with distrust the men for this office they favor. So far as the railroad is concerned, this is the only office on the State ticket of any importance. They can afford to merge everything else for victory here. And so far as the producers are concerned, they can afford to take no risks.

The election will be a close one, and let no man in this matter throw away his vote. For years we have opposed the management of any corporation or enterprise so as to oppress the people and evade bearing its just proportion of the burdens of the Government. We have passed resolutions and issued proclamations.

Men and brethren, has not the time come to act? We need no leaders who flourish trumpets and wear badges and uniforms. We want men who will stand or fall for the principles they proclaim, and to that end do not throw away a vote upon any man who is tainted with suspicion. MUDDILL.

MAGNOLIA GRANGE has had a visit from Worthy Lecturer Flint, who reports, in the *Patron*, a good attendance, with representatives from Sacramento, Newcastle and Grass Valley. A brother was initiated in the first degree, and a sister instructed in the third and fourth degrees. They also had a fine harvest-feast, and an open discussion of timely topics, winding up with a little dance by the younger members. Brother Flint credits this Grange with a deal of pluck, and predicts its progress.

RESPECT AND SYMPATHY.—In view of the death of Bro. H. G. Sanborn, Placerville Grange has passed resolutions expressing its respect for his many virtues, intellectual power and sound judgment, and its sincere sympathy for his widow in her affliction.

IMPROVING.—We are glad to learn that Sister J. M. Kerlinger, of West San Joaquin Grange, one of the *RURAL*'s contributors, is recovering from illness and is now in the resting stage which we trust will bring her ere long to full health and strength.

CORRECTION.—The date of Honorable J. V. Webster's letter, in last week's *RURAL PRESS*, should have been Oct. 20th.

## AGRICULTURAL NOTES.

### CALIFORNIA.

#### Butte.

WINTER WHEAT.—Farmers are sowing more grain this fall without waiting for the rains to come than we have ever before known in the county. Dry sowing on summer fallow never fails to produce a good crop, and our farmers realize that if they want to be certain of the grain getting an early start, and making a good root growth during the winter, they want to sow it without waiting for the first rains to come.

#### Fresno.

EDITORS PRESS:—The absence of rain up to this date has enabled the farmers to harvest and secure their crops, baul straw and store it away for emergencies, thrash beans and Egyptian corn. Shall I tell you more about Mr. Loomis' corn, or what may be said since its maturity? In my note in the *RURAL* of Aug. 7th, its prospective yield was described as enormous. His expectations have been fully realized, as the yield has averaged 60 bushels to the acre, and apparently has not diminished the supply of nutriment to his Muscat cuttings, which were planted in February and seem to have the advantage of a good year's growth. A surprising overestimate has been made of raisin grapes, and the acceptable power of solar heat for curing them. If prices corresponded as favorably, we should try and forget that the "sere and yellow leaf is the emblem of decay." —A. L. A., *Temperance*.

#### Lassen.

MOTH AND SCALE.—Susanville Cor. *Reno Gazette*, Oct. 17: The fruit-growers have commenced gathering the crop of winter apples, which is quite small and badly affected by the codlin moth. Unless the fruit-growers of this county soon commence a determined warfare against the moth and cottony cushion scale, the fruit will soon be worthless.

SHEEP AND CATTLE MOVING.—During the past two weeks a number of large droves of cattle have passed through town on their way to the lower country and a market. The numerous bands of sheep that are driven from below to the mountain valleys of this country during the summer months have nearly all left for their winter ranges.

#### Los Angeles.

ORANGES AND RAISINS.—Santa Ana *Herald*, Oct. 23: All indications point to a very large crop of oranges in the Santa Ana valley this season. The fruit is now quite large, and most trees are heavily loaded. We think the fruit will be as bright and clean as it was last year. The raisins of the valley have been curing finely during the present spell of good weather, and the greater portion of the crop is now beyond all danger of injury from early rains. Quite a large number of boxes of this year's crop have already gone to market, and the work of packing is going on all over the valley at a lively rate.

#### San Diego.

CHAMPION YAMS.—National City *Record*, Oct. 21: We have on our table a hill of sweet potatoes, or yams, weighing 76 pounds 10 ounces—a very fair yield for one vine. This mammoth hill of yams was raised in the Tijuana valley by Mr. A. Titus. When he delivered the same at this office, he only exacted one condition, viz.: "That the editor should eat the whole 'business' at one meal, or pay for the same." We paid for the yams. We would like to hear from some other quarter of the globe, if this hill can be beat. Tijuana valley lays claim to the championship of the world for yams.

#### Santa Clara.

LIVE-STOCK AT AUCTION.—Gilroy *Advocate*, Oct. 16: The great auction sale of Reeves'

cows, horses, hogs and dairy fixtures took place on Tuesday. There was a fair attendance of stockmen and farmers, and the auctioneer made sales aggregating over \$12,000. The chief buyer was Henry Miller, whose bill amounted to more than \$9000. Cows sold in small lots from \$10.50 to \$60 per head. The Reeves Bros. would have made improvements needed for their convenience years ago, but the owner of the ranch, Martin's, habit of leasing from year to year, left them in uncertainty about occupation long enough to warrant expenditure.

#### Tehama.

FOOTHILL PRODUCTS.—Red Bluff *Sentinel*, Oct. 16: Away up on the Champion Mill road, 20 miles east of this place, is W. O. Jennings' farm and stock ranch. It was said before he bought the place that corn and garden "truck" could not be grown there. Mr. Jennings has proved that assertion to be false. He planted corn, melons, potatoes, etc., the 2d day of July. The corn is now ripe—fine, large ears—and has been gathered and put into the barn. He has been using melons and potatoes nearly two months, which were large and well flavored.

### An Opportune Letter to Californians.

L. B. Anway to Wm. H. White.

MY DEAR SIR:—Your open letter in the *California Patron* of Oct. 16th, addressed to the State Central Committee selected by the Farmers' Convention, also to Joel Russell and J. V. Webster, reached me today. Being a member of that committee and in the absence of an opportunity to confer with my colleagues, I take the liberty to make you an answer upon my own individual responsibility and individual opinion.

While I concede to you every inference and opinion as stated in regard to the relations as between Stanford, Swift, the Republican party and the railroad and kindred corporations, I beg to differ with you most emphatically as to your opinion and the policy of your proposition to carry us both soul, and body, and land, within the bosom of the Democratic party, the Farmers' party, the Grangers and other industrial producers, and all for the purpose of showing Congress that the tail is trying to wag the dog. If Stanford is not just as much the dog and the people of California the tail when the Democratic party of California is in power as when the Republican party is in power, I must confess my powers of discrimination are at fault, and if you can discover any difference, you must certainly be the "boss" discriminator.

Your anxiety seems to be a dread or fear that Congress will, if Swift is elected, discover that Stanford owns and runs the politics of California. I would say to you, "my dear sir, that Congress for a long time has known that capital has run the politics and owned the Legislatures of all the States in the Union, and the National Legislature as well;" therefore it is too late to be catching at straws of such character as mentioned in your communication.

You certainly are aware of the excellent character of the anti-monopoly resolutions embodied in the platform of the Democratic party of 1882. You are aware that it swept the State, with one single exception, L. C. Morehouse for State Board of Equalization. You are also aware that the Democratic party had a nice working majority in both branches of the Legislature, and that they never, during their entire regular and extra session, attempted or even showed a disposition to carry out or redeem one single pledge made in that San Jose platform of 1882; and I defy you, or any other human being, to successfully contradict or show that I am wrong in the statement just above made. Neither does the present standard-bearer of the Democratic party—Mr. Bartlett—bring to view any better evidence or any better record, or any more sterling qualifications of character than did Governor Stoneman, the moment he accepted the nomination and endorsed the platform. Yet they proved just as recreant to the interests of the people, were just as ready to do the bidding of Stanford, as are the Republican party, and it matters not which of the political "bosses" is in the majority, Senator Stanford is the dog and does the wagging, you say.

"The Grangers, farmers, producers and working-men are thus called on to bow to this mighty Lord of California and kiss the foot that spurns them. Will they do it? My friends, I trust and believe they will do nothing of the sort."

I am fully in accord with you in the above sentiment, and I also trust that the producing classes of California have at last opened their eyes to the fact that it matters but little to this "mighty Lord of California" as to which foot they kiss, his Republican or Democratic foot.

In making such a statement I believe that I am voicing the sentiments of the entire State Central Committee, as well as Messrs. Russell and Webster. I believe also that I am in accord with the views of a very large majority of the Grangers of California, especially of those of whom the Farmers' Convention were composed. Therefore we say to you and to the independent voters of this State that those who represent the Farmers' party have forever cut loose from the mass of political corruption which is embodied in both the Republican and Democratic parties. That we have unfurled our banner, that we have placed at the head of our ticket as our standard-bearer a staunch and well-tried farmer, an old "war horse" Granger, Judge Joel Russell, of Haywards, Alameda county, one who is worthy and well qualified and comes well recommended. That we never, no, never, will trail our banner to or kiss the ordly foot. That we want no more Stanfords or Stonemans, or any more unredeemed pledges, but that we intend to fight, to fight on until we convince a majority of the people of this commonwealth as to the justness of our cause and victory finally crown our efforts.

MORE FAIRS TO TELL ABOUT.—We yield a good deal of space this week to recent fairs, but still have accounts to give of those at Los Angeles, Arroyo Grande, Visalia and elsewhere, which we had to defer or issue a double-size paper.





## Night Thoughts.

[Written for the RURAL PRESS by FANNIE H. AVERY.]

Apart from scenes of woe or mirth,  
I watch, with pensive brow,  
The moonlight shed upon the earth  
Its pure and gentle glow.

The holy beauty of the night  
Enthralls me with its subtle power,  
And something of its calm delight  
My spirit borrows of the hour.

My thoughts are drawn from worldly care,  
And soar afar on high  
Into the region blue and fair  
That mortals call the sky.

I flit, in fancy, through the realms  
Of space, whose boundless span  
My human intellect overleaps,  
With its "stupendous plan."

My heart with humble awe is thrilled  
To think the heights and deeps  
Of air with suns and worlds are filled,  
That the Almighty keeps

In harmony the most divine,  
Oh, words are all too weak  
The solemn rapture to define;  
I feel, but cannot speak,

When'er I dwell upon such themes;  
For then I love to think  
That there is something in me seems  
To draw me and to link

Me to those shining distant spheres,  
Which I view from the earth.  
What can it be my soul endears?  
Is it immortal birth?

The glorious Universe of God!  
If we thought on it more,  
Our minds would grow more large and broad,  
And worthier to adore

The Great Intelligence that bade  
Our bodies issue from the dust,  
And breathed that into them which made  
Our souls secure from moth and rust.

San Francisco, Oct. 6, 1886.

## The Evolution of Mrs. Thomas.\*

NUMBER 3.

[Written for the RURAL PRESS by M. H. F.]

By the time our heroine had finished "Green's History" the "Chautauqua idea" had taken root in the minds of all the Thomas household. From the reticent and undemonstrative head of the family down to the obstreperous little Dick, all held the mother's new departure in tacit or outspoken approval. Mr. Thomas was a man of sterling worth, if he was a little oblivious to things present. No one thought more highly than he of education. He was as ambitious for his children as every other true Yankee, but he had come from his Green mountain home to California at an early day, and after ten years of unsuccessful mining experience had settled down to his business of accountant, content to let other men do the speculating and roving about. He was quite a bachelor when he first met Mary Rivers and she was a good many years his junior, but they were speedily married, and he had always been of one opinion regarding her, that she was the best and "smartest" of women. Very naturally he had grown to think book-knowledge of not much consequence to a woman. Could any amount of such learning make his wife any better mother or housekeeper? Impossible. Yet when he saw her now quietly bending her energies to self-culture, with a fixed determination to bring herself to a higher intellectual level, he secretly resolved to help her all in his power. It was not his way to put his thoughts into words, but the whole family recognized his attitude and his good wife was infinitely encouraged by it.

They were all quite enthusiastic over each new Chautauqua book. Even little Dick enjoyed "Old Greek Life." A very few words of explanation enabled him to get an understanding of old customs and ideas which made his conversation for a few days seem quite classical to his small boy friends. One of his teachers overheard him discoursing about the Olympian games out on the school playground, and remarked afterward to Albert: "That is a bright little brother of yours. He shows that he comes from an intelligent home," and Albert felt not a little pleased and complimented. Indeed, the whole family almost unconsciously began to feel that they were an exceptionally literary and intellectual household, so much did the home reading help on school work. Some fact in history, a great epoch or revolution, would be read about and talked over at the table or fireside, and within a day or two an allusion to the same subject would appear in a reading or geography lesson at school, and a

teacher's question would follow, which would bring a prompt response from some member of the Thomas family. They all had a fair record at school before, but now their reputation began to grow rapidly. Albert had graduated at the high school and was now taking a year's course at a commercial college, while Mary was almost ready for the Normal; so both of them had essays to write requiring considerable general information, and it was both delightful and rewardful to their mother to have them begin to call upon her for help. With a happy heart she carried her Chautauqua text-books into the kitchen and stole many a glance into them as she watched her oven or had a moment's respite from housework. When she sat down to her afternoon's sewing there was always one of these same little text-books in her work-basket, and by dint of conning them over and over she became quite an authority in dates and names, not only in English, but in Greek history and literature. Nor was she satisfied with mere outlines; it was her nature to be thorough, and her mental appetite "grew by what it fed on." There drifted in her way an advertisement of Alden's cheap reprints of standard and classical books. It was quite wonderful how many things "drifted" in her way. She seemed to have helping hands reached out to her from every side, and she took the proffered aid with a happy and grateful heart. These little volumes from Alden were not beyond her slender purse, and she indulged in several. She found "Plato" not beyond her grasp and very delightful, yet it cost her only 15 cents. In the same frugal way she flavored a good deal of homely fare with "Attie Salt." An investment of a dollar gave her a choice selection of the most famous English poems, and an equal amount brought to her growing library the prose masterpieces of our best English and American authors.

When the minister called to see her one day he caught a glimpse of the little text-book, "Studies of the Stars," lying open on the mantelpiece, and was at once astonished and delighted to find his parishioner, whom he knew only as a model housewife and good church worker, evidently studying the science which to him was like a gateway to heaven. He turned to her with a beaming countenance: "Are you really interested in astronomy, Mrs. Thomas?" he asked.

And when she assured him that not only herself but her whole family were reading Bishop Warren's "Recreations in Astronomy," and enjoying it as if it were a story, he insisted upon shaking hands over the discovery.

"You make me very happy," he said. "I shall certainly venture now to give a little series of lectures I have prepared upon astronomy but have never offered to our people lest they should lack popularity. I have quite a collection of astronomical works which I shall be very glad to lend you. Have you read 'Ecce Cælum'?"

And so the Thomases read "Ecce Cælum" on Sunday afternoons during the next month, and were lifted into a celestial atmosphere of which they had never dreamed. As they together trod the starry highways, and with almost breathless awe followed their guide in his lofty descriptions and imaginations, their very faces took on new lines of refinement and spiritual culture. The higher education to which the mother was now leading them had its beneficent influence in many ways. A sort of tuning-down went on by slow and wholesome processes; voices grew gentler; manners more courteous; they "trod more gently among the parts of speech;" a growing reverence for the mother's opinions brought a quicker deference to her feelings and a prompt obedience to her authority. This did not come about in a day or a year. It was a gracious and beautiful growth, like any of the developments of Nature.

We may not in this brief space attempt even to outline all the influences which came to this household through the mother's uplifting. A whole book could not do justice to the theme. A lifetime, an eternity, can only reveal it all. But we may be sure this light was not hidden under a bushel. "It gave light unto all that were in the house." Nay, this little candle shed its beams much farther than that. The neighbors began to wonder what was the secret of the Thomas family's growing power in the community. The boys were so fond and proud of their home and their mother; the girls so sensible and intelligent; Mrs. Thomas and the minister were so often heard speaking of books and magazine articles of which other people had not heard. An explanation came one day, less than two years from the date of our story's opening. The minister proposed to his congregation to meet at his house for the purpose of forming a literary society, and those who responded to the call found Mrs. Thomas there—shy little Mrs. Thomas who had never spoken a word in public in her life, and whose face glowed with blushes when the good pastor told them that she would tell them about a new society which was having a wonderful growth at the East, and in California, too, called the Chautauqua circle. With a voice that shook so she could hardly control it, and a heart whose throbs she thought must be audible to all present, our heroine told the story of her own experience, and with eyes which threatened to overflow, she closed by saying: "Only my Heavenly Father knows how thankful I am that I have had just the help and inspiration which this course of study is bringing to me."

As a result of this meeting a little Chautau-

qua circle was started in San Luis with the minister for president and Mrs. Thomas for secretary. Thus the good seed grew and multiplied. Not long since the general secretary received a letter from this same minister saying that he had never found anything so helpful to his work in the community as this Chautauqua circle. "It has given me a hold upon the members such as I could have obtained in no other way. In helping them intellectually there has come to me an influence over them morally and spiritually. Besides, the course of reading itself seems all-embracing. It reaches all sides of human nature and need, intellectual, physical, spiritual. Neither does it fail to bring to my own mind a refreshment in many lines of thought which repays me a hundred fold."

Half a dozen years have gone by. Mrs. Thomas finished the Chautauqua course in good season in 1883. She was not able to go to Monterey to graduate, for every dollar was needed to help Mary through the Normal, and the mother was only too happy to deny herself for the sake of her good daughter. But the diploma came from Plainfield, with the signatures upon it, which, to Mrs. Thomas, represented the grandest and best of men. The family grew fairly jubilant over the arrival of that diploma; the boys gave it the benefit of "three cheers and a tiger;" Mary got up on a chair and presented it with a speech which, to say the least, was highly rhetorical; and Amy conducted her mother to "the platform" to receive it. Finally Mr. Thomas bore it off in triumph to be suitably framed, and to-day it hangs upon their parlor wall, its proudest ornament. Each year the back of the frame has been carefully removed and the diploma taken out to have one or more "seals" added to it. Soon there will be a "rainbow" of them, Amy says.

In a corner of the parlor are some beautiful home-made book shelves, the work of the younger boys' scroll-saw, a Christmas present to "mother" for her Chautauqua library; and here are gathered her beloved books and her nicely-bound "Chautauquans." The way in which the whole family regards them reminds one of the old Penates; and, to Mrs. Thomas, they represent more than words can tell—help, comfort, inspiration—these only partially tell the tale. She stands before them sometimes and loses herself in a happy reverie, which ends not infrequently in clasped hands and uplifted face. A few weeks since the Chautauqua circle of San Luis gave a reception to their little community, and Mrs. Thomas was the essayist of the evening. As she came quietly forward upon the platform of the town hall, and with perfect self-possession bowed to the full house, her sweet, matronly face looked so thoughtful and cultured, so pure and intellectual, that an old-time friend would hardly have recognized her. She had chosen for her theme "A Roman Matron," and her paper showed so much acquaintance with Roman customs, such familiarity with their history and modes of life, and yet such appreciation of the fact that the Roman woman had a human heart beneath her sternly-dignified exterior, that her audience were instructed and pleased, yet moved to deep sympathy. She told the story of a woman's life in that far off and cruel age, from the cradle to the grave, stirring every mother's heart as she pictured the poor heathen woman in times of bereavement and trouble—"Christless, lifting up blind eyes to the darkness of the skies."

At the close she pictured her death and burial with a gleam of hope for the future lighting the pitiful darkness of the grave.

"Over her," she wrote, "creeps the tender grass; above her bloom the sweet wild flowers;

"Is the unseen with the seen at odds,  
Nature's pity more than God's?"

A hush of solemn thought filled the room as the sweet, womanly voice ceased to speak.

A stranger present walked home with the minister.

"Who is this Mrs. Thomas?" he asked.

"One of the best and noblest women I know," answered the clergyman. "Yet you would hardly believe me if I were to tell you how she has developed since I first knew her. She proves a pet theory of mine that the powers of the mind and spirit strengthen with our strength, and that the mature mind is better capable of growth than that of a child. Just by virtue of its mature power it can grasp ideas with more force, and is infinitely superior in appreciation and resolute perseverance. In short, we are immortal. As to Mrs. Thomas, my friend—ah, it is a wonderful case of Evolution!"

AN INK RIVER.—In Algeria, there is a small stream which the chemistry of nature has turned into true ink. It is formed by the union of two rivulets, one of which is very strongly impregnated with iron, while the other, meandering through a peat marsh, imbibes gallic acid. Letters have been written with this compound of iron and gallic acid, which unite to form the little river.

THE SWIFTEST BIRD on the wing is the frigate bird, a sort of nautical bird of prey. Sailors believe that it can start with the peep of dawn from the coast of Africa, and, following the trade winds, land on the American coast before sunset. It can undoubtedly fly more than 200 miles an hour, but we do not know of any trustworthy record of the speed of which it is capable.

## Wild Oats.

[Written for the RURAL PRESS by ALLAN.]

Human, not agricultural. The idea of an uncultivated patch of land is dull and uninteresting compared with that of the labored and cultivated ground that yields diverse, plentiful, enriching crops. It is solacing to the mind to consider the great effort that is being made for the cultivation of the minds of the rising generation; but it is also stimulating to think of the need for additional effort to extend and perfect the education of the young, that cannot be obtained by the usual attendance at school. When self-education is thoroughly inaugurated, then the mind is conscious of added growth, power and wealth.

The unskillful politician ruminates sadly over lost opportunities of education and culture, when he would choose to cope with new circumstances and new men in the legislative field. How a man has to reproach himself when he realizes that his powers are unequal to accomplish his work, by reason of being poorly equipped, when diligence in previous years would have furnished him with added power. Some are unable to abide the discipline of life by reason of neglect of themselves in the earlier portions of their lives. Many might have attained to higher experiences and conquests if they had in early years devoted themselves with individual heart and strength to the tasks of life.

The immediate attention is required to the supply for the future of the best influences that shall accrue to the gaining and controlling of the ripe and reliable means of power and attainment in the future time. If a man will work he will find assuredly that true science, knowledge, principles, will have their unflinching reward in natural and proper consequences. The wild oats of bad habits and defective tendencies will drop from him and no more deface him if he presses onward to the full manhood of attainment which is the privilege of all persons. The harrow of right criticism must be allowed to pass over a man's character and work, to procure the best results of the human, lifelong harvest. Under the influence of the drag of events, a living character will be prepared and strengthened to advance in the line of progress traced out. Then let every person, ambitious of progress, be encouraged and confirmed in his faith of the worthy results that follow a right undertaking, although some time and opportunities have been lost in earlier years.

## Fact or Sentiment.

EDITORS PRESS:—When such high contracting parties as the American President and the Queen of Great Britain and Empress of India take months to settle the meaning of so short and simple a word as b-a-y, I presume it is permitted to "F. A." and myself to discuss a word three times as long.

"Sentiment" Webster defines as "A thought prompted by passion or feeling."

Fact, as: 1. "Anything done." 2. "Reality." To instance a "fact," slavery, with its attendant horrors and hardships, was a legalized American institution. Let me ask "F. A." is the knowledge of the "fact" elevating? The "sentiments" entertained regarding that "fact" elevated many otherwise commonplace persons into heroes and martyrs.

The knowledge of certain "facts" in the career of Napoleon I inspires in "F. A." thrilling "sentiments" of admiration; in me, "sentiments" of detestation at the man, and "sentiments" of sympathy with the millions whose lives were brutally sacrificed, with the millions whose homes were ruinously desolated, with the despairing widows, the bereaved mothers, the orphan children, with France depopulated, with Europe weltering in blood; and all to what end? That one miserable, mean, selfish, vainglorious mortal might give rein to his ambition!

So I venture once more to offer my opinion that the "sentiments" we receive and entertain are more important than the "facts" imparted to us.

A mind well stored with "fact" is rightly credited with knowledge, which puffs up. A mind endowed with right "sentiments" is possessed of charity, which edifies.

There is truth of fact and truth of sentiment equally. If by sentiment "F. A." means maudlin amativeness and namby-pamby philanthropy, I quite concur that publications charged with such noxious gas cannot have the match applied too soon.

I think my lecture on "Lowell," published in your issue of Oct. 2d, expresses my views so amply that no further airing of them is now needful.

EDWARD BERTWICK.

Carmel Valley, Oct. 3, 1886.

THE INTERNATIONAL YACHT CONTROVERSY.—A veteran naval officer suggests that the relative merits of the sloop and cutter type will not be settled until one of our sloops conquers in English waters. He says the performances of cutters in the rough seas and thrashing winds of the British channel and narrow seas are really wonderful, and confirm him in the belief that they are the best rough-weather boats he has ever seen in nearly 40 years' service in all quarters of the globe.

\*Concluded from page 322, RURAL of Oct 16th.









A. T. DEWEY.

W. B. EWER.

Published by DEWEY &amp; CO.

Office, 252 Market St., N. E. cor. Front St., S. F.

Take the Elevator. No. 13 Front St.

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W. B. EWER.

G. H. STRONG

SAN FRANCISCO:

Saturday, Oct. 30, 1886.

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## The Week.

No doubt all will rejoice that this week will end the political campaign of 1886. It has been a long season of unrest and excitement, and has considerably unsettled the public mind. The supreme duty of the occasion, however, remains still to be done, and that is the voting. An article in another column treats of the general principles involved in this act. Upon a following page may be found the nominees for State offices by the six leading political organizations. The table will give our readers an opportunity to contrast the names for different offices and to discover what formal indorsement each candidate has. The day of election will be Tuesday, November 24, and it is a public holiday, according to the law. There is such an array of candidates that in all probability there will be some very close contests, and it may be some time before the complete result can be announced. One thing is consoling, and that is that the temper of our people is such that there will be quiet and orderly waiting for the result, whatever it may be.

The rains continue in the form of local

showers few and far between. Along the upper coast and bay regions the new grass is starting—the foxtail, so innocent when young and so villainous when old, is the first to break the soil, and it gives a good bite at first. It would do well if the stock could bite it all off young, but that is not possible. It lingers to pierce and persecute nearly all summer. It is, on the whole, one of our worst field pests. Would that its shadow might grow less.

## Consider Your Vote.

An observant foreigner once made the remark that "the people of America seem to be always holding an election, or just getting over one," and in these frequently recurring agitations he thought he saw an element of danger. We have a great many very good, clever people who seem inclined to indulge the same feeling. They have it for a boast that they take little or no interest in political affairs. They rarely attend primaries. They never go to political meetings. They never join clubs and contribute time and money to a campaign. They are even inclined to neglect the polls. In short, they do not conceal the fact that they look upon the whole thing as a necessary evil and are disposed to have as little to do with it as possible.

Now these political croakers and pessimistic fault-finders seem oblivious of the fact that political agitation is one of the best of schools to augment the intelligence of the people. Every man, not a natural-born idiot or fool, likes to have some sort of reason for his vote. No matter whether it be a good reason or a bad one, it will require a little mental effort to give it shape. Hence our elections are educating. They awaken mind. They stir thought. They break up the routine and monotony of business and everyday life, and set everybody to thinking, reading and talking. It may be very poor reading, very shallow thinking and silly, frivolous talking, but it is better than none, and nearly everybody comes out of the fight more enlightened than when he went into it. This will certainly be the case of the man who ran for office, for he will find out what an irreclaimable scoundrel, or fool, or sneak thief, or liar, or drunkard, or ass he has been all these years and did not suspect it.

It was a saying of George Whitefield that the devil is fond of fishing in muddy water. If that is so, he has had fine angling in American politics for some time. The "filthy pool of politics" has passed into a proverbial saying. It is more than a rhetorical fancy or ill-natured jest. That there is a foul, black, malarious stream of corruption and depravity sweeping across our national life the most roseate optimist will hardly deny. The recent exposure of the corrupt measures by which the Broadway railroad franchise was obtained in New York, the postoffice stamp robbery at Minneapolis, the discovery of an alliance between the police and gamblers in Chicago, and the infamous coal ring in Pennsylvania, are mere bubbles on this stream. Politics has become a trade. Party organizations, which were once the property of the whole, are now merely the tools and mouthpiece of a few voracious public vampires who suck the life-blood of the people. These few are regarded as leaders, managers or bosses, and the voters are the slaves and property of the machine. The heads tap the public treasury and divide the patronage. They hold the fat places and market the honors.

And now the strangest feature of the case is the apathy or prejudice of so many good citizens. Some are so thoroughly absorbed in business that they hardly care to take time to vote, and many who do are not careful or active enough to scan their ticket. They seem to forget that good government is essential to business prosperity and the security of rights. They forget they are sovereigns invested with a solemn duty to perform, and that it is not only unwise and foolish but treasonable to the best interests of the country to neglect it. How many seem wholly indifferent until they are approached at the polls, or a few days before the election, and then, in obedience to some old prejudice, or to gratify a friend or acquaintance, slide in a ticket the composition of which should make them blush. They vote for men they would not invite into their parlors or trust in a trade simply because their names are on the party ticket. All such voters are accomplices in the

political depravities and debaucheries of the day; they are accessories before the fact.

There are times when the extent of political uncleanness becomes so apparent as to simultaneously awaken the people and a revolution sweeps the country like an electric current. We had such a wave after the exposure of the Tweed ring, and for some time the country breathed more freely. There are indications now of another such revolt. The general breaking-up of party allegiance all over the country is ominous. The greedy robbers of the people have turned their guns against each other, and if one-half they say about each other is true, the hose should be turned upon the whole squad. A great convulsion is evidently at hand. The people are having more to say about public questions than ever before. The time has come for the industrial masses to move as a unit. We have, scattered over the country, a variety of organizations, all moved by the same instinct, animated by the same aspiration—the elevation and advancement of industry. They cannot accomplish what they desire by divided effort; they should mass their forces at the ballot-box. Their interests are identical, and the times are propitious. It is useless to delay; the time for action has come. Let every citizen remember that his vote is a solemn trust; that it is the flower of the highest civilization. It makes all men equal. It is a privilege that has come to us at great cost of blood and revolution, and should not be lightly prized. There is no excuse for evading personal responsibility, or misusing it. The ballot is secret, and however dependent one may be he can vote his convictions. Vote your conscience, vote as you pray; pay no heed to party names or majorities, for the right will win; and whatever may be the consequence, our own manhood demands that we vote our best convictions.

## The Potato Disease.

We are glad, as we have stated before, that the Department of Agriculture has established a bureau of fungoid diseases of plants and will pursue investigations and collect information which will result, we hope, in a better understanding of these insidious foes of the agriculturist. Pastures, grain crops, garden crops, orchard and vineyard products are all more or less injured by these obscure vegetable parasites which vie with insect pests in the evil they work. Let them be thoroughly studied and all useful discoveries made be widely published.

The Department has begun its attacks on fungoid forces by tackling that old giant of a depredator, the potato disease or potato blight, as it is commonly called. The disease is caused by a parasitic fungus, *Phytophthora infestans*, which grows in leaves and stems as well as in tubers. Early in the growing season the external threads of the fungus may be detected on the stems and leaves of the potato in the form of patches of fine white mold, which causes, later on, a more or less extensive brown-ing and decay of these parts. The rot of the tubers may be either dry or wet, and may continue after the potatoes are dug and housed. The disease has been known for many years. It is present each year, but is disastrous only in exceptional seasons. It is believed to be worse in wet than in dry weather; on lowland than on uplands; on clay soil than on sand; in thin-skinned white varieties than in thick-skinned red ones.

The Department asks the assistance of potato-growers all over the country in furnishing their observations on certain points of the disease, and the compilation of all experience will, no doubt, be sent to each in the form of a special report. The questions to which answers are requested are the following:

1. In your county, about what per cent of this year's potato crop was destroyed by rot?
2. What per cent of last year's crop was so destroyed?
3. About what per cent of the harvested crop of 1885 was lost during the winter and spring by a continuation of the rot in cellars and storage pits?
4. Were any varieties entirely free from rot, or freer than others?
5. Was the season in 1886 wet or dry? In 1885?
6. Did early or late varieties rot most?
7. Did you observe any instances in which location (wet or dry), or quality of soil (sand, loam, clay, etc.), affected the severity of the disease?
8. Did the weather (cold or hot, wet or dry) exert any marked influence?
9. What remedies or means of prevention, if any, did you try? and with what results?

[In case there was no rot, your statement to that effect will be of use.]

Some of our readers can give valuable information on these points, and we trust they will do so. This can be done merely by addressing letters answering some or all of the questions, and giving any additional points that may have been observed, to Hon. Norman J. Colman, Commissioner of Agriculture, Washington, D. C.

## Floriculture.

One of our readers in San Mateo writes to ask how she can best secure information on floriculture which will be practicable and valuable under California conditions. We know no way in which it can be done so well as for all interested in the delightful art of floriculture to begin at once and furnish floricultural notes for the RURAL PRESS. There is really no reason why such subjects should not occupy considerable space on our pages. If those who are working and thinking among flowers will only jot down their lessons of experience and the sentiments which are promoted or suggested thereby, we shall have a Floricultural Department which will be full of value and delight to our readers. We would like to see a floricultural society organized. The State Horticultural Society had such aims at first, but the matters of the orchard seemed of so much greater importance and interest to the members that it was impossible to do any justice to a floricultural subject, even when one was chosen for discussion. It seemed to take all the time of all the meetings to discuss such weighty matters as fruit-tree planting, training and protecting from pests, and fruit selling; and, although this class of subjects has been discussed monthly for seven years, there seems rather more reason for continuing it than there was for beginning it in 1879. The only thing for the floriculturists to do would be to organize among themselves and rule out fruit subjects as coldly as the fruit-growers have ruled out the posies. We would like to see such a society started. We would like to have membership in it; we would like to give full reports of its proceedings, as we do now of the fruit meetings.

The way to begin to develop the literature of California floriculture is to begin to make it, and that duty rests upon every one who grows a flower or loves one. The columns of the RURAL are at the service of such a one. Perhaps it would be a good starting point for each one who believes in having a floricultural society, to meet at some central point monthly, and who would become a member thereof, to write to us of their disposition in the matter, and make suggestions as to the character and location of the organization. If there be enough who favor the idea to make a promising nucleus for a society, it only will remain to set a time and place where all may meet for finishing the organization. This is the way the State Horticultural Society was established, and now it has a good membership and very important discussions, as readers of the RURAL are aware.

It is decidedly wrong that in California, the land of flowers, there should be large floricultural centers, like San Francisco, Oakland, San Mateo, etc., without any society of floriculturists. There are good organizations in some of our counties. The societies at Santa Cruz, Pasadena and elsewhere, which hold floral fairs, always make them grand successes, but we do not hear of meetings for discussion. The Santa Barbara Horticultural Society takes both fruit and flowers within its view and does well with them. The Los Angeles Pomological Society is one of the best in the State, but it is a fruit society, as its name indicates. So there are horticultural and viticultural societies at San Jose and many other places, but so far as we know no distinctive floricultural organization which meets for discussion. If the work should be undertaken by florists and floriculturists in and around the metropolis, probably it would result in similar efforts in other parts of the State. It can be easily done. All that is required is for a few enthusiastic individuals to take the initiative.

Whether this is done or not, the columns of the RURAL are open for contributions from all floriculturists. There is no reason why they should not adopt such a means for exchange of views and experiences, just as those enjoyed in the more prosaic branches of outdoor occupations do. Let us hear from you who are willing to aid in this matter.



### Superintendent of Public Printing.

By his association with the publication of the new schoolbooks, the Superintendent of Public Printing becomes of more general public concern than when he was almost wholly occupied in the dressing up of State officers' reports, legislative bills, etc. The State Printing Office, which is situated near the State Agricultural Pavilion, is also much more of an establishment since the large expenditure has been made for fine machinery, and the force of printers, pressmen and binders so greatly multiplied. We have thought that the portrait of the gentleman who has brought all this vast business into its present excellent form would be of much interest to our readers, and so we have secured the excellent picture which we give on this page of Col. James J. Ayers, Superintendent of State Printing.

Col. Ayers has all his life been devoted to the arts of printing and journalism. When a mere lad of 13 he commenced his apprenticeship to the art preservative in the office of the *Courier des Etats Unis*, New York. Being conversant with the French language, his progress in mastering the type-setting part of the business was rapid. He remained in this office two years, when he entered, as an advanced apprentice, the book and job office of Wm. Wright, at that time one of the leading offices in New York. Here he familiarized himself with this important branch of his business. He was afterward employed in Craighead's great publishing office, where General McComb, now Warden of the Folsom prison, and he worked together, and both finished their educational course in the printing business.

In the spring of 1848 Col. Ayers started with his mother for St. Louis, Mo., by way of New Orleans. On arriving in the capital of the then Far West, he entered the office of the *Missouri Republican*, the most flourishing newspaper then west of Philadelphia. At the close of the year news came of the discovery of gold in California. On the 2d of February, 1849, he started for the new-found El Dorado, and after a voyage of eight months, filled with perils and disasters by land and sea, he entered the Golden Gate on the 5th of October, 1849. Like the great majority of Argonauts, he at once proceeded to the mines, but returned to San Francisco in the fall of the next year. Here he took position for a short time on Judge Crane's paper, the *California Courier*; but when the late Senator Casserley separated from Mr. B. R. Buckalew, the proprietor of the *Public Balance*, a leading daily of that period, Col. Ayers formed one of a co-partnership which purchased that fine establishment and published the paper with great success until the fire of May, 1851, swept the office away. In October of that year he joined Mr. Henry Hamilton and Harry de Courcey in the enterprise of starting a newspaper at Mokelumne Hill, and the *Calaveras Chronicle*, a paper which still survives, was the result. He returned to San Francisco in 1854, and was employed in the *Herald* office (John Nugent's paper) until the vigilance committee boycotted that paper out of existence.

Then he saw what few others at that time could see—a field for a cheap paper in the metropolis of the State. Inducing four other printers to join their fortunes with his, he started the *Daily Morning Call*, the first number of which made its appearance on the 1st of December, 1856. The paper was raised into a prosperous condition by the hardest kind of work and the closest possible attention to business of the associated printers who owned it. The first year placed it on a paying basis, and

after that it became a power in the State. Its circulation rapidly increased, and in three years it could boast of the largest circulation of any paper in California. For 10 years Col. Ayers remained at the head of the firm, and then he sold out to go to the Sandwich Islands for the benefit of his health. At Honolulu he started the first daily paper published there—the

gross in his district in the fall of 1879, but was defeated by Mr. Pacheco. In 1883, when Gov. Stoneman assumed his office, he tendered Col. Ayers the position of Superintendent of State Printing, which that gentleman accepted. His term will expire next January, when he will return to Los Angeles and take charge of the *Daily Herald*, of which paper he and Hon.

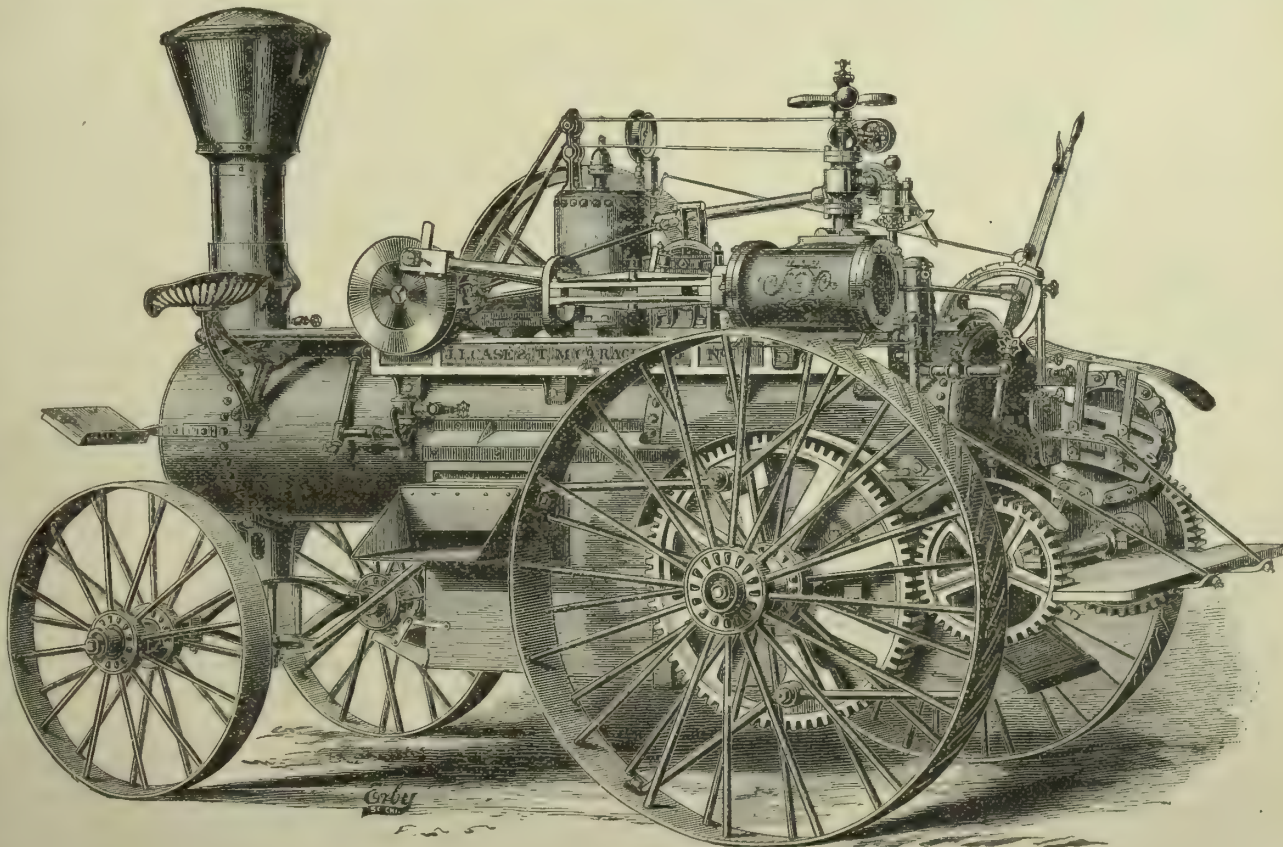


COL. JAMES J. AYERS, SUPT. OF STATE PRINTING.

*Hawaiian Herald*. Returning from the islands, he made a most unfortunate venture in taking a large printing office to White Pine. As editor of the *Virginia City Enterprise* for a year before the White Pine furor, he had received such information from that district as satisfied him that the mines were rich, extensive and

Joseph D. Lynch, Democratic candidate for Congress in the Sixth District, are joint proprietors.

ORIGIN OF DEW.—It is common to hear people speak of dew falling; it does not fall—it rises, as one might say. Dew forms on vegeta-



J. I. CASE CO.'S NEW TRACTION ENGINE, WITH STRAW-BURNING ATTACHMENT.

permanent. But, alas! they turned out to be worthless. In 1872 the Colonel went to Los Angeles, and soon became, in conjunction with Hon. Joseph D. Lynch, proprietor of the *Evening Express*. He remained at the head of the *Express* (Mr. Lynch taking the *Herald*) for ten years. During that time he was elected as a delegate-at-large from the State to the Constitutional Convention which met in the fall of 1878. In that body he was conspicuous as Chairman of the Committee on Harbors and Marsh and Tule Lands, and took a leading part in the debates of that body on the Chinese question, on the railroad corporations, on the taxation article, on the law of libel, and on other important questions. He ran for Con-

tion precisely as the moisture forms on the surface of an ice-pitcher in a warm room. Dew is the deposition of moisture in the atmosphere on the cooler surface of the earth.

THE STRONGEST WOOD IN AMERICA, according to Professor Sargent, is that of the hickory of the Arkansas region, and the weakest the West Indian birch (*bur seva*). The most elastic is the tamarack, the white or shell-bark hickory standing far below it. The least elastic, and the lowest in specific gravity, is the wood of the *Ficus aurea*. The highest specific gravity, upon which in general depends value as fuel, is attained by the bluewood of Texas.

### Traction Engines.

There are many reasons for believing that in the future there will be many more traction engines used on the level lands of our great valleys. There has been a steady increase in the employment of them as motive power for thrashing and for hauling heavy loads of grain along the roadways, but the increase has been very slow. It is quite possible that this has been in part owing to the character of the motors heretofore offered here, and that improved machines may be found more available. The subject is one of considerable interest, and we are always glad to give our readers any information on the subject which may come to our knowledge. Our attention has been drawn to a new style of traction engine brought out by one of the most enterprising and best-known Eastern manufacturing firms, the J. I. Case Threshing Machine Co., of Wisconsin, and of which a supply has just been imported by their California agent, Mr. Arthur W. Bull, of 123 California street, S. F. The engraving on this page shows their new traction engine, design of 1886. The design was especially made to give the purchaser his choice between a traction engine with a straw-burning attachment or as a plain traction engine with chain self-steering gear. The engraving shows the engine with the straw-burning attachment. Mr. Bull's catalogue shows also the engine without this and with the chain gear. By the use of the chain running along the boiler to the back end, then connecting to the large and strong steel cross-shaft, and that with the main driving gear, the boiler shell or waist is left free from all brackets and castings, allowing the placing of the straw-burning attachment in position without interference of any gearing or bracket. Several of these engines sold last season as regular tractions gave such satisfaction that the manufacturers decided to furnish them either as plain tractions with self-steering gear, or as tractions with the patent straw-burning attachment without steering gear. The steering gear cannot be supplied where the attachment is wanted. The engine is precisely the same as the J. I. Case geared engine, and they furnish 8, 10, 12 and 14-horse tractions, either geared or chain. They are adapted for thrashing, steam plowing or road purposes. In this connection it has come to our knowledge that a traction engine was used to propel a combined harvester and thrasher for a period of 55 days in Tulare county with signal success this season.

It is not necessary for us to enter minutely into the construction of the engines. The engraving shows it to be as graceful in design as is consistent with strength. Those who may be interested in such machines and desire full information of what is claimed as especial advantages in the design and construction, can obtain it from Mr. Bull's catalogue. We are informed that a number of the new design have been recently sold in this State, and the experience of those who have them can, no doubt, be had. We understand the J. I. Case T. M. Co. propose to make a specialty of traction engines hereafter, and their reputation for their machinery hitherto certainly entitles them to attention in this field.

THE CONGO COUNTRY.—Notwithstanding the glowing accounts which have been published in regard to the splendid opportunities for business, for Europeans, which are presented in the newly-discovered Congo country, Africa, M. de Brazza, the explorer, says that after nine years' experience he has come to the conclusion that the West African territory and the basin of the Congo must be left to be developed by the original inhabitants.



## FRUIT MARKETING.

### California Fruit at the East—No. 5.

More About the Auction Plan—Evils of the Present Methods—Necessity for Concert of Action between Shippers and Growers.

[Our Special Correspondence.]

In his last letter your correspondent advocated the plan of selling California fruits in the Eastern cities by an auction system, and endeavored to show that such a method would solve existing difficulties and insure California growers a fair price and an extended market. Since that writing he has been in Philadelphia, Milwaukee, St. Paul, Minneapolis, St. Louis, Kansas City, Omaha and Denver, stopping again on his way westward at Washington and Chicago. In all these cities he took occasion to submit this plan to the judgment of as many wholesale and retail fruit dealers as time would permit him to interview. He found many who at first did not consider the plan a good one, and who predicted failure if it should be tried. A free discussion, however, of the merits of the system would, as a rule, bring about a decided change of opinion, and many of those who least favored the idea at its first mention are now among its strongest advocates.

#### An Unprofitable Shipment.

The following case in point will serve as an illustration: Among those who at first entertained with little favor the idea of selling California fruits at auction was the well-known firm of Quackenboss & Harlow, who are the St. Paul, Minn., agents for Porter Bros. Co., and are among the largest fruit dealers in the Northwest. A day before the arrival of your correspondent at St. Paul, this firm sold 400 single crates of San Jose grapes at 50 cents per crate. These grapes arrived in a \$600-rate passenger car and were due in St. Paul Friday morning; but, owing to some delays in transit, the car did not reach its destination until late Saturday afternoon. The grapes therefore could not be offered until the following Monday morning. By that time they were in poor condition. The best of them sold at \$1 a crate. Some were sold at 75 cents, and by Thursday 400 single crates were yet on hand, which were gladly sold at 50 cents a crate. The account of this unfortunate San Jose grower will therefore stand as follows:

Freight on 400 crates @ \$600 $\frac{1}{2}$ car.	\$300 00
Cost of crates and baskets at 19c.	76 00
Picking and packing (estimated at 6c per crate).	24 00—400 00
Sales—400 crates @ 50c each	200 00
Less 10% commission	20 00—180 00
Loss	\$220 00

So that in this one transaction the grower, in addition to the total loss of four tons of grapes which should be worth at least \$40 per ton, is out of pocket for freight, crates and labor \$220, making a total loss of \$380. Analyzing the case, we find that this great loss on comparatively so small a transaction was brought about by the four following causes:

First—The highly excessive freight charges of \$600 per car.

Second—The delay in transit of nearly two days.

Third—The fact that the fruit was of an inferior quality; and

Fourth—Because the present method of selling perishable California fruits is entirely too slow.

These causes can and should be remedied. If a proper quality of fruit had been sent, with a freight rate of \$300 per car, with better railroad time and under a system whereby California fruits would be disposed of within a few hours after arrival, the San Jose fruit-grower's statement would have stood as follows:

Freight on 400 crates at \$300 per car	\$150 00
Cost of crates and baskets @ 19c	76 00
Picking and packing, estimated at 6c $\frac{1}{2}$ crate	24 00—250 00
Sales 400 crates at \$1 50 (a low estimate)	600 00
Less 10 per cent commission	60 00—540 00

Net returns for four tons of grapes on vine \$290 00

#### Another Unfortunate Instance.

The experience of this unfortunate San Jose grower was not much worse than that of the firm of which your correspondent is a member. In Kansas City the writer found that a day or two before his arrival, nearly 100 single crates of his grapes had been sold at 50 cents a crate.

"Were the grapes of an inferior quality?" was asked of the commission-man.

"No, on the contrary they were above the average."

"Did they arrive in poor condition?"

"No, they reached us in excellent condition."

"Then how do you explain their being sold for but 50 cents, which involves a loss of about 90 cents a crate?"

"Well, I will tell you how they came to be sold at 50 cents a crate. About two weeks ago

the market looked bare and clean, and we believed we could dispose of a carload of fruit to advantage. Accordingly, we quietly telegraphed our connections to that effect, but it would appear that our neighbors thought just as we did and also wired for carloads each, and as a consequence, instead of Kansas City receiving one carload that week it received several; the market was thus glutted, and after carrying your fruit for a week we were glad to get 50 cents a crate for it."

"How can you prevent a repetition of such an occurrence?"

"Aye, there's the rub; we don't know how to prevent it; under existing conditions, this same thing is likely to happen any day in any week of the season."

#### Arguing the Auction.

But to return to our interview with Quackenboss & Harlow, of St. Paul.

"No, sir, I do not think the plan of selling California fruits by auction a good one, and if tried I predict a total failure," said a member of that firm to your correspondent.

"But why should the plan of selling by auction not work as well with California fruits as it has for many years past with Mediterranean fruits?"

"Because Mediterranean fruits are not so perishable. Malaga grapes, for instance, are so packed that they will keep for several months."

"That is quite true, but is it not also true that the very fact of California fruits being more perishable is all the stronger reason why they should be speedily sold, instead of being held for an indefinite period in the hands of the commission-man, awaiting private sale? Besides, if a concert of action is established between California growers and shippers, the supply can be so regulated as not to exceed the demand. The aggregate daily demand for all Eastern distributing points can easily be gauged, and carloads containing a 24-hour, or, at most, a 48 hour supply, only can be dispatched from the central shipping point in California, and as all this fruit, by the auction system, would positively be sold on the day of arrival, there would be no decaying fruit left on hand, as now, to depress prices of new arrivals on following days."

"That is all very well, if you can get the buyers to attend your auctions, but, you see, the buyers have for years been educated to look for foreign fruits at auction, hence they do not now expect, in fact, cannot buy them from first hands anywhere else; whereas, in California fruits it is different. They have always been sold on commission and at private sale, and it would be a long time before the trade would become reconciled to the idea of buying California fruits at auction. In the meanwhile such fruits as would be offered in that way would, in the absence of buyers, be slaughtered."

"If buyers have been educated to buy foreign fruits at auction, why may they not be educated to buy California fruits in the same way? If there must be a beginning, why not have that beginning as soon as possible? There certainly was a period when foreign fruits were offered at auction for the first time, and it would appear that the foreign growers and shippers have happily outlived that 'first time,' and for many years since have enjoyed a highly remunerative market. Since they have pioneered the way and have demonstrated that selling by auction is absolutely the most equitable and profitable manner of marketing perishable fruits, why not profit by their wisdom and experience? You say, 'it would take a long time before the trade would become reconciled to the idea of buying California fruits at auction.' If only a portion of the California fruits sent East should be sold by auction and the remainder offered at private sale, it must be admitted that the plan would be crippled and could not be made entirely successful. But what if California growers and shippers all agree that their fruits shall be sold only by auction—would not all buyers who must have California fruits to supply their trade be obliged to attend these auction sales or pay a profit to those who do attend, or go without California fruits, and thus lose a valuable trade which must certainly drift into the hands of more enterprising competitors? If there was such an auction sale to-morrow and you needed California fruits and could get them in no other way, do you pretend to say you would keep away, knowing your neighbor would be present and knowing that he would supply the trade you would be obliged to turn away empty-handed from your doors?"

"Well, I must admit that if I needed California fruits, as I certainly would, having established a large trade on them, and could get them in no other way, I should, of course, attend such auction sales. But the question is: Can you get the California growers and shippers to agree to sell their fruits in that way, and would they be willing to take the risk of having their fruit slaughtered?"

"Would the risk be as great as under the present system? Let us imagine that the plan of selling all California fruits by auction was now in operation; that the California growers and shippers had united, were enjoying a \$300-rate with fewer cars to the train than now, and that their trains were running on passenger schedule instead of the present precarious and uncertain time of transit. Under these circumstances the 400 crates of the San Jose grower which you sold but yesterday for 50 cents a crate would have reached St. Paul Friday morn-

ing in place of late Saturday afternoon, with freight charges at 37½ cents instead of 75 cents per crate. Granting even that, from unavoidable causes, the train was delayed in transit and failed to reach its destination earlier than Saturday evening, thus postponing the sale until Monday morning, is it not reasonable to suppose, with the fruit-buyers from 100 miles or more centered in your store on that Monday morning, and with the natural business competition and jealousies usually existing, that these 400 crates would have sold for much more than 50 cents a crate? True, that even as early as Monday morning this lot of grapes was in poor condition, but it certainly was in better condition than on the following Thursday, and for that reason alone would certainly have realized perhaps double the amount you now hold to the credit of the grower. As for the question whether growers and shippers will agree to sell their fruits at auction, why should they not? What protection have they now, and how could the conditions be worse than at present? Has it not been demonstrated that with two factions in the field, viz.: the growers and the shippers, the plan of shipping 15-carload lots at a time is highly disastrous? And as a result has not the Fruit Union discontinued dispatching trains from Sept. 13th up to date, and have they not been sending from two to three carloads daily at passenger rates? Furthermore, by the present system is not the vast market east of Chicago choked and limited, and has not California fruit in and west of Chicago been brought into fierce competition with itself while yet the property of growers and shippers? Whereas, if the proposed plan is put into operation, there is a strong probability that the combined influence of shippers and growers will secure better railroad terms and improved transportation facilities; will thoroughly develop the vast and almost untouched market east of Chicago; will create the strongest competition among the buyers, instead of as now among the sellers, and by the holding of prompt auction sales immediately after the arrival of the fruit will insure a minimum loss of fruit by decay. Hence, when there is so much to gain and so little to lose, why should growers or shippers hesitate to unite and agree upon a uniform method of selling all their fruits by auction?"

"All this is admittedly true, but may not the fear of auction-buyers combining, in order to depress prices and to secure California fruits at their own figures, keep shippers and growers from offering their fruits at auction?"

"Though it, no doubt, has been frequently attempted, such a thing as a combination, on the part of auction-buyers, has thus far proven impossible on Mediterranean fruits and would prove equally impossible if attempted against California fruits. Auction fruit sales are attended by from 50 to 300 buyers, each equally anxious to secure the first choice. This fact, together with the natural competition among city buyers and the further competition between city and out-of-town buyers, make the chances of combination very slender, if not impossible."

At the close of this interview both members of the firm of Quackenboss & Harlow frankly admitted that their opinions had undergone a change, and they had come to the conclusion that selling California fruits by auction is the only proper way to market such products in the East.

#### Mr. Porter's Views.

Mr. Washington Porter, of Porter Bros. Co., of Chicago, after thoroughly discussing the idea, spoke in substance as follows:

"The plan of selling California fruits by auction ought to succeed, and is worthy a fair trial, provided: First, that a concert of action between growers and shippers is secured and both agree to sell only by auction; second, that the California management so successfully gauge this market that the supplies of fruit forwarded to the various distributing points do not exceed the demand. But I should advise the growers, in any event, not to burn their bridge behind them. In other words, if they adopt the auction plan, let them be prepared with some other method to put into prompt operation should this one fail."

#### Other Favorable Points.

The policy that may be pursued under the plan of selling by auction is such that shippers and growers may enjoy the widest possible latitude consistent with "regulated distribution." The prospective united organization of shippers and growers may, through its directory, select as many distributing points as in their judgment will thoroughly cover the Eastern territory. Agents can be appointed at each of these points, with instructions that all fruit consigned to them shall be sold only by public auction.

Where growers or shippers have no preference, the general manager stationed at the California shipping point shall use his best judgment and forward shipments to the most desirable point, consigning them to the agent of the Union at that place. But all growers or shippers should be permitted, not alone to name shipping points but also their own consignees, and it should be the duty of the general manager to carry out such wishes, provided the shipments to certain points do not exceed the demand. To illustrate: If it should be found that the city of Denver, for instance, can use to advantage but one carload a day, it should be the duty of the manager to so regulate shipments that not to exceed that quantity

is forwarded to that point within 24 hours. Those having a preference for Denver as a market and making the earliest application should receive the first preference for space in the Denver car, and so on, until the car is filled, when further applications for space for that point and on that day of shipment must be denied. It may frequently happen that a carload of fruit shipped to any one point may contain a consignment to the agent of the Fruit Union and several other consignments to various commission houses in the same place. These various consignees should place their letters of advice in the hands of some one auctioneer who is to prepare a complete catalogue, giving the brands, quantities, varieties, and names of consignees. The entire carload is to be sold at the same hour and place; the auctioneer's charges to be paid by the commission house out of his commission.

As a rule, it will be found that nearly all these Eastern consignees, including the Fruit Union agents, have a town and country trade of their own to supply. Accordingly, these very consignees will also become bidders for the very fruits which by them are placed at auction, and will purchase, as jobbers, such fruits as their orders may call for. They will thus occupy the two-fold positions of commission-men and jobbers, earning a commission as the one and a profit as the other, thus affording them an opportunity to secure by far more satisfactory earnings than they now enjoy. And thus the plan is sure to meet, with their approval and encouragement, which, in itself, is an important feature, as the assistance of the Eastern commission-men and jobbers is very material in the development of a market for our fruits in the East, and thus, also, will a large and influential number of auction bidders be at once secured, whose presence and whose interest in the success of these auction sales will be a fair guarantee that the fruits will bring market prices.

By the plan now in operation the Eastern commission-men labor under serious disadvantages, frequently receiving, without having been consulted, much more of a kind and variety of fruit than they can dispose of. This very fact has been one of the chief causes for so many ruinous returns. By the auction plan, should any Eastern consignee receive a carload of a certain fruit, out of which he could use but a fraction, he would buy at auction only as much of this carload as he needed, and the remainder would be sold to such other bidders as could make use of it.

The plan of "regulated distribution," if intelligently carried out, would afford shippers and growers almost a guarantee that their fruits were not being shipped to an overloaded market—a point that thus far has never been possible to guard against.

Still another favorable point might be mentioned in connection with auction sales. Each shipper and grower would receive with his returns a copy of the printed catalogue containing the prices realized for all fruits offered at that sale. This in itself would be a source of satisfaction, if not of valuable information, to all parties concerned at this end of the line.

#### General Opinion on the Proposition.

As before mentioned, your correspondent has submitted the plan set forth to many of the brightest, sharpest and most experienced wholesale and retail fruit dealers in Chicago, Baltimore, Washington, New York, Boston, Philadelphia, Milwaukee, St. Paul, Minneapolis, St. Louis, Kansas City, Omaha and Denver. Thus far he has met but one wholesale dealer who, after the matter was thoroughly discussed, held to his opinion that the plan could not be made a success. This gentleman, however, was unable, either by proof or reasoning, to point out why the plan would not succeed, no doubt expecting his mere assertion, that the plan would fail, ought of itself to be convincing.

#### Discussion Desired.

It is earnestly hoped that the California fruit-growers and shippers will, at the State Convention which is to meet in Sacramento in November, thoroughly discuss this and such other plans as may be offered to remedy existing serious evils. The three points to be gained are low freights, quick railroad time and a thoroughly regulated distribution of our fruits throughout the entire East.

The writer firmly believes that the plan he advocates in these letters not alone embraces these points, but also provides a practicable solution. If, in the plan proposed, there be any weak or fatal spots, let those who may discern them promptly, point them out, and if they cannot be strengthened or overcome, the writer will hold himself in readiness to support and advocate any better plan that others may be enabled to present.

H. WEINSTOCK.

Sacramento, Oct. 25th.

"THE RESOURCES OF SAN JOAQUIN COUNTY" is the title of a pamphlet of 50 pages and upward, edited by W. R. Ellis, Stockton. It treats of the soils and climate, wells and waters, farm and orchard industries, manufacturing and commercial interests and towns and villages of the county, and does it in a bright, easy style, well fitted to catch and hold the attention of the home-seeking stranger, who is particularly addressed. The work is illustrated with two maps—one colored to show the character of the lands, as adobe, sandy loam, etc., and cuts of the handsome Stockton courthouse and of San Joaquin county's exhibit at the State Fair, in 1884.



## Santa Barbara Fair.

[Written for the RURAL PRESS by Mrs. J. HILTON.]

The Fifth Annual Fair, held at Santa Barbara Oct. 5th to 9th, had an unusual attraction for the people of the county, namely, the new fair grounds—land reclaimed from the ocean's overflow. Once it was a very unsightly place, devoted principally to tadpoles, mudhens and mosquitoes. Now a fine race-track, well fenced, and a beautiful pavilion in the shape of a Greek cross, greet the eye. Thirty men were employed the last month to finish the work in time, and the last nails were driven the second day of the fair. When the building is painted it will be not only ornamental, but useful to the Barbarens for their rose and horticultural and other fairs for which Santa Barbara is so noted. Entering the main door, the first thing to catch the eye is the coloring. The mind cannot grasp anything else at first, there is such a profusion of everything. Going to the opposite side of the building, we ascended the raised platform to get a good view of the whole. After enjoying that awhile, we turned to inspect the contents of the platform. On a long table we found Lompoc's exhibit of fruits and vegetables, presided over by R. Machin, of that place. He had 46 varieties of fruit, mostly apples. W. W. Broughton also had 46 kinds, and several others had from 5 to 26. Mr. Schuyler had a Peerless potato weighing 6 pounds 6 ounces. Larelle & Robinson's exhibit of honey was fine, as also was Sudden's and Slaughter's display of grain. On another table were fruits, grains and wines of Montecito and Santa Barbara. In the front were pianos, some entirely open, showing their fine mechanism and durability. In the center of the room was a large rock mound, with potted plants, curios, pretty and scarce, owned by Dr. Yates. On one side was an ice-cream booth, beautifully decorated with fan palms and pampas plumes. A notice over a door on the opposite side told that the W. C. T. U. ladies had refreshments for sale, and the way they had to work to feed the hungry crowd proved conclusively that they were reaping quite a harvest. Nothing stronger than lemonade was sold on the grounds, and so everything was pleasant. As we wandered about we saw exhibits of toilet articles by A. Ruiz; boots and shoes by Bell & Hunt; Boeseke & Edwards, fine display of hardware, silverware, and quaint and lovely lamps; the handsome leather-work shown by Loomis; fine harness by Mr. Rundell; photographs, paintings and medallions, Japanese articles, rich-looking Jersey butter, Indian idols and curios of all descriptions, stuffed birds and snake-skins, goldfish, a live parrot, who said he lived at the end of the wharf—in short, everything that goes to make up a grand exhibit. Almost forgetting the wonderful fancy-work and grand paintings, we went and paid them a last look; then out to see the monstrous vegetables—squashes, 240 pounds; melons, 49 and 51; beets as large as three usually grown, even here in California; cornstalks, 16 feet high, with enormous ears; oats, 8 and 9 feet tall; wheat and barley, 5 and 6 feet high, with large fine kernels in the heads; Guinea pigs, pigeons, and a few coops of chickens. Some grand Plymouth Rocks, owned by Mrs. C. K. Lawton, drew all eyes. Then the pigs, sheep, goats, cows, oxen and horses! One would have to be a very good judge to know to whom to give the premiums; they were all so nice. I did not think much of the races on account of the pool selling and betting, and until that is done away with they will not be a credit to the town or association. Good, honest racing to show off stock is interesting to most people, but any other kind is bad and always will be.

The delightful music given by the band was well appreciated; and of course the baby show drew a crowd—in fact there was such a crowd every day that the association felt warranted in holding the fair one day more than was advertised.

Los Alamos, Santa Barbara Co.

## Some Farther Account.

The Santa Barbara Agricultural Society was formed in September, 1881, and a few weeks afterward held a fair in Lobero's theater. Citizens gave a ready and generous support to the undertaking, the horticultural society joined with them in the effort, and altogether they achieved a measure of success which increased with every annual display until that of October, 1884, surpassing all that had gone before, showed that the farmers had become alive to the necessity of raising the very best of everything, and that a spirit of emulation had been aroused which might lead to the very best results. Especially was this manifest in the increase of fine breeds of horses and cattle.

By this time the need of more room for exhibits, both outdoors and under cover, had become so pressing that the directors realized something must be done at once toward getting a park, race-course and building of their own, if the fairs were to continue. In brief, the issue was the acquisition of ample grounds at the estero, the construction of a track and the erection of a roomy, handsome pavilion which was duly opened on the 5th instant, with an apt address by Capt. C. P. Low, president of the society.

The building is in the shape of a St. Andrew's cross, the extremity of each arm forming

a large alcove and the central floor being an octagon, with entrances on three sides, between the alcoves, and on the fourth an elevated platform for speakers, musicians, etc. All available space was taken, and much more could have been filled, the management having been so kind to early comers that they had nothing left for later applicants.

From the long list of entries published we cull some of the more salient:

Lompoc fruit was varied and abundant. R. Machin's display (mentioned above by our special correspondent) included 25 varieties of apples, beside pears, quinces, peaches, Japanese persimmons, English Medlars, Muscat and Seedless Sultan grapes and almonds, and bottles of Versailles currants, Houghton seedling gooseberries, Loquats, Sicily lemons and pomegranates.

Robert Lyon, of Ventura, showed 20 varieties of apples, 2 plates of handsome lemons, 2 of oranges on the stem, 3 of pears.

Geo. Williams had 21 varieties of grapes and 12 plates of apples, beside figs, quinces, pears, etc.

Stephen Rutherford, of Goleta, showed a strange freak of nature in the shape of walnuts grown in clusters, like grapes. His crop was enormous this year.

Hayne Bros. & D'Urban made a notable display from orchards and vineyards in Santa Ynez valley. It embraced Muscat, Riparia, Berger, Grenache, and Folle Blanche grapes from vines only 3 years old; 8 varieties of apples, 2 of pears, and a heavy-laden branch of St. Michael's oranges, grown without irrigation.

M. S. Dimmick, of Carpinteria, had 26 varieties of apples (one 14½ inches in circumference), and 10 of pears, beside plates of peaches, quinces, lemons, oranges and limes. E. H. Pierce had 20-odd varieties of apples, several plates of peaches, evaporated fruits, walnuts and some of the largest ears of corn at the fair. O. N. Cadwell, 20 varieties of grafted and 26 of seedling apples, 9 varieties of grafted pears and 4 of seedlings, 7 of Japanese persimmons, and sundry plates of raspberries, strawberries, quinces, lemons and oranges.

H. Langman, Patterson's ranch, Goleta, showed 6 squashes weighing from 200 to 270 pounds each, the largest ever exhibited in the county.

P. O. Higgins, Carpinteria, had a very large display, comprising 12 varieties of Irish potatoes, 60 varieties of wheat, 20 of oats, 30 of barley, 7 of spelt, 12 of corn, and several beets planted in May, averaging 50 pounds each, grown without irrigation.

Melons, sweet potatoes, peanuts, broomcorn, evergreen millet and Italian rye-grass were also represented.

In the center, from a base of rocks, rose a pyramid of choice plants, contributed by Dr. Yates, including Mexican and Florida pine-apples in fruit, graceful ferns from the South seas, and other treasures of his conservatory.

W. A. & T. S. Hawley's display of Schuttler wagons, plows, mowers, windmills, fanmills and agricultural implements was the largest exhibit of the kind ever made in Santa Barbara.

The weather was delightful, and the races and procession were enjoyed by throngs of visitors. Says the *Independent*: "We have seldom seen so beautiful a sight as this stock parade. We counted 92 horses and mules, among which were a number of splendid animals." Foremost of the cattle were F. T. Underhill's Holsteins from the Ontare ranch—3 bulls, 11 cows and 9 calves, all beauties. Among them were Aggie Kathleen, imported in '83, six years old, with a milk record of 56 pounds 4 ounces in one day and 8432 pounds in six months; Ontare Chief, bull calf, born on the ranch in April, '85; and Strathmore, imported, four years old, weighs 2530 pounds, took first prize and sweepstakes at State Fair last year.

Jerseys were shown by E. J. Packard, A. C. J. Wilson, O. K. Lawton and others; and there were a few scattering Durhams.

Several pens of Poland China, Essex and Berkshire swine were on exhibition, while coops of Plymouth Rock, Houdans, Langshans, Light Brahmas and Brown Leghorns represented the cacklers.

One of the entertainments of the week was a concert given in the Pavilion by the W. C. T. U.

HONORS TO CALIFORNIA BOTANISTS.—Prof. and Mrs. J. G. Lemmon, who toiled so devotedly to have the products and capabilities of the Pacific Coast worthily represented at New Orleans during the winter of 1884-85, have lately received from the management of the World's Exposition, held then and there, six certificates of award in the "First Degree of Merit," as follows:

1. Largest and best exhibit flora of North America, first premium, \$50.
2. Largest and best exhibit flora of the Pacific Slope, first premium, \$50.
3. Largest and best exhibit forage grasses, sedge and other plants, first premium, \$30.
4. Largest and best exhibit new and rare ferns and flowering plants, first premium, \$30.
5. Largest and best exhibit paintings of rare and beautiful plants, made in the field with water-colors, first premium, \$30 (awarded to Mrs. Lemmon).
6. Largest and best exhibit indigenous (Arizona) potatoes, represented by botanical specimens, live tubers and water-color paintings, first premium, \$10.

The fact that our State was but one among 22 competitors makes these awards the more important and gratifying.

An ocean steamer left Boston, the other day, for Liverpool with 10,000 barrels of apples.

## Nevada State Fair.

In her State Fair, held at Reno, the 4th to 9th, our sister Nevada seems to have scored a great success, and the *Journal*, the *Gazette* and the *Stockman* quire in general satisfaction.

In culling and compiling from their ample notes, we find need of considerable firmness in saying "No!"

The town was crowded with visitors, many of whom had trouble in getting a place to sleep.

At the pavilion the merchants were well represented, and gained much credit for their exhibits. The handiwork of ladies also was there in profusion, and no department in the building proved more attractive than that wherein the products of their dextrous fingers were displayed.

But to come to those things which most concern farmers and horticulturists, the output of fruits on the lower floor was deemed the very best ever made in the State. The exhibits, though of the best quality, were not specially selected for exhibition purposes, but placed on view just as taken from the trees. Ross Lewers showed 30 varieties of apples. Go where one may, he can find no more beautiful, perfect, fine-textured and palatable apples than this State produces; she can challenge the productions of any other. And her citizens think the same is true of her pears, peaches, grapes, plums and all classes of small fruit.

Artistically arranged in the form of a pyramid, were innumerable glass jars containing nearly every fruit grown on the coast, all preserved by Mrs. Theodore Winters.

There were only a few specimens of corn, pumpkins, cabbages, beets, onions, eggs, onions, egg plants, tomatoes and hops, but these were of excellent quality. A. S. Barnes, of the Golden Eagle hotel, received a premium for the best specimen of corn. It was raised in the garden adjoining the hotel on Sierra street, and had no more than ordinary care.

Hon. Theo. Winters had an exhibit of cheese from his Washoe valley dairy, which was pronounced by good judges equal to the product of any dairy on the coast. There were, however, only three exhibits of butter, and this in a country where butter-making is almost a specialty. B. C. Pratt showed the Stoddard churn, milk-testers, butter-workers, and many novel articles of practical utility to the dairyman.

A. E. Moore's and Orville Sessions' fine displays of comb and extracted honey testified that no locality excels this in the delicacy of its bee-product. The sole occasion for regret appears to have been the lack of any showing of ores adequate to illustrating Nevada's mineral wealth.

## The Display of Live-stock.

Though not so large as had been expected, was enough to show the progress made in the chief industry of Nevada. The parade at the track the third day comprised 26 horses, five double teams, nine roadsters, 20 Durhams, five Herefords, 21 Polled Angus, seven Holsteins and 16 Jerseys—A. Smith, of Redwood City, heading the line with his 5-year-old Shorthorn bull, Pharaoh. E. W. Crutcher, president of the Nevada Live-stock Association, had a herd of seven Shorthorns and one half-breed Hereford bull calf, recent importations from St. Joseph, Mo. Stinson & Marsh, of Ft. Churchill, showed eight Shorthorns, which attracted great attention. The animals were all descendants of the famous Indian Princess 17th, who was brought from Kentucky in 1872, and at the age of 15 numbers 125 descendants.

A. A. Longley had two cows with calves from the farm of Col. Younger, one of which took rank as the best cow of any breed.

H. F. Hapgood, agent for A. B. Matthews, of Kansas City, exhibited 16 Galloways and several Angus cattle; the former descended in a direct line from Galloway King, one of the noblest sires that ever ranged the hills of Scotland, for whom \$2000 was paid when he was only seven months old. In the same class Leonard Bros. showed their now well-known herd of splendid Galloways.

Sam. Davis, of the Carson Appeal, had on exhibition four beautiful Holsteins, which were admired on every hand, one expert giving it as his opinion that no animals on the coast could show a more thoroughly developed "milk mirror." The Holsteins and Jerseys of M. Gulling, the Reno breeder, received a great deal of notice.

T. P. A. Williams, of Boyne county, Mo., had seven Herefords from the breeding farm of James Kay, England, which were splendid specimens. Poverty, a direct descendant of Lord Wilton, one of the greatest prize-winners England had for many years, is a superb animal, being but four years old, and weighing 2500 pounds when in condition.

C. C. Stevenson's Jersey bull, Statesman, and herd of Jerseys were among the prize-winners.

T. G. Herman, of Wadsworth, who showed several head of graded stock, took a premium for the best one-year-old bull.

The display of stallions, roadsters, brood mares, horses of all work and teams was large and highly satisfactory to lovers of the horse; but as to them, as well as the sheep, goats, pigs and poultry, we must content ourselves with printing the premium list.


One feature of the speed program was an Indian pony race, contested by 21 Indians arrayed

in their best finery and mounted on such animals as are possessed by the Piutes. This proved very amusing. The winner's time was 3:15.


Several ladies took part in an equestrian tournament, and in addition the Kemler sisters gave an exhibition of fancy riding, jumping hurdles, etc., which was heartily applauded.



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knife may  
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serious cut.



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N. B.—Upon timely notice, intending purchasers will be taken from Cottonwood to the land and returned free.

### A NEW COLONY

On the new extension of Southern Pacific Railroads, on the lands belonging to R. T. BUELL, Esq., near Los Alamos, Santa Barbara county, Cal. Parties desiring to visit the property now, can go via San Luis Obispo and take the cars from thence to Los Alamos, thence by stage to the Colony. **20,000** acres of the best lands in California, subdivided into 20, 40 and 80-acre farms; \$20 to \$30 per acre. **INTERNATIONAL IMMIGRANT UNION, 401 California St., San Francisco.**

### \$10.00 PER ACRE.

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Consist of stock in the canals and entitle the owner to one-eighth of 2 feet 6 inches of water, being  $2\frac{1}{2}$  times the usual amount supplied to colonies. The owner of the water stock has a pro rata vote in the management of the canal, and the expense per year is about \$3.50 on a 20-acre lot.

A school-house is to be erected on the land this year, and it has two within two miles of it at present. Fresno, Selma, Fowler and Kingsburg are good local markets for produce. Opportunities to labor with or without terms are abundant, and land can be rented for wheat-growing in the neighborhood. The health of this region is perfection, and, in common with the plains generally, is an excellent sanitarium for persons affected with pulmonary and rheumatic complaints.

The best raisins in the world, wines unsurpassed, the finest grapes, the best peaches, apricots, plums, prunes, nectarines, figs and olives, and in fact all the choicest fruits and vegetables of the world are grown in this favored region. Raisin vines three to six years old yield per acre from four to seven tons, and increase to eleven. Wine grapes three to six years old yield from four to eleven tons per acre. Alfalfa is cut from four to six times a year, and yields from one to two tons per acre at each cutting.

Two good cows and 100 hens furnish more than half the living for a family, and can be kept, with a team, on three acres of alfalfa, the growth of which is incredible in this favorable combination of soil and climate.

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ISAAC GOLDTHRE, Vice-Pres't.  
R. E. JACK, Treasurer.  
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Secretary and Manager.

### THE PASO ROBLES, SANTA YSABEL, and EUREKA RANCHES,

Recently purchased by the West Coast Land Company, are now offered for sale in subdivisions.

This immense body of land, including 12,000 acres unsold of the Huerfano ranch, belonging to C. H. Phillips, comprises 64,000 acres of rich, virgin soil. It lies in a compact body, in the center of San Luis Obispo county, and is within from 9 to 20 miles of the sea coast. It is covered with white and live oak timber, is one of the most picturesque bodies of land in the State, and requires

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It has an abundance of living water, and where not sufficient for domestic use, good water can be had at a depth of from 10 to 40 feet. It has an average annual rainfall of 21 inches, exceeding by six inches that of Santa Clara county, one of the most prosperous counties in the State.

The extension of the Southern Pacific Railway from Soledad southward traverses these lands for 15 miles throughout their entire length, placing the property within eight hours of San Francisco.

These lands are offered at from \$10 to \$30 an acre, and are all susceptible of the highest cultivation. In salubrity of climate, productiveness of soil and location as to market, they are equal to lands in Los Angeles and other counties, which readily bring from \$100 to \$200 and upward; and as to price and terms, offer the best inducements to those seeking homes on any part of the Pacific Coast. The survey of the

### PASO ROBLES RANCH

Has been completed. The maps and catalogues are now ready, and will be sent free on application.

This ranch, containing 20,400 acres, has been subdivided into 230 lots. It is 12 miles from the sea coast, and is 20 miles north and west from San Luis Obispo city.

This ranch was one of the earliest granted by the Mexican Government and having been held by the same party for over 30 years, has never before been offered for sale. It consists exclusively of land of the choicest character, and is second to none in the State for the production of wheat, wine, fruits, raisins and olives.

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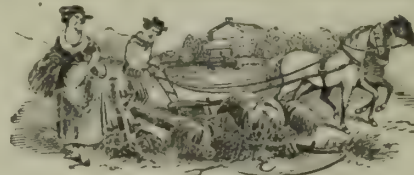
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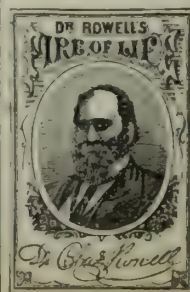
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## THE SIX STATE TICKETS.

Believing that many of our readers will find it convenient to have in tabular form a list of the candidates upon the principal tickets, we present below such a table of the nominees for State offices, to be voted upon Nov. 2d.

OFFICE.	FARMERS' CANDIDATES.	PROHIBITION.	REPUBLICAN.	DEMOCRATIC.	AMERICAN.	UNITED LABOR.
Governor	Joel Russell	Joel Russell	John F. Swift	Washington Bartlett	P. D. Wigginton	Jerome B. Cox
Lieut. Governor	R. W. Waterman	A. D. Boren	R. W. Waterman	Michael F. Tarpey	R. W. Waterman	Horace Bell
Secretary of State	Frank E. Kellogg	Frank E. Kellogg	Walter S. Moore	Wm. C. Hendricks	C. N. Wilson	J. K. Van Sant
Controller	John P. Dunn	J. A. Fairbanks	J. E. Denny	John P. Dunn	J. E. Denny	M. Shea
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2d district	A. Van R. Patterson	Alex. Van R. Patterson	A. Van R. Patterson	Byron Waters	A. Van R. Patterson	Clitus Barbour
3d district	L. W. Simmons	L. W. Simmons	Chas. A. Garter	Thomas L. Thompson	Chas. A. Garter	Philip Cowan
4th district	Marion Biggs	W. O. Clark	J. C. Campbell	Marion Biggs	W. O. Clark	J. P. Cosgrove
5th district	W. W. Smith	W. W. Smith	Jos. McKenna	H. C. McPike	H. C. McPike	P. S. Dorney
6th district	W. W. Morrow	Robert Thompson	W. W. Morrow	Frank McCoppin	W. W. Morrow	A. E. Redstone
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4th district	C. E. Wilcoxon	Chas. E. Green	John Beatty, Jr.	C. E. Wilcoxon	Thomas Bair	S. F. Breed
	M. D. Hamilton	L. B. Hogue	M. D. Hamilton	John T. Gaffey	J. T. Gaffey	

## List of U. S. Patents for Pacific Coast Inventors.

From the official report of U. S. Patents in DEWEY & Co.'s Patent Office Library, 252 Market St., S. F.

Reported by Dewey & Co., Pioneer Patent Solicitors for Pacific States.

FOR WEEK ENDING OCTOBER 19, 1886.

- 351,087.—SPRAYING NOZZLE—John Bean, Los Gatos, Cal.  
 351,088.—SPRAYING PUMP—John Bean, Los Gatos, Cal.  
 351,154.—FLOW—J. A. Bilz, Pleasanton, Cal.  
 351,092.—CLOTH WINDER—A. Brown, Mendocino, Cal.  
 351,309.—PRINTING PRESS GAGE—F. F. Byington, Oakland, Cal.  
 351,102.—PANTS HANGER—A. Flieger, Portland, Or.  
 351,104.—HAY PRESS—E. Gallagher, Bodie, Cal.  
 351,028.—GANG HOE—F. T. Gilbert, Walla Walla, W. T.  
 351,105.—SYRINGE BOTTLE—N. S. Hamlin, Marysville, Cal.  
 351,266.—BLOTTER—A. S. Johnson, Sprague, W. T.  
 351,062.—WASHING MACHINE—B. F. Mathews, San Bernardino, Cal.  
 351,119.—GATE—M. C. Meeker, Occidental, Cal.  
 351,337.—GATE—C. E. Plumley, Byron, Cal.  
 351,209.—TELEPHONE—Paul Seiler, S. F.  
 351,350.—VEHICLE RUNNING GEAR—John Zeek, Canby, Or.

## The Lieutenant-Governorship.

[ADVERTISEMENT.]

M. F. Tarpey, of Alameda, candidate for Lieutenant-Governor, is a man whose interests are all linked closely with those of the Grangers. He is a farmer and stockraiser in Stanislaus and Calaveras counties, and has a promising young vineyard in Fresno county.

Mr. Tarpey was the projector of the Wool-growers' Association of this State, and the formation of that association was largely due to his exertions. He is in no sense a politician, but is a farmer and Granger, and having been nominated for Lieutenant-Governor is worthy of the support of the people.

Should Mr. Tarpey be elected he will be the presiding officer of the Senate, and as such will have the appointing of the committees of that body. It is well known to the farmers of this State that all corporations and monopolies when they desire to raid the public treasury, evade taxation, or block legislation in the interest of the people, aim to accomplish their unholy purpose by first getting control of the committees in the Senate, which they do by the connivance of the Lieutenant-Governor. If the farmers and Grangers of the State will elect Mr. Tarpey Lieutenant-Governor, they can rest assured that their interest and rights will be safe in his hands, and that only true and honest men will be appointed by him, and that he cannot be either cajoled or influenced to act in opposition to the true interests of the people of this State.

An endeavor is being made to defeat Mr. Tarpey by monopoly influence, and all arts are being used to accomplish this purpose, even to the extent of trading votes against him, and the lavish use of money. Let the farmers and Grangers vote in their own interest by voting for Mr. Tarpey, and be not misled by false pretenses and insidious corporate hostility. Mr. Tarpey is a man of the people, true and unfaltering, and should be elected. Be sure his name is upon your ticket.

## An Awful Doom

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## The Question of this Election.

MESSRS. EDITORS:—The question asked most frequently is: "Who is going to be our next Governor?" What difference does it make to us whether Swift or Bartlett is Governor? Are they not both politicians, both lawyers, both retired capitalists, both behind the times as to the progressive needs of the people? The most important question to me, and to every voter in California who loves the State, seeks its welfare, and desires that the rights of the people shall prevail, and that the people and the country shall prosper and progress, is the same that the great railroad corporations are asking—"Who are to be our Railroad Commissioners?" That's the question the railroad bosses are acting up to, quietly and shrewdly, too. Don't you forget it, dear people, on election day; and when you hear men anxiously asking, "Who is going to be Governor?" just set them right on the too times greater question—"Who are going to be our Railroad Commissioners?" Voters! do your whole duty and be happy.

GRANGE VOTER.

## Musical.

[From the Boston Home Journal.]

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LIEUTENANT-GOVERNOR,

R. W. WATERMAN,

OF SAN BERNARDINO.

Secretary of State,

FRANK E. KELLOGG..... Santa Barbara

Controller,

JOHN P. DUNN.....San Francisco

State Treasurer,

H. S. GRAVES.....Sutter

Attorney-General,

WM. H. H. HART.....San Francisco

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DR. G. B. TOLMAN.....San Francisco

Clerk of the Supreme Court,

J. D. SPENCER.....Stanislaus

Associate Justices of the Supreme Court,

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MARION BIGGS.....Butte

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THIRD DISTRICT,

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SECOND DISTRICT,

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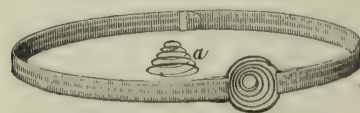
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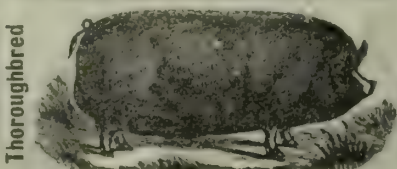
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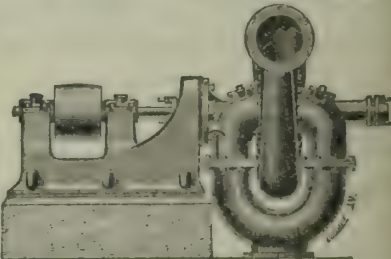
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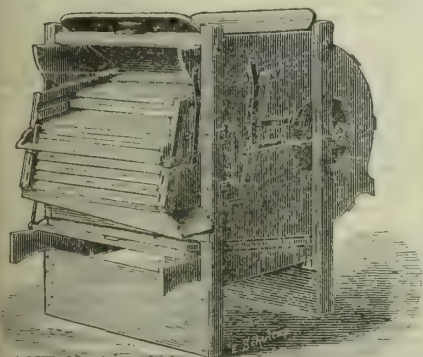
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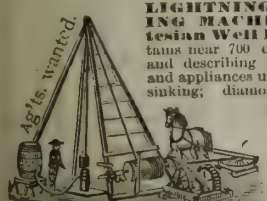


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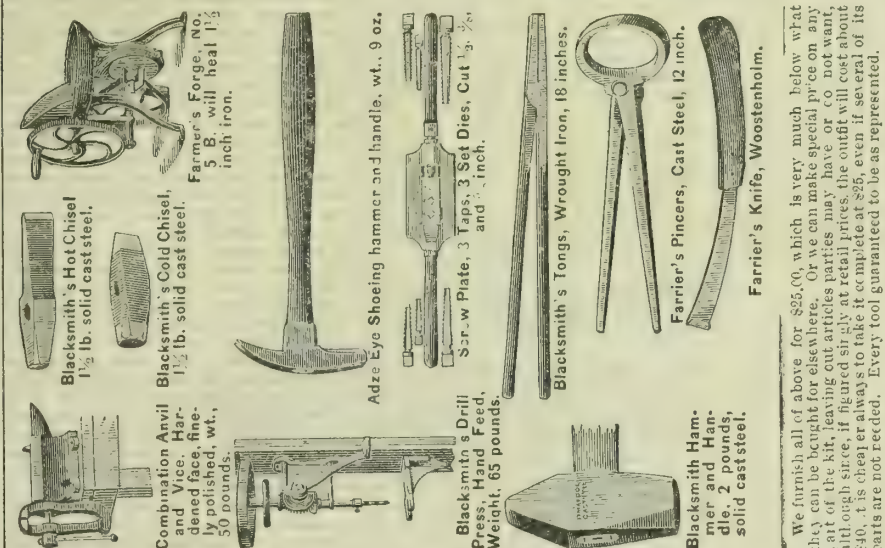
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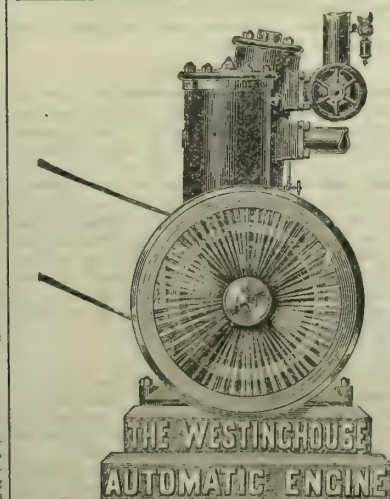
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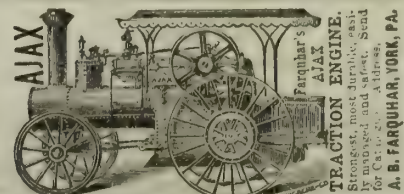
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## S. F. MARKET REPORT

NOTE: Our quotations are for Wednesday, not Saturday, the date the paper bears.

## Weekly Market Review.

## DOMESTIC PRODUCE, ETC.

SAN FRANCISCO, Oct. 27, 1886.

In cereals the market has ruled stronger and higher throughout the week. In vegetables the varieties lessen, and interest flags. In fruits, grapes have commanded the greater attention, but at lower prices. The English wheat market advanced, but declined to-day. The following is to-day's semi-public cable:

LONDON, Oct. 27.—Cargoes off coast, steady. Cargoes on passage and for shipment, easier. California wheat off coast, 34s. California wheat just shipped, 34s 9d. California wheat, nearly due, 34s. English country market, firm. French country market, steady. Liverpool wheat, spot, firm. Liverpool wheat, Cal. 6s 8d to 6s 11d. Weather in England, cold and wet.

## Foreign Review.

LONDON, Oct. 25.—The *Mark Lane Express*, in its review of the British grain trade during the past week, says: The restricted sale of wheat deliveries have caused values to harden. Several provincial markets report an advance in native wheat of 6d@1s. There is an increased inquiry in London for the best samples. The sales of English wheat during the past week were 60,159 quarters, at 29s 9d, against 71,308 quarters, at 31s 6d, during the corresponding period last year. The values of fine barleys are advancing. Beans and peas are steady. The rain has destroyed the Scotch oat and barley crop. Flour is firm, and foreign wheats are steadier. There has been a fractional rise in the best brands. Wheat cargoes on passage have improved in value. There is a demand from France, under the stimulus of the proposed increase in import duties of cargoes. California for French ports are freely taken at 3d@61 advance. At to-day's market, there was an improving feeling. English wheat was not dealt in below 1s advance. Foreign white was 6d dearer. Red American and Russian were firm, at 1s higher. Flour was 6d dearer. Foreign flour, 6d@1s dearer. English malting barleys advanced 2d and seconds 1s. The following is in the Associated Press dispatches to-day:

NEW YORK, Oct. 27.—Labouchere, in his cable letter to the *World*, says: "The wheat harvest in Russia, which is a complete failure this year, should be great news for growers in America."

## English Wheat Markets.

LONDON, Oct. 26.—It can hardly be said that cargoes are easier to buy, but there is no demand at prices asked. The advance seems to have stopped, and the market shows weakness.

## Eastern Wool Markets.

BOSTON, Oct. 24.—During the week there has been a fair demand for wool, and prices are supported about as firmly as for some time past. The sales for the week have been 2,487,700 pounds of all kinds. No further advance has been made this week. It looks as though the high-water mark had been reached. Manufacturers realize the situation and they purchase at full current prices, but many of them are now well stocked. The market, therefore, is more quiet this week, but there is no concession in prices on the part of holders. Many desirable grades have been quiet. The trade in California wool and prices remain the same. We notice the sale of 84,000 pounds spring at 20@24c; 4000 pounds spring at 22½c; 100,000 pounds spring, part at 24c, and 75,000 pounds do on private terms. In Oregon wool there have been sales of only 19,000 pounds Eastern on private terms. The receipts for the week have been 5552 bales domestic, and 1439 bales foreign.

NEW YORK, Oct. 24.—Nothing of special interest has been developed in the market during the past week. Supplies are kept in hand so well that no effort to realize is resorted to. Last week's business has been smaller than usual, recent liberal sales having supplied immediate wants. Full former prices are reported, with no apparent weakening up to the close. Among sales were 100,000 pounds Oregon at 24 cents; 85,000 pounds spring California at 21½@25 cents; 100 bales spring California at 21@23 cents; 31,000 pounds scoured do at 48 cents. The Philadelphia market has ruled quiet. Manufacturers in many cases are stocked up, while others are buying in a hand-to-mouth way rather than submit to the extreme views of sellers. Stocks are light and held with confidence, at full rates. Among sales were 20,000 pounds California at 18½ cents; 55,000 pounds California at 19½ cents; 25,000 pounds California at 22 cents; 10,000 pounds Territory fine at 23 cents; 2000 pounds Territory fine at 23½ cents; 5000 pounds Territory heavy fine at 13 cents. The Boston market is less active, with some apparent weakness in wools, which are in ample supply. The threatened lock-out of 59 mills of the National Knit-goods Association, should it take place, must have an effect on wool, much as dealers strive to appear indifferent about it. Among sales were 137,000 pounds Territory at 23@27 cents.

NEW YORK, Oct. 26.—The wool market is quiet, but prices are very steady. Domestic fleeces are quoted at from 30@38c, pulled wools, 14@35c, and Texas, 9@25c.

## New York Wheat Market.

NEW YORK, Oct. 24.—Wheat movements have been moderate, but the market is firm, and prices higher, with stronger foreign market reports. Spot closed 1½@2c higher; futures, 1½@2½c higher for the week.

## New York Hop Market.

NEW YORK, Oct. 24.—Buyers are few and hesitant, while the competition to sell foreign goods is so sharp that values are very unsettled, making it almost impossible to state market values. Goods are "branded" and "sealed" so as to represent almost anything that may be called for, and this adds to other unfavorable influences. The "best Germans" are quoted at 30@32c, while acknowledged poor grades are from 25c down to 20c. Some strictly choice new Pacifics were offered at 30 cents, and a

fine lot as low as 28 cents. In States, nothing new is reported. Coast crop of 1886, prime to choice, 28@30 cents; 1886, fair to good, 25@27 cents; 1885, good to choice, 13@16 cents.

## California Products at the East.

NEW YORK, Oct. 24.—Beans—The market holds up well on choice. California Lima, flat, \$1.85. Canned Goods—Tomatoes, 20 lbs, 75c; 30 lbs, 95c@1.10; gallons, \$2.40@2.60; Lima beans, 2 lbs, \$1.15@1.20; salmon, Columbia river, \$1.55@1.70; Alaska, \$1.45; California canned peaches, \$2.50@2.75; pears, \$2.50@2.75; plums, \$1.80@2; grapes, \$1.80@2; apricots, \$2.10@2.25. Honey—Extracted, 5c. Seeds—California mustard, 4½@5c for future and spot.

## California Fruit at the East.

CHICAGO, Oct. 23.—Receipts of grapes by passenger train have been quite liberal this week, and the market has gained in strength during the same time. The prices in the forepart of the week were somewhat lower. Tokay grapes, which were then selling for \$2.50@2.75 per 40-pound crate, now bring from \$2.75@3.20. Muscats, which then sold for \$2@2.50, now bring \$2.50@2.75. It is thought there will be better prices during the next two weeks, as receipts of home-grown grapes are falling off, and will still continue to decrease, which will naturally cause a better demand for California grapes. Pears are meeting with good demand at \$2.50@3 for fall varieties, and \$3@3.50 for winter. Quinces are dull and the market is overstocked, selling at 90c@1 per box. It is not thought advisable to ship any more quinces to this market this fall. Grapes and pears will, undoubtedly, be in good demand for the rest of the season. Dried fruits remain firm at unchanged prices.

NEW YORK, Oct. 24.—California grapes are a shade firmer, at \$3.50@4.50 for 40-pound crates. There is now a great abundance of grapes in the market. California grapes are more popular than those from Europe, and sell for higher prices, and there is a greater variety of grapes shipped from California. Almost any of these varieties may be bought at retail, from Italian dealers, at 15 cents per pound, and excellent Malagas may be obtained for 10 cents per pound. The domestic grape crop is abundant; pears are also abundant; fine ones, however, are quite scarce. Pleasant eating pears may be bought for \$3 per barrel, while really attractive looking pears of better variety sell for more than that per bushel. It will be several weeks before common pears disappear from the market, and when they are all out there will be only a few of the finer Eastern pears left.

## Local Markets.

BAGS—The market is without essential change; indeed, it can be said that the demand, for the season, is virtually over.

BARLEY—The taking of three vessels for foreign loading has imparted more strength and activity to the market for the better grades. Transactions are reported large for both exporting and consumption. Transactions on Call have been fairly large at firm prices. The following are to-day's transactions: Morning Session: Buyer season—300 tons, \$1.06½; 100, \$1.05½; 500, \$1.07. Seller season—100 tons, 96c. Seller 1886—100 tons, 97c. No. 1 Brewing, buyer season—100 tons, \$1.27; 100, \$1.27½ c. Afternoon Session: Buyer season—100 tons, \$1.07. No. 1 Brewing, buyer season—100 tons, \$1.27½ c.

BEANS—The market is steady and firm, with a slight advance reported for Pinks. Shipments to the East continue fair.

DAIRY PRODUCT—Fancy brands are barely steady, while good to choice grades are weak, dull, and in oversupply. Concessions are necessary to effect sales.

DRIED FRUITS—Prunes and plums continue in oversupply, but apricots are scarce and high. Very few peaches and apples received yet.

EGGS—California eggs continue scarce, with dealers paying an advance on last week's prices for choice to strictly choice. Eastern and also Utah by express are in good supply.

FEED—Hay continues strong for choice grades, owing to limited supplies, but other grades are fairly steady, owing to lighter receipts. Ground barley, bran and middlings are strong and higher, but feed-corn is weaker. The following is the range for hay: Barley, \$8@11; oats, \$9@12; wheat, \$10@14; with something extra selling slightly higher.

HONEY—The market is reported unchanged. Dealers appear to be making more inquiries for the better grades, but, as yet, are not disposed to bid up.

WHEAT—The market for sample parcels has ruled strong, with higher prices obtained from both shippers and millers. Holders are said to have sold quite freely at \$1.40 to \$1.42½ for good to choice white shipping, but as buyers bid 1½ cts lower to-day, no transactions are reported. On Call, the week has witnessed more activity and freer transactions, with an advancing tendency up to Monday, when it shaded off, but to-day options are steady. Buyers seem desirous of keeping options on Call down. The following are today's transactions on Call: Morning Session: Buyer season—500 tons, \$1.44½; 200, \$1.44½; 2300, \$1.44½; 1300, \$1.44½. Buyer 1886—300 tons, \$1.39½; 100, \$1.39½ c. Afternoon Session: Buyer season—600 tons, \$1.44½; 1000, \$1.44½. Buyer 1886—200 tons, \$1.39½; 800, \$1.39½ c.

[COMMUNICATED.]

## Market Information.

## Cereals.

The yield of wheat and corn for each year since 1880 has been as follows:

Years.	Wheat, bu.	Corn, bu.
1881.....	380,280,000	1,194,916,000
1882.....	504,185,470	1,617,025,100
1883.....	421,086,160	1,551,066,805
1884.....	512,763,900	1,795,528,432
1885.....	357,112,000	1,936,176,000

Total, 5 years, 2,175,427,530	8,094,712,427
Average for 5 years....	435,085,506
Yield this year.....	462,500,000
This year's wheat crop is larger than was claimed	

on September 1 last, yet, large as it is, the situation is only slightly changed. This is better illustrated by the following: The exports of wheat, flour included, for the five years ended June 30, 1882, to 1886, were as follows:

Year ended June 30.	Wheat and Flour, bu.
1882.....	118,650,649
1883.....	147,811,316
1884.....	111,534,182
1885.....	128,993,344
1886.....	94,557,149

Total 5 years.....	601,552,640
Average 5 years.....	120,310,528

Best authorities claim that from the season of 1884-85, there was carried into the season of 1885-86 a surplus of 155,000,000 bushels, which, added to last year's crop, gave a total of 512,000,000 bushels. From this, the consumption for seed and food must be deducted, which is placed at 350,000,000 bushels, leaving a surplus of 162,000,000 bushels. Out of this, there was exported 94,500,000 bushels, leaving a carryover of 67,500,000 bushels to go into the present season. Say this year's crop was 462,500,000 bushels, and the carryover 67,500,000 bushels, then we commenced the present season with a supply of 530,000,000 bushels. The consumption (food and seed) is placed, this season, at 355,000,000 bushels, which leaves a surplus of 175,000,000 bushels. Saying that the very small stock of 60,000,000 bushels will be required as a carryover into the season of 1887-88, then there was an available surplus, at the commencement of this season, for export, of 115,000,000 bushels. Of this, there was exported, in the months of July, August and September, 40,934,232 (this includes flour) bushels, leaving on October 1, for export, 74,000,000 bushels, which is less than was exported last season from October 1 to June 30, as the following shows. Last season the exports aggregated 94,557,194 bushels; of this there was exported (flour included) in the months of July, August and September, 18,336,675 bushels. Taking the latter from the aggregated export and we have 76,220,519 bushels, which represents the exports from October 1, 1885, to June 30, 1886. Our advices to October 16 give the exports, so far in the month of October, nearly two and a half times more than the like time in October of last year. At this rate of exporting, the available surplus will be all shipped out of the country before March of next year, which will necessitate drawing on the normal stock. If this should be the case, dealers expect high prices to rule.

Our local wheat market has ruled very strong throughout the week, owing to an advance abroad, but more particularly to a decline in charters and shippers' necessities, causing them to bid up. As usual, the daily papers, so far as known, have willfully misquoted, of course, not in favor of farmers, but of buyers. Sales were made up to \$1.42½ for choice white shipping wheat, and \$1.45 for milling. Fair shipping sold at \$1.37½ to \$1.38½, and good at \$1.40, yet the daily papers were all of 2½ cts less. At this writing, the tonnage loading wheat here and at San Diego has a carrying capacity of 160,000 short tons; the bulk of the wheat required has to be bought before the middle of November.

Owing to the taking of two vessels for barley loading, the market advanced, with a strong tone at the close. There is a strong but quiet buying of all the best grades of barley, supposed to be on English orders. Feed barley is in comparatively light supply, considering the heavy consumption and the large demand for other kinds.

Oats have ruled firm, with a slight advance obtained for the better grades, but barely steady for fair. The market appears overstocked with poor oats, and to effect sales, concessions, at times, are necessary; but as the consumptive demand is increasing, and as receipts, it is thought, will be lighter, an improvement is looked for.

In rye and buckwheat more trading has been done at current quotations.

Corn has come in more freely, causing low prices to obtain, with much difficulty reported in effecting sales even at the decline. A well-known wheat commission merchant informs us that yesterday he sold to a large exporter, Wm. Dresbach, a parcel of over 4000 sacks choice White shipping wheat, Oakland delivery, at \$1.42½.

Silver continues to advance, which is against India wheat shipment to Europe.

## Dairy Product.

Butter continues weak, with concessions, at times, necessary to make quick returns. There does not appear to be any end to the supply. Poorer grades, as usual, are very hard to sell at any reasonable figure.

Cheese, under light receipts and a good demand, is higher, with the market strong at the advance.

California eggs are scarce and wanted. Some strictly choice, fresh-laid sold in a small way as high as 47½ cts, but 42½ to 45 cts are the quotations given, which can be had for consignments. Choice eggs are also higher. Considerable Utah, by express, are coming in and sell at 30 to 35 cts, while Eastern only fetch 19 to 21 cts.

## Feedstuff.

The receipts of hay have been light, necessitating some competition by buyers to meet their orders. The supply of choice to extra choice is not only in light stock, but the supply in the country is reported light; but poor to good hay is in good supply.

Bran, middlings and ground barley are higher and strong under a strong demand. Feed meal is in liberal stock, and weak. Other ground feed is unchanged.

Feed carrots are only in fair supply, with a good demand ruling at steady but firm prices.

## Fruits.

Grapes kept well up to Saturday, when concessions were made to clean up. On Monday, and again on Tuesday, heavy receipts caused low prices to rule, with buyers offish even at the decline. Wine grapes are coming in in poor condition, the market for which is slow and low.

California oranges are coming in more freely, but as yet the demand is light, owing to liberal supplies of other kinds of fruits.

Apples, unless choice varieties without defects, are hard to sell. Choice are in good demand but at unchanged prices. Wormy and otherwise defective apples sell at the best prices sellers can get.

Strawberries fluctuated considerably. On Monday only 16 chests were received, which caused them

to advance to \$10 to \$11, but Tuesday freer receipts sent them down again.

The remarks above apply to pears—while choice are wanted, poor are unsalable.

Figs, plums and canteloupes are about out of market.

## Hops.

Dealers report the market weak in sympathy with lower prices at the East. The decline in New York is said to be due to heavy purchases in Germany for immediate shipping and a large transfer, about 5000 bales, of Californian. So far as can be ascertained, dealers here are confident of better prices later on, and while not buying except at lower prices, they do not offer their high cost purchases on the market.

## Live-stock.

Beef cattle are weaker under heavy offerings from all sections of the State and also Nevada. Mutton sheep are firmer, but no higher. The higher price of wool causes sellers to be more indifferent. Hops continue to be forced on the market. The supply is largely in excess of requirements, and buyers purchasing buy low with the expectation of having to feed. Milch cows are weak and low, with the range \$30 to \$45; to fetch the latter price, the cow must be something extra. In horses, last week's report covers this week's market.

The following are to-day's meat prices: Beef—Stall-fed, 6½@7½ c; grass-fed, extra, 6@6½ c first quality, 5½@5¾ c; second, 4½@5c; third, 4@4½ c. Calves, small, 9@10c; larger, 7@8c @ lb. Mutton—Ewes, 4@4½ c; wethers, 4½@5c. Lamb—Spring, 6½@7c @ lb. Pork—Live hogs on foot, 2½@3c for grain and dairy feed; 2½@2¾ c for soft; dressed, 5@5½ c for hard, and 4½@4¾ c for soft. Grass-fed stock sell on foot, gross weight, at one-half the price they fetch dressed; stall-fed, on foot, fetch one-third less than they sell at dressed.

## Raisins.

The market is reported dull for home trade, owing to curers sending consignments direct to large jobbing houses. These consignments, it is claimed, operate against the market. The demand for Eastern shipment continues free, at unchanged prices for choice to fancy, but off-grades are slow.

## Vegetables.

Potatoes have dragged throughout the week, owing to few shippers being in the market. Poor qualities have been and continue to be hard to sell, but choice go off fairly well at the lower prices.

Sweet potatoes have held to steady prices, with the demand and receipts about equal.

Onions, under light receipts and a good demand, advanced from 10 to 15 cts, but on Monday fell back again under freer receipts and a lessened call. To-day the market appears firmer.

String beans, Lima beans, summer squash and cucumbers are about out of market.

Egg-plants are in lessened supply, but prices do not advance.

Cabbages, etc., are unchanged.

## Wool.

The market continues to hold to strong prices, with all received meeting quick sales at full prices. Receipts are growing light, with the bulk of the fall clips marketed. English advices report a firm, strong market, particularly for crossbred.

## Miscellaneous.

The tonnage movement compares with last year at this date as follows:

	1886.	1885.
On the way.....	250,375	213,597
In port, disengaged.....	72,000	91,969
In port, engaged.....	94,610	37,649
Totals.....	416,985	343,215

The above gives a carrying capacity as follows: 1886, 657,176 short tons; 1885, 549,144 short tons; increase over last year, 108,032.

Heavy receipts of poor fowls have caused poultry to rule in buyers' favor. Only large, choice, well conditioned find a quick market, and for which an advance on top quotations can be had.

Game has ruled steady, at full quotations.

San Francisco, Oct. 27, 1886.

## Fruits and Vegetables.

Extra choice in good packages fetch an advance on top quotations, while very poor grades sell less than the lower quotations.

	WEDNESDAY, Oct. 27, 1886.
Apples, bx com.	30 @ 75
do choice.....	1 00 @ 1 25
Bananas, bunch	1 50 @ 3 00
Blackberries, bx	— @ —
Cantaloupes, or	— @ —
Cherries blk.	— @ —
do Royal Ann.	— @ —
Cherry plums.....	— @ —
Cranberries.....	7 00 @ 10 00
Currants chest.....	— @ —
Figs, bx.....	50 @ 85
Grapes.....	25 @ 40
do Rose Peru.....	25 @ 40
do Muscat.....	30 @ 50
do Tokaya.....	25 @ 40
Wine, Zinfandel 16 00	@ 19 00
do Mission.....	12 50 @ 16 00
Limes, Mex.....	4 00 @ 4 50
do Cal. box.....	— @ —
Lemons, Cal, bx 2 50	@ 4 50
do Sicily, box 8 00	@ 10 50
do Australian.....	— @ —
Nectarines box.....	— @ —
Oranges, Cal, bx 2 00	@ 3 00
do Tahiti, bx 3 35	@ 3 50
do Mexican, M.....	— @ —
do Panama.....	— @ —
Peaches, bx.....	2 00 @ 2 50
do back.....	— @ —
Crawfordia, bx	— @ —
do bakt.....	— @ —
do choice.....	— @ —
Pears bx.....	1 00 @ 1 50
do choice.....	1 00 @ 1 50
do Bartlett, bx	— @ —
Persimmons.....	— @ —
Jap, bx.....	— @ —
Pineapples, doz 4 00	@ 5 00
Pomegranates, b	— @ —
Plums bx.....	2 25 @ 4 00
do Egg.....	— @ —
Quinces bx.....	40 @ 60
Raspberries ch.....	— @ —
Strawberries ch 6 00	@ 8 00
Watermelons 100	— @ —
DRIED FRUIT.....	— @ —
Apples, sliced, lb	2 25 @ 3 00
do evaporated.....	8 @ 8 1/2
do quartered.....	1 1/2 @ —
Apricots.....	12 @ —
do evaporated.....	— @ —
Blackberries.....	25 @ 30
Citron.....	8 @ 10
Dates.....	8 @ 10
Figs, pressed.....	8 @ 10
Figs, loose.....	5 @ 5

RAISINS.

Dehesa Plus, fey 2 65	@ —
Imperial Cabin.....	— @ —
et, fairy.....	1 90 @ —
Crown London.....	1 20 @ —
do Lovers.....	— @ —
do Lovers Muscat.....	1 60 @ —
do Lovers.....	— @ —
Cal. Valencia.....	1 50 @ —
do Lovers.....	1 50 @ —
do Sultanias.....	1 50 @ —
do Sultanias.....	1 50 @ —

cents higher for halves, quarters and eighths.

## VEGETABLES.

do Sicily, box. 8 00	@ 10 50	do Layers ... 1 50	or —
do Australian. —	@ —	do Sultanias... 1 50	or —
Nectarines box. —	@ —	Fractional come 25, 50 and 75	
Oranges, Cal., bx 2 00	@ 3 00	cents higher for halves, quar-	
do Tahiti, bx 3 35	@ 3 50	ters and eighths.	



Domestic Produce.

Extra choice in good packages fetch an advance on top quotations, while very poor grades sell less than the lower quotations.

BEANS AND PEAS.		WEDNESDAY, Oct. 27, 1886	
Bayo, cti.....	1 40 @ 1 55	Peanuts.....	3 @ 4
Buckeye.....	1 25 @ 1 55	Filberts.....	13 @ 14
Pea.....	1 70 @ 1 85	Burbank.....	1 00 @ 1 25
Red.....	1 10 @ 1 15	Early Rose.....	65 @ 1 00
Pink.....	1 07 1/2 @ 1 15	Cuffey Cove.....	1 30 @ 1 25
Large White.....	1 70 @ 1 75	Jersey Blues.....	1 00 @ 1 20
Small White.....	1 75 @ 1 85	Petaluma.....	1 00 @ 1 20
Lima.....	2 00 @ 2 35	Tomatoes.....	1 00 @ 1 20
Fld Peas, blk eye	1 00 @ 1 50	River reds.....	60 @ 80
do green.....	1 00 @ 1 12 1/2	Humboldt.....	— @ —
do Niles.....	1 25 @ —	do Kidney.....	— @ —
BROOM CORN.		Chile.....	80 @ 1 15
Southern per ton	50 @ 70	do Oregon.....	— @ —
Northern per ton	50 @ 70	Peerless.....	90 @ 1 20
CHICORY.		Salt Lake.....	1 00 @ 1 25
California.....	4 @ 4 1/2	Sweet.....	75 @ 1 20
German.....	6 1/2 @ 7	POULTRY AND GAME.	
DAIRY PRODUCE, ETC.		Hens, doz.....	4 50 @ 6 50
BUTTER.		Roosters.....	5 50 @ 7 00
Cal fresh roll, lb.	20 @ 30	Broilers.....	3 00 @ 4 50
do Fancy brands	32 1/2 @ 35	Ducks, tame.....	3 00 @ 5 00
Pickle roll.....	19 @ 21	do Mallard.....	3 00 @ 3 50
Pickin, new.....	15 @ 18	do Sprig.....	1 50 @ 2 00
Eastern.....	— @ —	Geesa, pair.....	1 00 @ 2 00
CHEESE.		do Goslings.....	— @ —
Chese, Cal., lb.	12 @ 14	Wild Gray, doz	3 00 @ —
Eastern style.....	13 @ 15	Turkeys, lb.....	12 1/2 @ 16
EGGS.		do Dressed.....	— @ —
Cal., ranch, doz.	40 @ 45	Turkey Feathers,	10 @ 20
do store.....	32 1/2 @ 37 1/2	tail and wing.....	— @ —
Ducks.....	— @ —	Snipe, Eng., doz.	— @ —
Oregon.....	— @ —	do Common.....	— @ —
Eastern.....	18 @ 21	Doves.....	75 @ 85
Utah.....	30 @ 35	Quail.....	75 @ 1 00
FEED.		Habbits.....	1 00 @ 1 25
Bran, ton.....	15 50 @ 16 50	Hare.....	2 00 @ 2 50
Cornmeal.....	26 00 @ 27 00	Venison.....	8 @ 10
Ground Barley.....	21 @ 23	PROVISIONS.	
Hay.....	8 00 @ 14 00	Cal. Bacon.....	— @ —
Middlings.....	19 50 @ 21 00	Heavy, lb.....	8 1/2 @ 9
Oil Cake Meal.....	26 50 @ 28 50	Medium.....	8 1/2 @ 9
Straw, bale.....	35 @ 50	Light.....	10 1/2 @ 11 1/2
FLOUR.		Extra Light.....	12 @ 12 1/2
Extra, City Mills	4 12 1/2 @ 4 50	Lard.....	7 @ 9 1/2
do Country Mills	4 00 @ 4 37 1/2	Cal. Smoked Beef	11 1/2 @ 12 1/2
Superfine.....	3 00 @ 3 50	Hams, Cal.....	10 @ 13 1/2
GRAIN, ETC.		do Eastern.....	13 1/2 @ 14 1/2
Barley, feed, cti.	82 1/2 @ 97 1/2	SEEDS.	
do Brewing.....	1 05 @ 1 25	Alfalfa.....	10 @ 11
Ochevalier.....	1 45 @ 1 55	Canary.....	3 1/2 @ 4
do Coast.....	90 @ 1 45	Clover red.....	12 @ 13
Buckwheat.....	1 00 @ 1 25	White.....	17 @ 18
Corn, White.....	1 30 @ 1 35	Cotton.....	20 @ 21
Yellow.....	1 30 @ 1 35	Flaxseed.....	2 1/2 @ 2 1/2
Small Round.....	1 30 @ 1 35	Hemp.....	1 @ 1 1/2
Nebraska.....	97 1/2 @ 1 05	Italian Rye Grass	25 @ 26
Oats, new.....	— @ —	Perennial.....	7 @ 9
Choice feed.....	1 35 @ 1 40	Millet, German.....	4 1/2 @ 5
do good.....	1 27 1/2 @ 1 32 1/2	do Common.....	7 @ 10
do fair.....	1 20 @ 1 25	Mustard, white.....	3 @ 3 1/2
do black.....	1 12 1/2 @ 1 15	Brown.....	2 25 @ 2 75
do Oregon.....	1 25 @ 1 45	Rape.....	1 @ 1 1/2
Eye.....	1 10 @ 1 25	Ky. Blue Grass.....	11 @ 13
Wheat milling.....	— @ —	2d quality.....	11 @ 12
Gilt edged.....	1 42 1/2 @ —	Sweet V. Grass.....	75 @ —
do Choice.....	1 40 @ —	Orchard.....	20 @ 25
do fair to good	1 38 1/2 @ —	Red Top.....	15 @ —
Shipping choice	1 40 @ 1 41 1/2	Hungarian.....	8 @ 10
do good.....	1 37 1/2 @ 1 38 1/2	Lawn.....	30 @ 40
do fair.....	1 36 1/2 @ 1 —	Mesquit.....	10 @ 12
HIDES.		Timothy.....	5 1/2 @ —
Dry.....	— @ 18	TALLOW.	
Wet salted.....	8 @ 9 1/2	Crude, lb.....	1 1/2 @ 4
HONEY, ETC.		Refined.....	6 1/2 @ 6 1/2
Beeswax, lb.....	20 @ 22	WOOL, ETC.	
Honey in comb.....	8 @ 10	SPRING—1886	
Honey in comb.....	— @ —	Humboldt and	22 @ 25
Fancy.....	11 @ 13	Mendocino.....	17 @ 20
Extracted, light.....	3 1/2 @ 4	Sacramento valley.....	17 @ 20
do dark.....	3 1/2 @ 4	Free Mountain.....	17 @ 20
HOPS.		N. hern defective	— @ —
Oregon.....	27 1/2 @ 30	S. Joaquin short.....	14 @ 18
California.....	25 @ 30	do long.....	— @ —
ONIONS.		Cava's & F. th'l.....	— @ —
Pickling.....	45 @ 60	Oregon Eastern.....	17 @ 22
Silverskin.....	90 @ 1 25	do valley.....	23 @ 25
NUTS—JOSBING.		Southern Cal.....	15 @ 17
Walnuts, Cal., lb	8 @ 9 1/2	FALL—1886	
do Chile.....	7 1/2 @ —	Southern, free.....	17 @ 20
Almonds, hdshl.....	6 @ —	do defective.....	12 1/2 @ 19
Soft shell.....	10 @ 12	Northern, free.....	20 @ 23 1/2
Brazil.....	11 @ 12 1/2	do defective.....	15 @ 20
Pecans.....	10 @ 12 1/2	Middle free.....	18 @ 21
		do defective.....	15 @ 18

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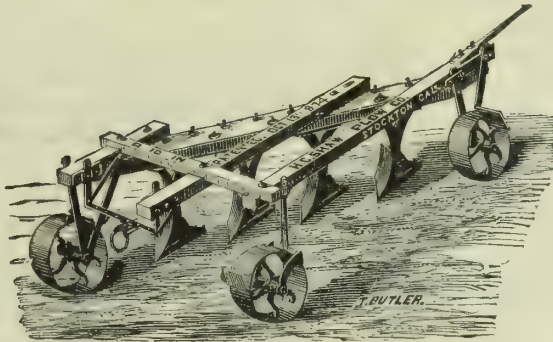


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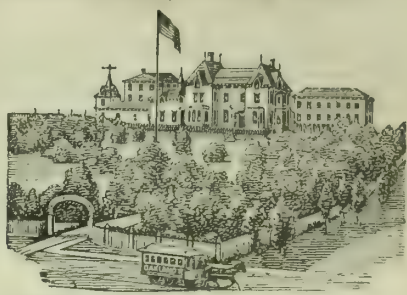
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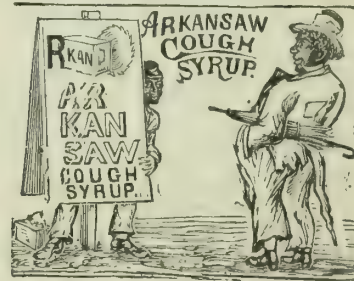
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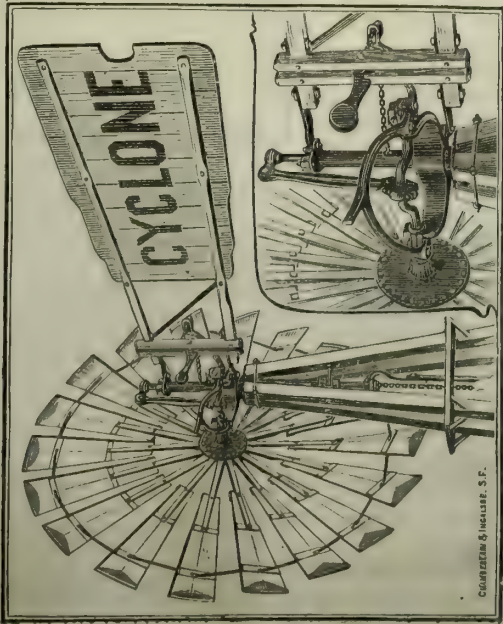
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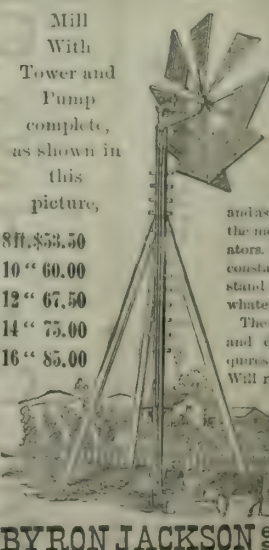
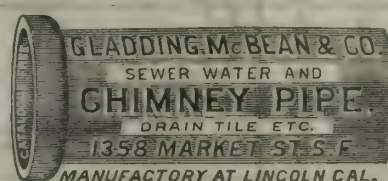
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Prunes.

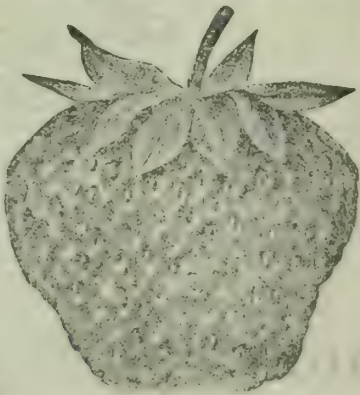
Cherries,

Peaches,

Apricots,

Nectarines,

Figs.



Quinces,

Loquats,

Guavas,

Medlars,

Persimmons,

Pomegranates,

Mulberries,

Small Fruits,

Rhubarb,

Asparagus,

Ornamental Trees,

Roses, Etc.

Santa Rosa Nurseries are now and always have been FREE FROM SCALE, and the unusual care which has always been taken to have everything that leaves our nurseries true to name, and in the best possible condition to grow, has given them a reputation for reliability which has caused our sales to more than double every year for ten years. ELEGANT CATALOGUE FREE.

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## FRUIT TREES! Established 1863. FRUIT TREES!

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Agency of CALIFORNIA NURSERY CO., Niles, Alameda Co., Cal.

We have now for sale at Lowest Market Rates the Largest, Best Selected and Healthiest Stock of

## Fruit Trees, Grape Vines, Olives, Small Fruits, Etc.

Ever offered on the Pacific Coast, including all the new varieties, all grown on new land at the above Nursery and free from scale and other pests. Samples of the trees always on hand.

## Seeds! Seeds! Seeds!

WE HAVE ALSO CONSTANTLY ON HAND A LARGE AND FRESH STOCK OF

## Grass, Clover, Vegetable, Flower, and Tree Seeds,

And Ornamental Trees and Plants, Bulbs, Roses, Magnolias, Palms, etc.,  
at LOWEST RATES. Price List mailed on application.

P. O. Box 2059.

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## NAPA VALLEY NURSERIES.

LEONARD COATES, Proprietor.  
(Successor to COATES & TOOL.)

General Nursery Stock. Headquarters for Centennial Cherry, Muir Peach, Love-all Peach, Glaister Plum, Etc.

All Stock Unirrigated and free from disease. One Centennial Cherry Tree given away with every order amounting to \$10 and over.

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For 1886 and 1887.

FRESH STOCK OF

## GARDEN AND FIELD SEEDS!

All of this year's growth, for sale at the GEO. F. SYLVESTER SEED WAREHOUSE, Nos. 315 and 317 WASHINGTON STREET, SAN FRANCISCO. SAMUEL BRECK, Proprietor.



PRICE LIST OF  
**Myrobolan Nursery**

Haywards, Alameda Co., Cal.

AUTUMN OF 1886-7.

APPLES.	PER 100.	PER 1000.
Yellow Newtown Pippin.....	\$8 00	\$10 00
White Winter Pearmain.....	8 00	10 00
Red Pearmain.....	8 00	10 00
White Doctor, a large tart apple.....	8 00	10 00
Yellow Bellflower.....	8 00	10 00
Red Bellflower.....	8 00	10 00
Regular, a Red, a good keeper.....	8 00	10 00
Alexander.....	8 00	10 00
Pound Pippin.....	8 00	10 00
Rhode Island Greening.....	8 00	10 00
San Ramon King.....	8 00	10 00
Gravenstein.....	8 00	10 00
Red German.....	8 00	10 00

APRICOT ON MYROBOLAN.	PER 100.	PER 1000.
Blenheim, 1 and 2 yrs. 1/2 to 1 in. diam'r.....	\$6 00	\$50 00
Large Early.....	6 00	50 00
Early Moorpark, 1 and 2 yrs. 1/2 to 1 in. diam.....	6 00	50 00
Late Moorpark, 1 and 2 yrs. 1/2 to 1 in. diam.....	6 00	50 00
*Hinds Seedling, 1 and 2 yrs. 1/2 to 1 in. diam.....	6 00	50 00

CHERRIES.	PER 100.	PER 1000.
Black Tartarian, 1 yr., 5 to 6 ft.....	\$10 00	\$90 00
Royal Ann, 1 yr., 5 to 7 ft.....	10 00	90 00
Rockport Bigarreau, 1 yr., 5 to 6 ft.....	10 00	90 00
Great Bigarreau, 2 yrs., 6 to 7 ft.....	10 00	90 00
Gov. Wood, 1 and 2 yrs., 6 to 7 ft.....	10 00	90 00
Burr's Seedling, 1 yr., 6 to 7 ft.....	10 00	90 00
Centennial, 1 yr., 5 to 6 ft., 50c. each.....	40 00	

PEARS.	EACH.	PER 1000.
Howell, 1 year old.....	12 1/2 cts.	\$10 00
Bourne Clairgeau, 1 year old.....	12 1/2 cts.	10 00
Kieffer Hybrid, 1 year old.....	12 1/2 cts.	10 00
Bartlett, 1 year old.....	12 1/2 cts.	10 00
Winter Seckle, 1 year old.....	12 1/2 cts.	10 00
P. Barry, 1 year old.....	20 cts.	18 00
B. S. Fox, 1 year old.....	20 cts.	18 00

PLUMS and PRUNES on MYROBOLAN.	PER 100.	PER 1000.
Kelsey's Japan Plum, 1 yr., 4 to 5 ft.....	\$10 00	\$90 00
Kelsey's Japan Plum, 1 yr., 3 to 4 ft.....	8 00	70 00
Washington, 1 and 2 yrs., 5 to 6 ft.....	6 00	
Yellow Egg, 1 and 2 yrs., 5 to 6 ft.....	6 00	
Jefferson, 1 and 2 yrs., 7 to 8 ft.....	6 00	
Early Golden, 1 and 2 yrs., 6 to 7 ft.....	6 00	
Hooing Superb, 2 yrs., 6 to 8 ft.....	6 00	
Royal Hative, 1 yr., 6 to 7 ft.....	6 00	
Hungarian Plum, freestone, 1 yr., 7 to 8 ft.....	6 00	
Hungarian Prune, a clingsone, 1 year, 7 to 10 feet.....	6 00	
Iskwith's Imperatrice, the latest, 1 year, 6 to 7 feet.....	6 00	
Coe's Golden Drops, 1 yr., 6 to 7 ft.....	6 00	
Silver Prune, 1 and 2 yrs., 6 and 7 ft.....	6 00	
Summer Prune, 1 and 2 yrs., 6 to 7 ft.....	6 00	
Bulgarian (good for all purposes), 1 year, 6 to 7 feet.....	6 00	
Robe de Sargeant, 1 and 2 years, 6 to 7 ft., good for drying.....	10 00	
Petit Prune, 1 and 2 yrs., 4 to 6.....	6 00	50 00
Petit or French Prune, 1 yr., 4 to 6.....	5 00	45 00

PEACHES ON MYROBOLAN.	PER 100.	PER 1000.
Early Crawford, 1 and 2 yrs., 1/2 to 1 in. diam.....	\$6 00	\$50 00
Foster, 1 yr., 1/2 to 1 in. diameter.....	6 00	50 00
Salway, 1 and 2 yrs., 1/2 to 1 in. diameter.....	6 00	50 00
Seller's Cling, 1 yr., 1/2 to 1 in. diameter.....	6 00	50 00
Wager, 1 yr., 1/2 to 1 in. diameter.....	6 00	50 00
Orange Cling, 1 and 2 yrs., 1/2 to 1 in. diam'r.....	6 00	50 00
Susquehanna, 1 yr., 1/2 to 1 in. diameter.....	6 00	50 00
Hale's Early, 1 yr., 1/2 to 1 in. diameter.....	6 00	50 00

ALMONDS ON MYROBOLAN.	PER 100.	PER 1000.
Soft Shell, 1 yr., per 100.....	\$6 00	\$8 00

QUINCE.	PER 100.	PER 1000.
Apple Quince.....	\$10 00	\$12 00
Pear.....	10 00	12 00

CURRENTS.	PER 100.	PER 1000.
Red Cherry, 1 yr.....	\$1 50	
Red Cherry, Cuttings.....	\$1 00	

GOOSEBERRY.	PER 100.	PER 1000.
Dwarf (extra early).....	\$20 00	
Houghton Seedling, No. 1, 1 yr.....	1 50	
Houghton Seedling, No. 2, 1 yr.....	1 00	
Berkeley, No. 1, 1 yr.....	8 00	\$70 00
Berkeley, No. 2, 1 yr.....	6 00	
Berkeley, No. 3, 1 yr.....	5 00	
Swiss Gooseberry Cuttings (double bearer, don't mildew).....	5 00	
Champion.....	5 00	

RASPBERRY.	PER 100.	PER 1000.
Cuthbert.....	\$1 00	\$9 00
Red Antwerp.....	50	4 00

My Cherries are on the Mazard Root, My Peach, Apricot, Plum, Prune and Almond are on the true Myrobolan. All my trees are true to name, raised without irrigation and free from insect pests.

JAMES O'NEILL, Haywards, Alameda Co., Cal.

J. L. HEALD'S  
**AGRICULTURAL WORKS,**  
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Stationary Engines and Boilers.  
Portable Straw-Burning Boilers & Engines.

IRON AND BRASS CASTINGS.  
Machinery of all kinds furnished at shortest notice.

Heald's Patent Wine-making Machinery,  
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Presses and Pumps, and all appliances used in Wine  
cellars. Irrigating and Drainage Pumps. Heald's  
Patent Engine Governor, Etc.

**STEEL STAMPS**  
With Full Name or Initials,  
For Stamping

SILVER-  
WARE,  
TOOLS,  
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GEO. M. WOOD & CO., General Engravers,  
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**ACME BANJO METHOD.**

By N. P. B. CURTISS. Price, \$1.25.  
Mr. Curtiss, whose Guitar Method has long been a standard, does real service to the lovers of good music at home, by this thoroughly good and entertaining instructor. No less than 75 diagrams illustrate the positions of the fingers. Simple explanations and very sweet vocal and instrumental music fill a book, which is destined to make the elegant modern BANJO still more appreciated and popular.

**THE ROYAL SINGER**

Holds the field against all comers as the chief book for singing classes in 1886-7. Good music, sacred and secular. Improved instructions. L. O. Emerson. 60 cents; \$6 per dozen.

Song Greeting (60 cents) for High Schools; Song Bells (50 cents) or Song Reader (Book 1, 50 cents; Book II, 60 cents) for Common Schools, and Gems for Little Singers (30 cents; \$3 per dozen) form a complete set for music teaching in schools.

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(35 cents), Tenney and Hoffman, is the newest book for Sunday Schools. Superior collection.

In press and nearly ready—Anthems of Praise.

**PIANO CLASSICS**

(\$1.00) is a great favorite with good pianists.

47 Books mailed for retail price.

OLIVER DITSON & CO., Boston.

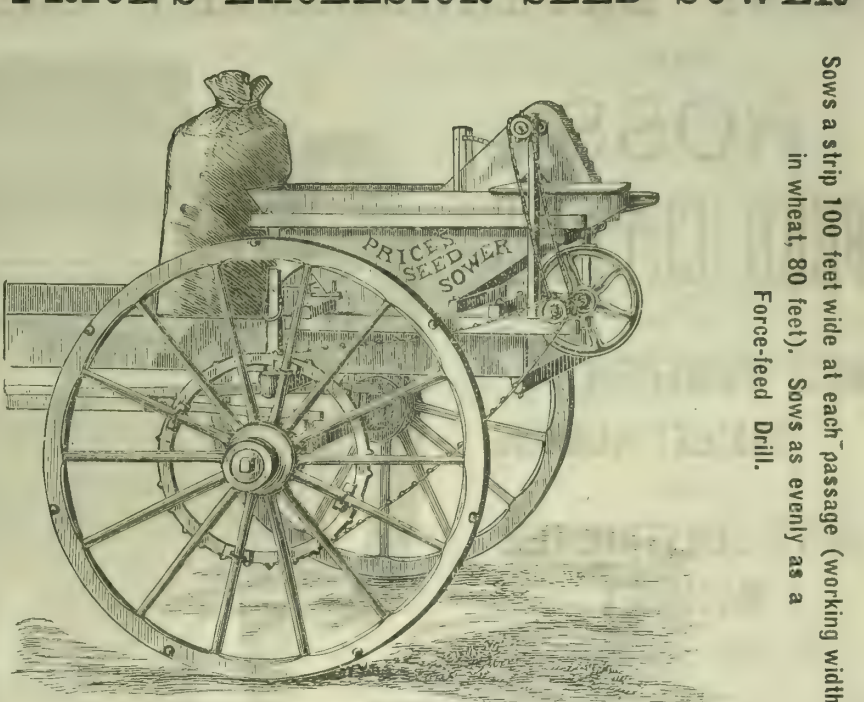
C. H. DITSON & CO., 367 Broadway, New York.



**HORSE POWERS, WINDMILLS, TANKS**

And all kinds of Pumping Machinery built to order. Awarded Diploma for Windmills at Mechanics' Fair, 1885. Windmills from \$65. Horse Powers from \$50. F. W. KROGH & CO., 51 Beale Street, San Francisco.

**PRICE'S EXCELSIOR SEED SOWER**



The supply of grain to the distributor is governed by the speed of the team, feeding rapidly when the team walks fast, and slowly when they walk slowly. Will sow an acre of ground as thoroughly with 80 pounds of seed as any other machine of its class will with 100 pounds. Sows 20 acres per hour with ease. Saves its cost in seed grain over any other machine every 200 acres sown. Warranted as above. Order on Trial. Price on board cars, \$40. Send for large, illustrated circular.

JACOB PRICE, San Leandro, Cal.

**LIGHTNING HAY KNIVES**  
WEYMOUTH'S PATENT.

This Knife is the BEST IN USE for cutting down hay and straw in mow and stack, cutting fine feed from bale, corn stalks for feed, cutting peat and ditching marshes. The blade is Best Cast Steel, spring temper, easily sharpened, and is giving UNIVERSAL SATISFACTION. A few moments' trial will show its merits, and parties once using it are unwilling to do without it. Its sales are fast increasing for export as well as home trade, and it seems destined to take the place of all other Hay Knives. They are nicely packed in boxes, 1 dozen each of 60 pounds weight, suitable for shipping to any part of the world. Manufactured only by  
**HIRAM HOLT & CO.**  
EAST WILTON, MAINE.  
For sale by the Hardware trade generally.  
warned of our rights, and the public are cautioned against purchasing any Hay Knives made as described above, which are not of our manufacture.  
EAST WILTON, Sept. 1, 1886.

**STEARNS MANUFACTURING COMPANY,**  
SAN FRANCISCO, CAL.

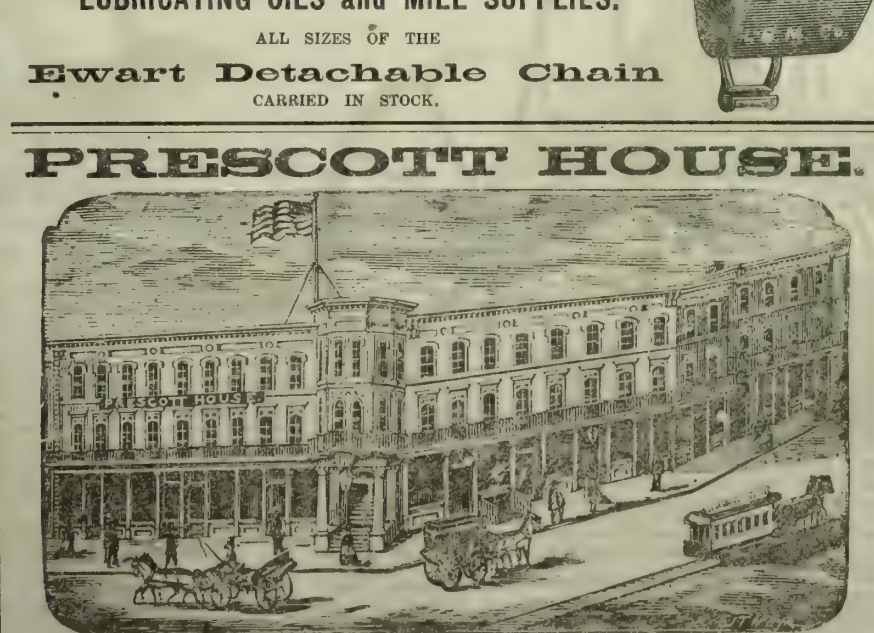
Sawmill, Woodworking and Shingle Machinery.  
DETROIT BLOWER CO.'S DRY KILNS.

Circular, Band, Scroll and Crosscut Saws.  
SAW TOOLS, KNIFE and TOOL GRINDERS.

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LUBRICATING OILS and MILL SUPPLIES.

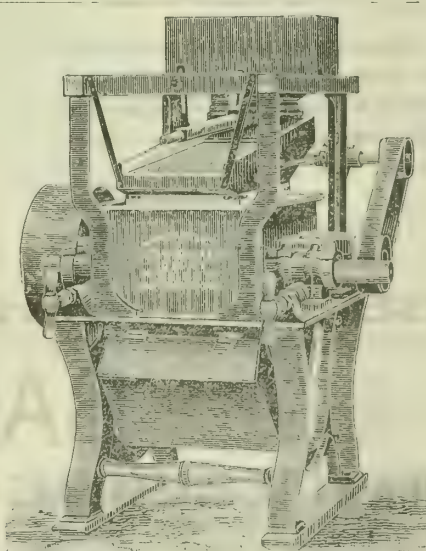
ALL SIZES OF THE  
**Ewart Detachable Chain**  
CARRIED IN STOCK.

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S. W. Corner Kearny and Montgomery Avenue, San Francisco.  
Free Coach to and from the House.  
J. W. BECKER, Proprietor.

Engraving Superior Wood and Metal Engraving, Electrotyping and Stereotyping done at the office of this paper.  
NEW Sample Book of beautiful cards, 14 Games, 12 tricks in magic, 136 Album verses. All for 2c. stamp. STAR CARD CO., Station 15, Ohio.



**Pacific Barley Crushing Roller Mill**

WITH SHAKING SCREEN.

These Mills are constructed in the least complicated and most substantial manner possible, with rigid iron frame, long bearings, adjustable boxes, with coil springs to allow any chance obstruction, such as nails, screws, etc., to pass through without injury to the rolls. This feature is found on no other roll made on this Coast. Send for prices to

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MILL MACHINERY AND SUPPLIES,  
101 to 107 Mission St., San Francisco.

**AGENTS WANTED**  
to sell the  
**MISSOURI STEAM WASHER**

Active, honest persons all over the country, with or without team.  
[Extracts from Reports of Purchasers.]  
"MARY J. TAPPAN, Reynolds, Neb. They excel all other washers I ever saw. JOHN R. DODGE, JR., Normal, Ill. The best machine ever invented by man. H. H. HUNT, Cottageville, S. C. Everybody likes them and everybody wants them."  
"S. H. ADAMS, Austin, D. T. My wife would not take a quarter section (160 acres) of land for her machine, if she could not get another."  
"MRS. J. H. SWIFT, Near Orem, Iowa. The most useful article about the kitchen. ANNA RAMSEY, Mission, Tex. Have thoroughly tested it on articles from two states to look quita; gives entire satisfaction."  
"ST. CLAIR PARKER, JR., Evert, Washington Ter. Self-stuff and can not be spoken of too highly. JOHN DEPTON, Bismarck, Minn. Have given it several severe tests and it came out triumphant every time."  
"JNO. H. WHEELER, Kansas City, Mo. They have proved themselves to the families we secured them. A. P. SHIPLEY, Topeka, Kan. Gives entire satisfaction. Rather handle the Washer than anything I have seen."  
"E. M. MANSLEY, Lawrence, Texas. He proved a better Washer than I ever thought would be invented. JOHN C. BYARS, Scotland, Mo. If you will get up any instrument that will take as much labor off of men as this Washer takes off of the women, and I want to know, I could sell one at every house."  
"MRS. M. P. DODGINS, Coahoma, N. Y. Gives perfect satisfaction. I do my washing when in sun, and I use it with hard soap. MRS. M. MOORE, Nebraska. Will do more than any, especially washing dishcloths."  
"MRS. F. G. SINDEN, Sullivan, N. Y. Would not take \$50 for mine if I could not get another. Washes quicker and better than it can be done by hand. MRS. FRED H. HARRIS, Hillsdale, N. Y. I call that the best I would not be without one for twice its price. MRS. ISAAC B. POND, Southfield, Conn. Have used it nearly four months. Am perfectly satisfied. I rarely recommend it to all housekeepers. MRS. MARY E. VALE, Yakima, Wash. Saved me \$25.00 per year for 15 months I've had it."  
"MRS. C. W. TALCOTT, Northfield, Conn. I have thoroughly tested it for five months with entire satisfaction. EDNA J. HUNT, Stamford, Mich. Had rather give up my Jones cow than part with my Washer."  
I will ship a sample to those desiring an agency on a week's trial on liberal terms. A thousand per cent the best washer in the world for saving labor, clothes and soap. Pays capable agents BIG MONEY. Write for particulars. Address J. WORTH, Box 516, St. Louis, Mo.; or Box 1968, San Francisco, Cal.

**Timber Claim and Seed Men, Attention!**

100,000 lbs. of fresh Forest Tree Seed and 1,000,000 Tree Seedlings offered at prices that defy competition. Also I have for sale a limited number of the famous Potawatamia Plum Tree. T. E. B. MASON, Shenandoah, Iowa



# MOST EXTRAORDINARY CAPACITY FOR CUTTING FEED.

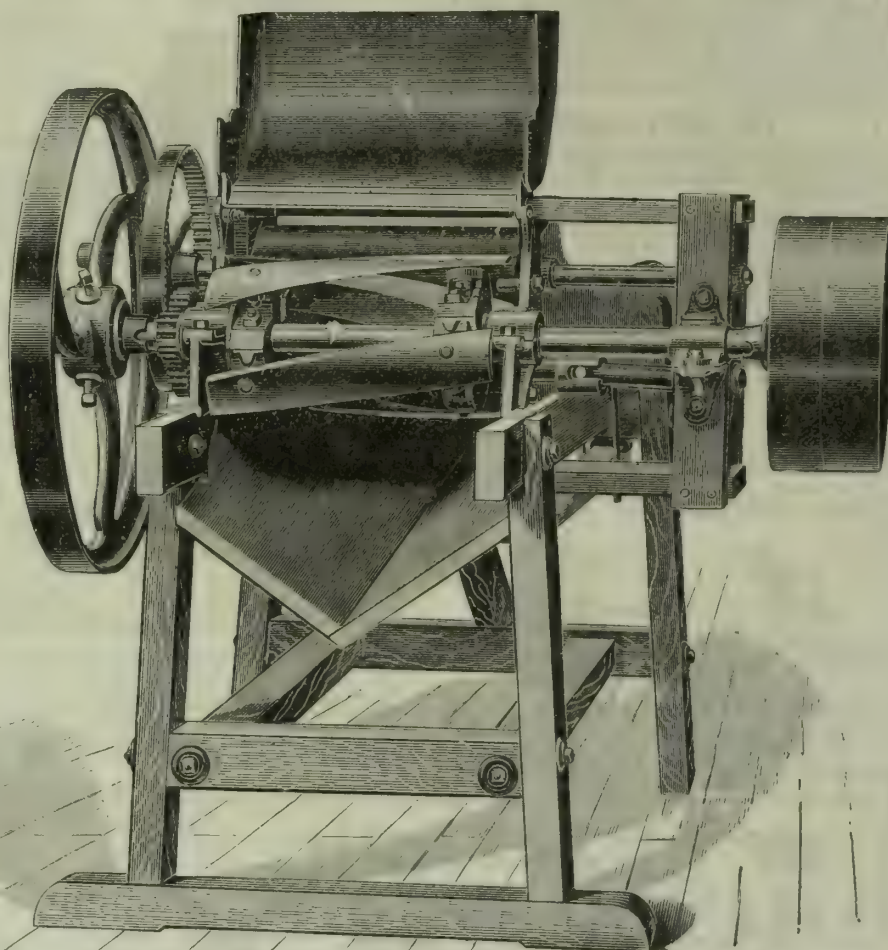
## THE ROSS FEED CUTTERS

ARE THE  
MOST POWERFUL,  
EASIEST RUNNING  
—AND—  
BEST CONSTRUCTED  
MACHINES

In the Market,

And are guaranteed to cut double or treble the amount of Feed with the same or less driving power, of any other Cutter in the world. Smaller sizes of the Ross will cut more Feed than the largest sizes of other makes, hence we can sell a better Cutter for less than any other firm can manufacture.

We carry the greatest assortment of Styles and Sizes, furnish the most complete Descriptive Catalogues and sell below other's prices for inferior goods.



ROSS LITTLE GIANT No 17A.

## THE ROSS CUTTERS WITH ELEVATORS

Have been Awarded  
ALL FIRST PREMIUMS,  
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Every Year Exhibited,  
OVER ALL OPPOSITION.

The Largest Stock Raisers on this Coast use our Cutters with great satisfaction, there being Single Ross Cutters in use in this State which can cut more feed than TEN of the largest of other makes in use here, and our smaller sizes are just as satisfactory.

All who want the best machine in the market for Cutting Feed, either in large or small amounts, must buy a Ross to accomplish their purpose.

## G. G. WICKSON & CO.,

38 California Street,

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Junction Market, Pine and  
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# BAKER & HAMILTON.

SACRAMENTO:  
Nos. 9, 11, 13, and 15  
J Street.

NEW STYLE EUREKA GANG PLOW, with Seat behind the Levers.

EUREKA GANG PLOWS.

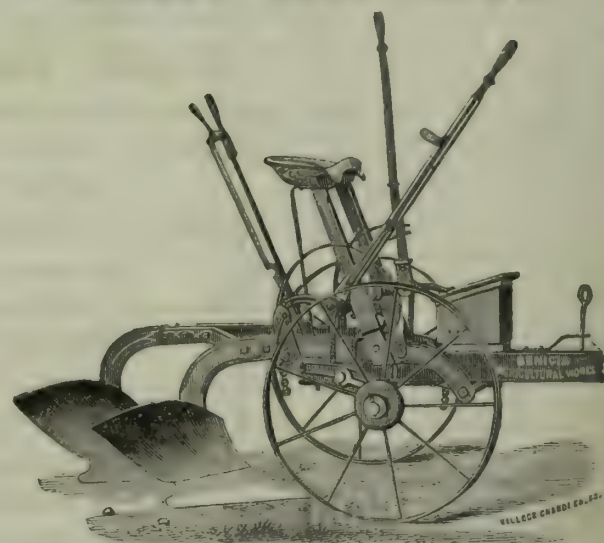


No. 107c. Beams 3½x1½ Inches. TWO EXTRA SHARES WITH EACH PLOW.

THIS NEW STYLE EUREKA GANG PLOW HAS THE CELEBRATED GALE CHILLED IRON BOTTOMS. We find the farmers of California require a Gang Plow with Chilled Iron Bottoms. We have spent the past two years in experimenting with different kinds of plows, have studied carefully the good qualities of each plow offered in the market, and now feel sure that we have in the NEW EUREKA GANG PLOW with the Gale Chilled Iron Bottoms, the best Chilled Iron Gang ever invented. It has all the good qualities of the EUREKA GANG, of which every farmer in California is acquainted, combined with the NEW SLOPING LANDSIDE GALE CHILLED IRON BOTTOMS.

We offer this Gang Plow, knowing it to be the best Chilled Gang in the market. It is the Strongest and Lightest Draft Gang to be found. We can supply this Plow, with all the various Eureka Gangs, as follows:

No. 107c, with 5-16 Iron Center Steel Moldboards, chemically hardened, Cast Cast-steel Shares, with or without Land Gauge, 10 or 12-inch Cut.....	\$95 00
No. 107c, with Star Moline Bottoms, with or without Land Gauge, 10 or 12-inch Cut.....	95 00
No. 107c, with Chilled Iron Bottoms, with or without Land Gauge, 10 or 12-inch Cut, Chilled Shares.....	85 00
No. 107c, with Chilled Iron Bottoms, with or without Land Gauge, 10 or 12-inch Cut, with Cast Cast-steel shares.....	95 00
Extra, for Beams 3½x1½.....	per Gang, 3 00
Extra, for Beams 5x1½.....	per Gang, 10 00
Extra, for Bottoms cutting 14 inches.....	per Gang, 5 00
Extra, for Bottoms with Fin Cutters.....	per Gang, 3 00
Extra, for one Detachable Beam.....	per Gang, 5 00



EUREKA GANG PLOW, No. 7c.

THE FAVORITE.

AWARDED THE FIRST PREMIUM at the State Fairs of 1877, 1878, 1879, 1880, 1881, 1882, 1883, and numerous County Fairs.

THE LEADING GANG PLOWS OF THE UNITED STATES. They are made to adapt themselves to various kinds of soil, and are supplied with different patterns of Plow Bottoms. These implements have received more State and County Fair Premiums, have been successful in more plowing contests, and have met with a more extensive sale, than any Gang Plow ever invented. They have been the Plows against which all dealers and manufacturers interested in the sale of other Gangs have waged the fiercest war, and the ones by which inventors have measured their efforts, well knowing that if they could make a more satisfactory implement than the Eureka, they could justly claim to have the best. The efforts in this direction, both by Eastern and California inventors, have been strenuous and unremitting, and possibly might have been crowned with success but for certain stumbling blocks in the shape of broad patents, covering all essential points, whose validity they have compelled us to establish in the courts.

Weight, with Steel Bottoms, 63½ lbs. Weight, with Chilled Iron Bottoms, 68½ lbs.

No. 7c Eureka Gang Plow, with 5-16 Iron Center Steel Moldboards, chemically hardened, Cast Cast-steel Shares, with or without Land Gauge, Beams 3½x1½, with 2 extra Shares, 10 or 12-inch Cut.....	\$95 00
No. 7c Eureka Gang Plow, with Star Moline Bottoms, with or without Land Gauge, Beams 3½x1½, with 2 extra Shares, 10 or 12-inch Cut.....	95 00
No. 7c Eureka Gang Plow, with Chilled Iron Bottoms, with or without Land Gauge, Beams 3½x1½, with 2 extra Shares, 10 or 12-inch Cut, Chilled Shares.....	85 00
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# PACIFIC RURAL PRESS

TWENTY-FOUR PAGE EDITION.

Vol. XXXII.—No. 19.]

SAN FRANCISCO, SATURDAY, NOVEMBER 6, 1886.

{ \$3 a Year, in Advance  
SINGLE COPIES, 10 CTS.

## The Story of a School.

Written for the RURAL PRESS by JEANNE C. CARR.]

In the year 1873, a company of gentlemen in and around Indianapolis, Indiana, conceived the idea of founding a rural colony in Southern California, glowing reports of the country having captivated their imaginations with pictures of golden fruits and ever-blooming flowers at the season when the States of the interior are swept by blizzards, or buried under the snow. A choice was made by their agents of a portion of the rancho San Pasquale, lying at the extreme northern end of the San Gabriel valley, and thither in '73-4 the Eastern emigrants had so far settled as to incorporate a colony, form a school district, and engage Miss Jenny Clapp as a teacher.

The best room in Deacon Clapp's comfortable cottage was given up to the school; meanwhile under an enormous oak tree on the mesa, now Orange Grove avenue, a little one-roomed school-house went up. For two or three years this was used for the various public needs of the colony, when it was moved to a more central position at the nucleus of Pasadena City, then consisting of a grocery store which also served as a post-office wherein the tri-weekly mail was dispensed, and a blacksmith's shop.

Soon a new district was formed bearing the name of the settlement, and so rapid was the increase of population that in 1876 a large two-story building was erected, the upper floor being arranged with special reference to the social needs of the settlers. The site of the Pasadena schoolhouse, about four acres in extent, was given to the district for these purposes by the late D. B. Wilson, one of the original owners and most judicious promoters of the San Pasquale enterprise.

In 1883, the consent of the Wilson heirs having been obtained, the Free Library and Village Improvement Association, of Pasadena, placed their building upon the school lot.

Meanwhile the increasing population required the formation of new school districts and building of new schoolhouses in the suburban neighborhoods. South Pasadena, already quite densely populated, has a pretty rural school-house commanding a lovely view over the San Gabriel valley. North Pasadena schoolhouse, in the best modern style of school architecture, is seen from afar on the summit of Monk hill. East Colorado street has a third, equally well appointed. All these outlying stations are tributaries of the new Wilson or Central school, figured at the head of this article.

With the opening of the San Gabriel Valley Railroad, and the consequent increase of busi-

ness, it became evident that the removal of the Wilson school to a more suitable location was inevitable. By a vote of the citizens it was decided to sell the original site at auction and erect a new and model schoolhouse with the proceeds. The sum of \$46,500 was realized from this sale, and \$10,000 from the subsequent sale of the lot on which the Free Library building yet stands.

The site selected covers two acres, and is one

Back of these apartments are the accommodations for primary classes, with their separate entrances and conveniences of every kind. There are ample spaces reserved for playgrounds for the little ones, and in the basement they, as well as the older pupils, will have rooms for gymnastic exercises in wet weather.

The second is really the main story of the building; in it is a fine room for the library, the principal's room, and the arrangements of slid-

in California is now receiving the finishing touches.

To the stranger within our gates who rightly estimates the progressive forces which are at work here, I am sure none will seem as important as the ample provisions made for the education of the children. The teachers now employed in our crowded schools brought to us well-earned reputations in other fields. Mr. Pierce, the principal of our Central school, with

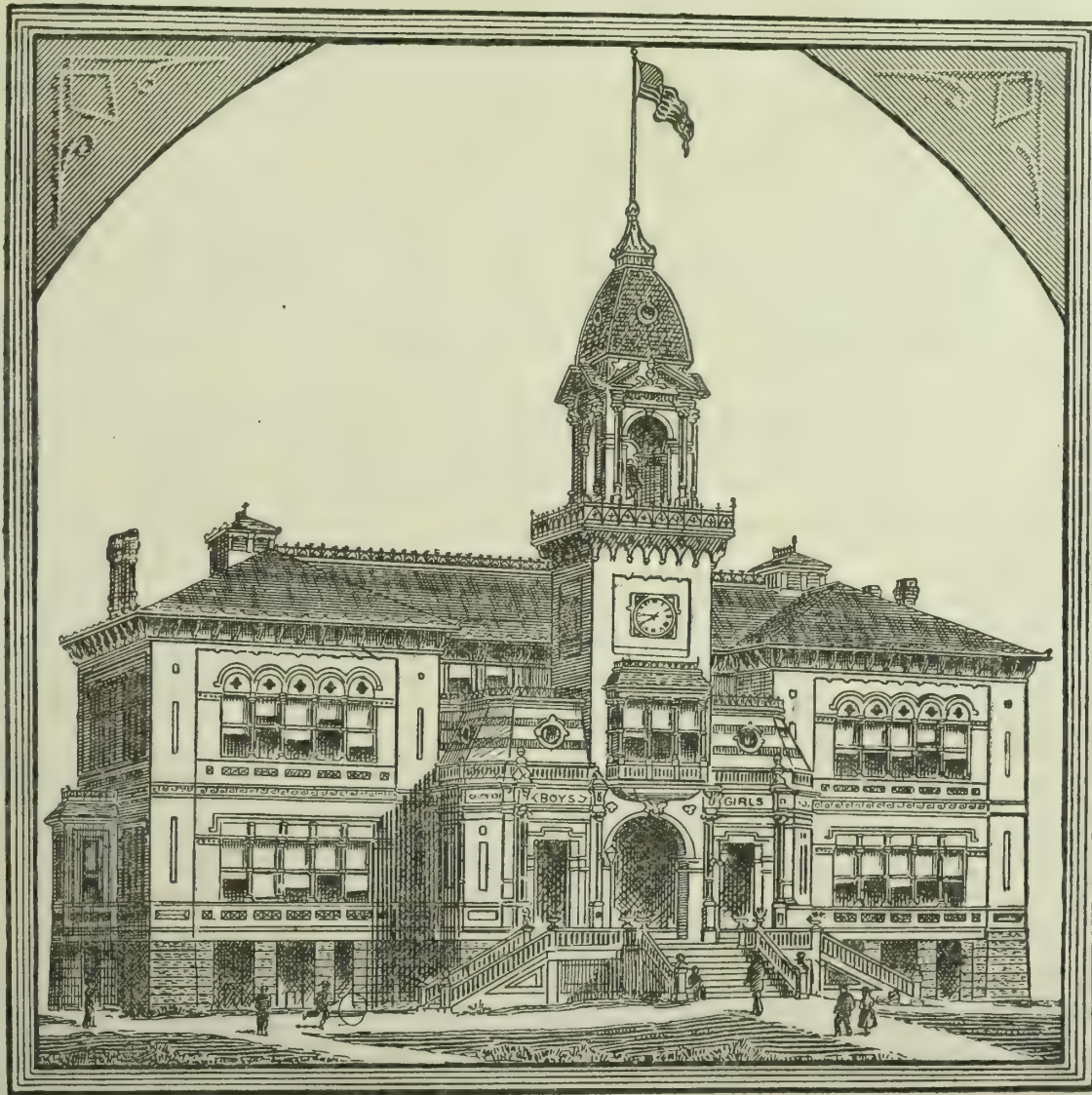
his estimable wife, came to us from New Jersey, and is one of the most accomplished school officers in the State.

There is no lack in Pasadena of facilities for more private instruction in literature and fine arts than that furnished by the public schools. But it is ever to these that we must look for what is to determine the character of our civilization and citizenship, and the people who are thronging here to-day, as well as those who succeed them, will hold in highest honor the little band of pioneers who, amid many privations incident to a new settlement, first founded and amply supported the public school.

**A DRY LAND GRASS.**—The Sagebrush Stockman makes the interesting statement that Prof. Vasey, botanist of the Department of Agriculture, in Washington, in a recent visit to Colorado, expressed the belief that he had found a grass which only needed water at the time of seeding, and stated that an appropriation will be asked to experiment with it another year in fenced tracts on the plains. We hope such a grass has been found, and that some of the seed will be sent for trial in California. There are a number of native grasses from the interior plains now being tested at the University of California—the seed having been sent by Col. Colman, Commissioner of Agriculture, but we are not aware that Dr. Vasey's best grass is in the lot. If not, let us have

it to try in this State, by all means. We can give it more rain than at the "time of seeding."

**COLD STORAGE.**—We see by the Los Angeles Times that cold storage such as is used at the East for preservation of fruits and other perishable produce is now provided for at Santa Ana. The process used is described as that of E. G. Wheeler—an ammonia process. They bring the fruit to a temperature of 45 to 50 degrees, and then ship it on refrigerator cars which keep it at the same temperature during the journey. The great advantage of the cold storage process is that if the shipment arrives on a glutted market it can be held or forwarded to some point where the demand is good. The plant now in use at Santa Ana cost complete \$5000, and has a capacity of two carloads of fruit every 36 hours.



NEW BUILDING OF THE WILSON OR CENTRAL SCHOOL, PASADENA, CAL.

of the most beautiful and commanding in the settlement, being upon Marengo avenue, at a point overlooking the busy little city, with ample grounds, water supply, and easy facility for drainage. As the building is now nearly finished, it is not too much to say that it is by far the most commodious and perfectly appointed public-school building we have seen.

Architecturally considered, it is also very satisfactory—massive but not heavy or labored in detail, admirably lighted, warmed and ventilated. Entering the main story, a spacious lobby leads into the hall, 16 feet in width, in which are the grand staircases leading to the story above. The two large classrooms on the main floor are bright and cheerful and each equipped with ample cloak and dressing-rooms for boys and girls. Here are private rooms for teachers, also.

ing-doors are such that the whole can be thrown into a noble audience-room when needed for public occasions.

While nothing essential to the wants of the several departments has been sacrificed to display, the interest of the public in the work of the school will surely be promoted by making the place for our public-school exercises so pleasant and attractive.

From the beautiful tower which crowns the schoolhouse, the eye sweeps over a marvelous scene of beauty and activity. Stately villas rise above the orange groves and orchards of the encircling hills, the growing, densely-populated little city, with railroad depots and business blocks, lies at the base of Marengo avenue, a lovely street, leading by one of the pleasantest of drives to the Raymond hotel. Lower down on this avenue one of the finest churches



## CORRESPONDENCE.

Correspondents are alone responsible for their opinions.

## Monterey District Fair.

The 10th annual exhibition of the Monterey Agricultural Association, District No. 7, opened at Salinas City on Tuesday, October 5th, and closed on Saturday, the 9th.

The weather during the week was fine, and there was a goodly attendance both at park and pavilion. Local reporters declare the display of horses was the largest and best ever had there—it is becoming better every year. The absence of gambling at the track was very noticeable, and the pool-box was less patronized than at any previous fair.

The ladies' equestrian contest, Saturday morning, drew a throng of witnesses, and the fair riders all four acquitted themselves handsomely.

The exhibition of cattle, though rather small, was otherwise highly creditable. Among the implements to be seen at the park were Lacey's sulky harrow; Hamilton's improved teeth for thrashing machine cylinders and device for rolled steel plow-shares; the Pacific Co.'s fence machine; Benicia sulky gang-plow and Tiger-mower; Compton automatic gate; Price's Excelsior seed-sower; Best's grain-cleaner and Dutcher's squirrel-smoker.

At the pavilion—passing the various mercantile and artistic displays, the fancy work and an interesting collection of Mexican curios—Paul Romie, of the Salinas nurseries, had a beautiful pyramid of foliage plants. J. S. Tibbetts, of the San Miguel, showed an assortment of vegetables, melons, garden seeds, etc., that attracted much attention. W. T. Gilkey, R. Windsor and W. S. Hunt had choice exhibits of fresh fruits. H. Corey displayed a fine lot of ranch produce, including two mammoth squashes, similar in shape and size, upon a single vine. Mrs. W. T. Gilkey had a superb output of canned fruits, jellies and pickles. Judge I. J. Harvey exhibited a lemon pear tree bearing green fruit, ripe fruit and blossoms. Mrs. J. B. Hickman had a beautiful display of grasses and pressed wild flowers, and dairy products were represented by Chas. Reynolds, Hiram Corey and J. W. Patton.

Matthew Cooke delivered the annual address on Friday evening, before a large and well-pleased audience.

Following are awards in agricultural and related industries:

## At the Track—Horses.

Roadsters.—Best stallion or gelding four years, C. W. Rowe's Hambletonian King; stallion, 2 years old, H. J. Palmer's Election; mare three years old, D. W. Evans' Ellen Voorhees.

Horses for all purposes.—Best stallion four years old, H. Corey's Clarence King; stallion three years old, J. W. Patton's Granger; stallion one year old, J. R. Hebborn's Nutmont; mare four years, J. R. Hebborn's Flora; mare three years old, M. Lynn's Silver Tail; mare two years old, H. Corey's Rose-dale; mare one year old, H. Corey's Ira; sucking colt, R. Corey's Comet, Jr.; gelding, H. Corey's Sir Henry; mare four years old with colt, H. De Groat's Kittie Lee.

Draft horses.—Best stallion three years old, W. B. Ford's Robert Ingersoll; stallion two years old, McEntee Bros.' Chief Justice; mare three years old, M. Barry's Nellie Miller; mare two years old, J. B. Smith's Flora; sucking colt, M. Barry's Col. Le Mar.

Carriage horses.—Best span buggy horses, H. M. Cavanagh's Susie and Kittie; single buggy horse, D. W. Evans' Monte.

Thoroughbreds.—Chas. Cockrill's Daisy D, Clara Treat and Ironclad; J. B. Iverson's Herculeine.

## Cattle.

Durham.—Best bull three years old, H. Corey's Prince Albert.

Jersey.—J. R. Hebborn's Fisher.

## Goats.

Best buck, W. J. Gilkey's Billie.

## Sheep.

Best ram, ewe and family, all J. W. Patton's.

## Swine.

Best boar and best sow of any breed or age, W. T. Gilkey's Dan and Chloe.

## Poultry.

Best pairs black Spanish chickens, ducks, bronze turkeys, white Leghorns, brown Leghorns, and 2d Langshans, J. W. Patton; best pairs turkeys, and Langshans, J. C. Webb.

## Agricultural Implements.

Best mower, E. P. Iverson's tiger mower; grain cleaner, Best's grain cleaner; sulky harrow, J. V. Lacey, Common Sense; gang plow, E. P. Iverson, Benicia; Sulky Gang; grain sower, D. Best, Jacob Price Excelsior; Farm gate, E. P. Iverson, Compton; S. Hamilton, Cylinder and Concave, special mention; J. Hamm, Pacific Co. combination fence machine, special mention.

## Equestrianism.

Lady equestrians.—1st prize, Miss Minnie Gilkey; 2d, Miss Florence Hebborn; 3d, Miss Ariana Williams; 4th, Miss Dottie Patton.

## Awards at the Pavilion.

Farm Products.—Best sack of oats, J. W. Patton; best sacks wheat, barley, buckwheat, corn, collection of native grains, W. T. Gilkey; hops, best 10 lbs. lard, Mrs. W. T. Gilkey; California peppermint, Miss Minnie Gilkey; exhibit corn, J. S. Tibbetts; honey in comb, strained honey, pickled olives, Mrs. W. T. Gilkey.

Garden products.—Collection garden seeds, parsnips, winter radishes, celery, cabbage, melons, cucumbers, tomatoes, turnips, sweet potatoes, best sack of onions, best pumpkins, J. S. Tibbetts; sack of potatoes, Robt. Porter; carrots, Mrs. J. R. Gil-

key; squashes, W. L. Carpenter; dried beans, W. T. Gilkey.

Fruits.—General display, W. T. Gilkey; 12 varieties of apples, W. S. Hunt; single variety of apples, Mrs. W. T. Gilkey; collection of pears, W. T. Gilkey; single variety of pears, quinces, Mrs. J. R. Gilkey; peaches, plums, collection of foreign grapes, collection of wine grapes, collection of nuts, W. T. Gilkey. Exhibits of R. Windsor, O. P. McFadden, of Cambria, M. Bolanger, of Jolon, and I. J. Harvey, not entered for premiums, deserve special mention.

Canned Fruits.—Best domestic canned fruit, fruit hermetically sealed, pickles, Mrs. W. T. Gilkey; sweet pickles, Mrs. J. B. Hickman; preserves, Mrs. W. T. Gilkey and Mrs. J. R. Gilkey; jellies, Mrs. W. T. Gilkey.

Preserved and Dried Fruits.—Exhibit domestic dried fruit, prunes and plums, apples, pears, apricots, peaches, Mrs. W. T. Gilkey.

Native Wines and Liquors.—Sweet red wine, Angelica wine, vinegar brandy, Mrs. J. R. Gilkey; white wine vinegar, W. T. Gilkey; exhibit of plants, P. Romie.

Best Bread.—Miss Lettie Cook; 2d, Miss Mabel Dorn.

Dairy Produce.—Butter, Chas. Reynolds; cheese, J. W. Patton.

## The Fair at Lakeport.

The Twelfth Agricultural District, which includes Mendocino and Lake counties, had its Fourth Annual Fair at Lakeport, Oct. 5th to 8th. The occasion failed to bring to town the usual number of strangers, which the *Democrat* ascribed partly to the fact that the directors had prohibited games of any description on the grounds, thus leaving out the main attraction for "sporting" characters, and at the opening the stock entries were so meager, and visitors so few, that the management felt somewhat discouraged. The second day, however, there was a decided improvement in exhibits, attendance and receipts, and Wednesday evening found the pavilion well filled with interested and pleased spectators.

The display of vegetables and of fruits, both green and dried, was excellent. Grapes, pears and apples especially were fine, and some of the same variety of apples from Scudamore's orchard, Esopus Spitzenberg, which took the first premium at the World's Fair in New Orleans, could hardly be surpassed. Despite the lateness of the season for peaches, some very nice specimens were to be seen, measuring as high as 11 inches in girth. The Clear Lake Canning Co.'s output was large and creditable. The best display of jams, jellies, fruits and pickles in glass was made by Mrs. Wambold. Choice bread, cakes, butter, cheese and honey filled the portion of tables allotted to them.

Wambold Bros' vegetable exhibit included squashes, onions, beets, cabbage, cauliflowers, melons, carrots, celery, tomatoes, lettuce, cucumbers, peppers, beans, radishes, corn and okra. A number of stalks of corn were shown standing over 13 feet high. One of the squashes weighed 125 pounds, and a watermelon tipped the scales at 45 pounds.

A large collection of house plants and ferns, by Mrs. Hunnewell, of Kelseyville, was greatly admired.

"The Charm flour-chest," full size, by Mr. Ozenberger, of Middletown, and a small model of another flour-chest by Mr. Herman, of Kelseyville, drew notice and praise alike from farmers' wives and city housekeepers.

Beautiful specimens of woman's needlework were displayed in variety and profusion. And in the children's department the embroidery and knitting, the bread and cakes and jellies showed that the little girls of that district are learning how to make home comfortable and pretty.

Among the mechanical exhibits an open buggy, manufactured by Jenkins & Davis, of Lakeport, without paint or oil on it to cover any defect, was entered for a premium and took it.

At the park the equine entries of all classes numbered nearly 50—stallions and mares, colts and fillies—roadsters and horses of all work being in an overwhelming majority. Shorthorns had a single representative in T. Manning's "Jumbo." John Mewhinny and A. G. Platt each showed a Holstein bull, cow and calf, and Thos. Haycock a Jersey bull and cow, which, with three graded cattle, made up the livestock.

## A New Railroad Enterprise.

EDITORS PRESS:—Some weeks since, at a meeting of the fruit-growers of Sonoma county, a resolution was adopted in regard to the necessity of a direct communication by rail with the East. All admitted that there was a good paying investment for some enterprising capitalists. At the next meeting the project was still further discussed, and a committee appointed to get propositions from the Donahue Line and the Central Pacific Co. So impressive were some of our people with the great benefit that would ensue that a corporation has been formed and the necessary papers obtained. The directors are: John Walker, Pres.; J. B. Rue, V. P.; Geo. Noonan, Treas.; W. H. Orr, Sec., and T. J. Proctor.

The directors are hard at work getting right of way. Maps and profiles of the survey have been made, and we are determined to have a railroad if we have to build it ourselves. The name of the road is the Santa Rosa & Benicia Central railroad; the distance about 50 miles,

and the route selected is an unusually easy one to build. Sonoma and Benicia strike hands with us, and all along the line the great desire is for a standard gauge railroad to enable the people to get their fruits, wine, hops, wool, wheat, etc., East. Now that the entire county has become interested, I believe the road will be built. One man says he will give a dollar an acre, and he is away from the line 1½ miles and has 1200 acres.

The extension of the Donahue line is a foregone conclusion, the surveyors are in the field, and the word is "On to Oregon," I hear, "and close up the only link in the United States not yet forged for the great chain of railroads." I rejoice in the progress ahead.

Santa Rosa.

PRO BONO PUBLICO.

## HORTICULTURE.

## Walnut Growing in Los Angeles County.

[Read by F. R. Willis before the Los Angeles County Pomological Society, at Downey City, Oct. 7, 1886.]

Of the various branches of pomology now attracting the attention of fruit-growers in Los Angeles county, none is more deserving of attention than the culture of the English walnut.

As an employment, nut culture is the easiest, most pleasant, certain, and, taken one year with another, most remunerative of any branch of industry in which the small farmer of this valley can engage.

The walnut seems to be almost indigenous to the southern parts of Europe and Asia, and the central part of South America. It is more hardy than many suppose, and would doubtless bear the winters of the Gulf States. In England, Scotland and France the walnut has become acclimated and bears large crops—France alone exporting in 1885 over 33,000,000 pounds of nuts. In California we find an entire State adapted, in a greater or less degree, to this branch of industry—the difference in adaptability being governed entirely by soil, climate and location.

The walnut flourishes best when planted in rich, moist, sandy soil to which there is good drainage, but where water can be found in from 15 to 20 feet from the surface.

It has been remarked by a well-known writer upon this subject that "sloping and rocky ground like the hillsides of our mountains is the soil best adapted to the walnut." While this may be true of other parts of this State, it is our observation that the reverse of the rule is true in Los Angeles county.

The walnuts grown upon the rich, sandy soil of Ranchoito, or upon the darker, heavier, but equally fertile soil of Old Los Nietos, are as large in size, fine in quality and in as great demand as the choicest imported nuts; and the reputation of the nuts grown in these two places of Los Nietos valley is an important factor in selling the entire crop of Los Angeles county; at least that is the inference we draw when we see sacks bearing the mark "Los Nietos walnuts" sent to various parts of the country each year, to be filled with the nuts sold by certain Los Angeles commission houses. And the further fact that in the San Francisco *Merchandise* and in the New York market reports, Los Nietos walnuts are always quoted in good demand, and at from one-fourth to one-half a cent per pound higher than nuts from other localities.

The trees are grown from roots which may be planted in the fall or in the spring, say about March.

The ground is first plowed deep, then harrowed and leveled. With a small plow open a furrow three or four inches deep, and drop the walnuts about 18 to 24 inches apart in the furrow; then cover with a plow, harrow the land, and the planting is done. After the trees appear above ground, cultivate carefully and often, but do not irrigate oftener than necessary. More trees are injured by too much than by too little water.

When the trees are from two to four years old they should be transplanted to land previously well prepared. Set the trees in rows 40 feet apart each way, keep well cultivated, and irrigate once or twice a year until they are large enough to shade the ground, when irrigation can cease altogether.

Some prefer to plant in boxes or barrels of damp sand, and when the trees are from four to six inches high, transplant at once to the places where they are to grow. For ourselves we prefer the former method, as inquiry and observation show to us that if a four-year-old tree is properly transplanted, there need be no loss, and the tree will come into bearing at least three years earlier than one transplanted during its first year.

In this valley large crops of corn can be raised each year between the trees until they come into bearing, thus insuring to the industrious farmer a continuous revenue.

The walnuts raised in this valley are classed as hard shell and soft shell, the latter now being most in favor, in consequence of coming earlier into bearing, and producing a finer nut than the hard shell. Either variety produces large crops, and such a thing as failure is almost unknown.

A few walnut groves in this valley were killed during the wet season of 1883-4 by being insufficiently drained, it being generally supposed that, owing to lack of drainage, the roots

of the trees were standing in water for some weeks, and, as the warm weather came early, the flowing sap was soured by the combined action of sun and water, thereby permeating every portion of the tree and causing its death; but generally the trees are absolutely hardy and always free from insect pests.

To prove that people have faith that such an occurrence can easily be obviated, I have only to cite the fact that many are putting out new trees in the place of those killed; and also, that they are preparing to drain the ground thoroughly during the rainy season.

In walnut growing, as well as in other kinds of work, the object to be attained is a liberal supply of coin, and it has been our observation for the last three years that in no other way can such a desideratum be more surely and successfully reached than by walnut raising.

The conditions for successful walnut culture seem better and are better in Los Nietos valley than in any other portion of the State. With our rich alluvial soil, our abundant rainfall and excellent facilities for irrigation, our protection by mountains and foothills from the hot desert winds, with the sea breeze equalizing the temperature of our summer and autumn days, we have all the natural advantages that we could desire.

The area of walnut groves now in bearing is not large, but within the past five years enough walnuts have been planted to more than quadruple the present yield.

There is still some land in Ranchoito suitable for walnut culture, most of which will be planted during the coming year; also a considerable number of acres in Old Los Nietos, under the Los Nietos irrigation system, which is also well adapted for the same purpose, and we venture the prediction that but few years will pass ere that will be considered the finest section in the United States for this industry.

## THE PUBLIC LANDS.

## Uncle Sam's Business for the Year.

Commissioner Sparks, of the General Land Office, has submitted to the Secretary of the Interior his report for the last fiscal year. At the outset the Commissioner says: "In my previous report I referred to the imperative need of reform in the administration of the public land laws to the end of protecting the public interest rather than ministering to the advantage of speculation and monopoly, private or corporate. The steady purpose, in which I have endeavored to reflect the aims of all good men, has been the protection of the public domain and its preservation for inhabitancy by actual cultivators, to whom it rightfully belongs. The evidences of 'widespread persistent land robbery' laid before you in my last report were furnished by officers and agents appointed by the last administration. The developments of the past year under the agencies of the new administration have justified every word said in my last report." The sales, entries and selections of public land under the various acts of Congress, says the report, "embrace 20,991,967 acres, and of Indian lands, 1,132,596, making a total of 22,124,563 acres, being an increase over last year of 1,129,050 acres." The public surveys reported during the year embraced 2,302,376 acres. On this subject the Commissioner says that 1,400,000 acres of the Territory of Arizona have been surveyed, principally in the southern and central portions of the Territory. About 710,000 acres have been surveyed in California and about 580,000 in Colorado. Concerning the surveys in this State the report says: "The eastern portion, known as the plains, which is largely dominated by cattle corporations, was returned and surveyed several years ago, but no monuments existed and there are no means of identifying the subdivisions of sections, or even the locality of townships. It is of the utmost importance that prompt steps should be taken to fully ascertain the condition of the public surveys in that part of the State. In Dakota the eastern half of the State has been surveyed, except in portions along the international boundary line of the Turtle mountain region. The surveyed area of this Territory is about 4,700,000 acres."

In speaking of the surveys in New Mexico, the Commissioner quotes from the report of Mr. Julian, Surveyor-General of New Mexico, in which he expressed the opinion that large areas of the Territory will have to be re-surveyed, on account of the previous inaccuracy and fraud.

The work of the office is reviewed at length, showing that 3087 cases of entries were investigated, of which 1168, embracing 17,505 acres, were canceled as fraudulent, and 1485 cases, containing 225,000 acres, have been held for consultation. The Commissioner says his attention has been called to 3750 unlawful inclosures, containing 6,410,000 acres, and that proceedings to compel the removal of fences have been recommended in 88 cases, involving 2,250,000 acres, and final decrees ordering their removal obtained in 13 cases, involving 1,000,000 acres. Agents report 65 inclosures removed from 1,374,862 acres, and 47 inclosures, covering 359,000 acres, removed without resort to the courts. In several cases no area is given, and in one case the amount of fencing is stated as 130 miles. The total area over which fences



have been or are being removed is 2,714,926 acres, mostly in Colorado.

The report continues: "Twelve hundred and nineteen cases of timber depredations have been reported, involving a value in timber and timber products amounting to \$9,339,679 recoverable to the United States. About \$100,000 of this has been recovered. Depredations on public timber by powerful corporations, wealthy mill-owners, lumber companies and unscrupulous monopolists, though to a certain degree checked, are still being committed to an alarming extent and great public detriment."

"The subject of forest reservation," he says, "is one of unquestionable importance, and I respectfully renew the recommendation heretofore made." The Commissioner recommends that an act be passed making false and fraudulent returns of public surveys and of surveys of private land claims offenses punishable by fine and imprisonment. The recommendation is also made that the law authorizing surveys to be made under the "special deposit" system be repealed.

## SHEEP AND WOOL.

### The Proposed Registry of American Angora Goats.

In our report of the meeting of the California Angora Goat-breeders' Association, in last week's RURAL, the following paragraph occurred:

The question of joining the American Mohair Growers' Association of Texas, to establish a standard for a pure-blood Angora goat or a system of registry, was discussed and resolved that action on this subject be laid over until next annual meeting.

In order that our goat-breeding readers may understand more fully what is proposed by the American Mohair Growers' Association, we give below a communication which we have just received from the secretary:

EDITORS PRESS:—I send you herewith rules of the Angora Goat Register adopted at a meeting of the American Mohair Growers' Association held on the 4th and 5th of this month in the Southern hotel at San Antonio, Texas. There were 19 members present. G. A. HOERLE, Corresponding Secretary of the American Mohair Growers' Association.

#### Report of the Committee on Registration.

After a six-hours' argument, your Committee on Registration, consisting of J. P. Devine, San Antonio, Chairman; S. J. Arnold, Montell, Uvalde Co.; J. C. McFarland, Boerne, Kendall Co.; Thomas Evans, Montell, Uvalde Co.; R. H. Lowrey, Camp San Saba, McCulloch Co.; G. A. Hoerle, Ridge-wood, Bergen Co., N. J., came to a final conclusion, and recommend the following for adoption:

1. That an Angora Goat Register shall be established under the following rules:

2. That no animal shall be admitted unless it be covered entirely with mohair, without mane or coarse hair.

3. That no animal shall be admitted unless its fleece and undergrowth of hair be entirely white.

4. That the Register shall be divided into two classes—Class 1 and Class 2.

5. That the first requirement for admission into Class 1 shall be purity of blood.

6. That the applicant for admission shall make an affidavit, before a notary public, that according to his best knowledge and belief the animals in question are descendants of imported pure-bred stock, or shall prove, in any other way the association may hereafter decide upon, either by committee or in open session, such purity of blood.

7. That this Class 1 shall be subdivided into three degrees of excellence, the standards of which to be agreed upon by a committee to be appointed for that purpose by the president.

8. That the second class, or Class 2, shall consist of grades, which shall have also three degrees of excellence, of the same standard as Class 1.

9. That the above-mentioned committee shall consist of an equal number of pure-blood breeders and grade breeders.

[The president, Mr. W. D. Parrish, then appointed G. A. Hoerle and J. C. McFarland to represent the pure-blood breeders, and S. J. Arnold and R. H. Lowrey to represent the grade breeders, a committee to define the above-mentioned degrees of excellence. After adjournment they met and agreed upon the following rules:]

10. That besides the requirements already agreed upon in resolutions Nos. 2 and 3, only animals with fleeces reaching the following weights shall be called the lowest standard of excellence:

BUCKS.		
	If fine fleeced.	If coarse fleeced.
Over 5 years old.....	.....	.....
Over 3 years old.....	4½ lbs.	5½ lbs.
Two years old.....	3½ lbs.	4½ lbs.
Yearlings (first fleece).....	2 lbs.	2½ lbs.

EWES.		
	Fine fleeced.	Coarse fleeced.
Over 5 years old.....	3 lbs.	4 lbs.
Over 3 years old.....	3½ lbs.	4½ lbs.
Two years old.....	3 lbs.	4 lbs.
Yearlings (first fleece).....	1½ lbs.	2½ lbs.

11. That the above weights shall be called two points with an animal, and that for buck fleeces every additional pound of mohair, and for ewe fleeces every additional twelve (12) ounces, shall be counted as one additional point in the scale of points hereafter given.

12. That in judging fineness of fleeces, mohair of the factory standard fineness (No. 18) shall not count any point with ewe fleeces, but that with them No. 24 shall be counted three (3) points, No. 30 shall count six (6) points, and No. 36 nine (9) points; whereas for buck fleeces No. 18 shall count three (3) points, No. 24 six (6) points, and No. 30 shall count nine (9) points. However, kids of both

sexes shall not be rated that way nor admitted in the upper degrees of excellence.

13. That the animals submitted for admission into the upper degrees of excellence shall be judged by a scale of points, perfection to be called 50 points, and shall be composed of:

A. Fleece 31 points, viz.:	
Fineness counting up to.....	9 points (nine)
Weight counting.....	8 points (eight)
Evenness of mohair and covering.....	6 points (six)
Shape of fleece (quality of ringlets).....	4 points (four)
Luster.....	4 points (four)

B. Body 16 points, viz.:	
Constitution to count up to.....	6 points (six)
Symmetry of shape up to.....	5 points (five)
Weight up to.....	5 points (five)

C. Fancy 3 points, viz.:

Earlocks and tuft up to.....	2 points (two)
Lop-ears up to.....	1 point (one)

14. That in judging evenness, "shape and luster of fleeces, as well as constitution and shape and weight of the body, a fixed starting point shall not be agreed upon for the present, but it shall be left to the discretion of the Examining Commissioners to act upon their best knowledge and belief.

15. That in order to gain admission into the two upper degrees of excellence, thirty-five (35) altogether shall be required, including fancy points, for the second degree, and to gain admission into the first degree of excellence, forty (40) points shall be required and best possible fancy points indispensably necessary, and absolutely no coarse hair shall exist in the fleeces of the respective animals.

16. That the examination of animals for which admission into any of the three degrees of excellence of either of the two classes is applied for shall be made by commissioners, to be elected annually in open session, and that at least two commissioners shall be necessary to make an examination.

17. That the Examining Commissioners shall be men of integrity and thoroughly acquainted with the Angora goat husbandry.

18. That they shall be paid for every examination trip at the rate of (to be decided at the next meeting).

19. That the application for registration shall be made to the secretary of the association.

20. That whenever an application for admission into the Register is made by any owner of Angora goats, the secretary shall notify all the Examining Commissioners and ask them to volunteer and state at what lowest price each is willing to make such examination, and that in case no voluntary offers for the respective examinations are made, he shall appoint two commissioners who shall make the examination, and, as long as no fixed charges have been agreed upon, shall arrange themselves privately with the owner of the goats in regard to fees payable for the respective examinations.

21. That the owners of Angora goats for which admission into the Register is demanded shall make an affidavit to agree to answer correctly, according to their best knowledge and belief, all the questions addressed to them by the Examining Commissioners in regard to the breeding of their stock.

22. That each commissioner shall have for the term of his office a book, in the shape of a check-book, containing duplicate permits for registration, showing that the owner of a certain Angora goat is entitled to have that animal registered in a certain degree of Class 1 or Class 2. One of these duplicate permits the commissioner shall retain in his permit-book as a record; the other he shall give to the owner of the goat. The owner of the goat shall forward his permit, together with the amount of registration fee, to the secretary, who shall give him a receipt therefor and send the permit to the keeper of the Register.

23. That the charges fixed for registration shall be:

	Class 1	Class 2
Lower degree of excellence.....	25c.	10c.
Second degree of excellence.....	35c.	15c.
First degree of excellence.....	50c.	20c.
Transfers.....	10c.	10c.

For members of the association; non-members shall have to pay double charges.

24. That the keeper of the Register shall make the necessary entry in the respective records and furnish the owner a Certificate of Registration and an association card for every individual animal for which he produces a permit.

The above rules were adopted.

Before adjourning, the following Examining Commissioners were elected: J. C. McFarland, Boerne; Henry Fink, Leon Springs, Bexar Co.; W. H. Clark, Montell, Uvalde Co.; S. J. Arnold, Montell, Uvalde Co.; Maurice B. Moore, Austin; W. W. Haupt, Kyle, Hays Co.; W. Morgan, Fort Worth; P. H. Hale, Fort Worth; R. H. Lowrey, Camp San Saba, McCulloch Co.; Capt. W. Gordon, Junction City, Kimble Co.

The first Monday in June was agreed upon for the next day of meeting of the association, whereupon the president adjourned the meeting.

## THE IRRIGATOR.

### Ownership and Use of Water.

EDITORS PRESS:—The work in the orchards and vineyards is about over for the season. The vineyards were a success in this region, but orchards were a partial failure. The cultivation of wine and raisin grapes has passed the experimental stage and may now be considered a regular business here. The Natoma Company have made a great success with their vineyard this year. They employed many girls to select and pack grapes for shipment, and the company say that they give better satisfaction than Chinamen, and it is their intention to provide accommodations for them another year, so they can rely on their help.

The town of Folsom, 22 miles from Sacramento, on the Sacramento & Placerville Railroad, situated on the American river, at the foot of the rapids, is destined at some future time to become a city of some

importance. When the Natoma Company finish their canal to Folsom, and perhaps extend down to Sacramento, it will furnish unlimited water-power and abundance of pure, clear cold water for both cities; also an abundance of water for irrigation purposes.

I can appreciate the advantage that plenty of water would be to the inhabitants of this valley, as I have had 10 years' experience with irrigation, and it is my candid opinion that it is impossible to grow fruit to its utmost perfection without irrigation, except in some low situations.

The problem of the growth of trees few think about. The amount of moisture drawn from the ground is incredible without proof and facts. A large, healthy grapevine cut off in the spring, and a machine attached to the stump to weigh the pressure, will indicate 80 pounds pressure, more or less. Such a drain from the soil continually during the summer by trees and vines must exhaust almost all the dampness unless supplied by rain or irrigation.

Irrigation is the great question of the day. In my opinion, freely, the waters of the State belong to each individual composing the State; each one has a right to say what shall be done with his own. A riparian owner should have his share; the prior appropriator should have his share and no more. Now come in the people, the owners of the water, and say you riparianists and appropriators have taken possession of what does not belong to you, and we will now, through our authorized agents, redistribute this water justly among the people. Teach greedy, rapacious men a lesson, much needed, that they will not be permitted to take possession and monopolize the water as they have the land. Let no man or company of men own the canals or ditches. Irrigation should be a State work, with the Board of Supervisors in each county as agents for the State to manage the water for the people. Only enough should be charged to each irrigator to pay the interest on the cost of construction, and all work should be done under direction of a competent engineer.

If we could rise to the height and be able to comprehend the vast possibilities of this State, to produce a hundred-fold more in quantity and variety of the products of the soil by irrigation, rendering us independent of rain or drouth, we would scrutinize and question closely the men who undertake to represent us in the Legislature. All kinds of monopoly, tyranny, oppression and wrong die hard, and the history of all ages shows that oppression once fastened upon a people can only be shaken off by revolution and bloodshed.

MONTGOMERY PIKE.

Routiers, Sacramento Co., Cal.

## THE STOCK YARD.

### Baden Farm Shorthorns.

We have received a newly-issued catalogue of the Baden Farm herd of Shorthorns belonging to Robt. Ashburner. It is illustrated with four cuts, all of which have appeared in the RURAL PRESS, with full explanations of the breeding of each animal, together with a full analysis of their pedigrees, which, with the catalogue now issued, will be a great help to those beginners who have not access to the herdbooks, in the study of the pedigrees of Shorthorn cattle, as, most likely, those of our readers who are at all interested in the breeding and rearing of good cattle will have their copies filed away for future reference.

The catalogue contains the pedigrees of 76 cows and heifers and 21 bulls and bull calves, the youngest calf in the catalogue being calved on Sept. 19, 1886. The cows and heifers represent direct descendants of 12 imported cows; or, in other words, 12 different families in female line direct, of which the Frantics and Fidgets are most numerous. They are all descended from imported Frantic by 4th Duke of York (10167), and have always been bred to good bulls—bulls, with one exception, full of the best of Bates blood. That exception was the bull Water Prince 13114 (a son of the late Wm. Torr's Water Prince (19126) and Pocahontas 1st); being a large, good bull, he was used with great advantage on the then too much in-bred Frantics, as they came into Mr. Ashburner's hands.

There are 16 called by the name of Frantic, up to the 36th, that name now being given only to descendants of Camilla, by Aprioot's Goater, through her daughters, full sisters, Goldleaf and Fragrant, by Water Prince. Those called by the name of Fidget, seven in number, are descendants of White Rose, by Mad Anthony, a son of Echo of Oxford (12821).

After the Fidgets are 10 of the Pansy family that have come through two different lines of breeding from imported Pansy by Blaize (76). Then there are eight Gwynnes—descendants of R. Colling's Princess by Favorite (252), through two cows imported from England by Mr. Ashburner in 1875. This family and the Frantics are about equally esteemed by Mr. A. for their good breeding qualities and general usefulness.

There are, next, nine descendants of Flora, imported from the herd of Mr. Mason, England, in 1819. These are much esteemed for their milking qualities, especially that branch with the cross of imported Cirencester Duke (17563), a bull that improved the milking qual-

ities of all families on which he is known to have been used. His dam being of Sir Charles Knightley's Primrose family and his sire a Darlington bull with a double cross of Mr. Bates' 4th Duke of Oxford (11387), who was himself descended from some of the best milking strains of Shorthorns, on both sides.

The next family consists of seven descendants of imported Lady Jane, by Whittington (12299). All that Mr. A. ever owned of this family, that have come into use, have been great milkers. Eliza, now the oldest cow of the family in the herd, gave 26 quarts a day one season, for some time after calving, on grass only. There are five Fawsleys descended from Sir Charles Knightley's Garland by Gray Friar (9172), through imported Fawsley Garland 4th by Vanguard (10994).

Fawsley Garland 4th, bred to imported Cirencester Duke, above named, produced Fawsley Garland 6th, and Fawsley Garland 8th, from which the five females in the catalogue are descended.

After these come four descendants of imported Jane by Young Magog (2247); three from Mason's No. 6 by Dr. Syntax; three from imported Lady Newham by Belleville (6778); two from Mr. Torr's Gold Princess by British Prince (14197); one, Golden Hope, a 14-year-old cow, by Golden Duke, and out of a cow by Cirencester Duke, granddam imported Gold Princess, etc.; the other being a roan yearling by Baden Duke 7th and out of Golden Hope.

There is one Oxford cow, calved in 1872, a granddaughter of Princess of Oxford, bred by Samuel Thorne and bought of him by A. B. Forbes, of San Francisco. This cow is forward in calf to the Princess bull Baron of St. Lawrence 37610, who is already the sire of some good heifers in the herd.

Those interested will have some recollection of what we said about the bulls on the occasion of our last visit to Baden Farm, in June last. Since that time the fine old bull Cherry Prince has been added to the list of bulls, Royal Duke having been given in exchange for him. Cherry Prince was bred at Baden, got by imported Grand Prince of Lightburne (36730) and out of imported Cherry Oxford 2d by Baron Bates (30041), etc., to Old Cherry by Pirate.

There are three yearling bulls and 11 bull calves under one year old, beside two that have been calved since the catalogue was in print. At the end of the catalogue are four pages filled with reference to sires, giving some explanation as to the breeding of each bull recently used, whose pedigree does not appear among the bulls now in the herd. There are also 14 pages of reading matter, which will be both instructive and interesting to most people who are breeding cattle. The catalogue can be had by addressing Robert Ashburner, Schoolhouse Station P. O., San Mateo county.

### A Grand Cattle Convention.

It is announced from Chicago that formal calls have been issued for the annual meeting of the National Cattle-growers' Association of America to be held in that city on Monday, November 15th. The meeting, it is declared, will ratify the articles of consolidation agreed upon last fall between the committees representing the Chicago and St. Louis associations, and a joint meeting of the two organizations will be held for the purpose of effecting a permanent organization, to be known as the Consolidated Cattle-growers' Association of America.

A call has also been issued by order of the joint Executive Boards of the two existing associations for a delegate convention of cattlemen from all quarters of the United States to be held November 16th and to continue until the important business which will come before the meeting shall be dispatched. These delegates are to be appointed by the various cattle-growers' associations, Governors of the States and Territories, State and National Departments of Agriculture, agricultural colleges, live-stock exchanges, and the live-stock and agricultural press. The meetings are to be held while the American Fat Stock Show is at its height. All railroads centering at Chicago will grant reduced rates of fare during that exhibition.

### Cure for Milk Fever.

EDITORS PRESS:—D. A. Logan, of Cayucos, reports having cured two cows of milk fever by administering one tablespoonful of common soda dissolved in teacupful of warm water, given to cow from a bottle. Then immediately after this dose give in the same way a teacupful of vinegar mixed with a pint of warm water. The cow gets well without giving any medicine. A neighbor has succeeded in curing cows of the milk fever in the same way. This is deemed an important recipe and well worthy of trial.

San Luis Obispo Co.

DEATH OF JOSEPH RUSS.—Hon. Joseph Russ, of Humboldt county, died in Alameda last lately, aged 63 years. Mr. Russ was born in Maine in 1823, and received a good common-school education in his native State. He came to California in the spring of 1850, and for many years resided in Humboldt county, his home being in Ferndale. He served in the Assembly in 1871-72 and again in 1877-78. He was extensively engaged in stock-raising and dairying, in which pursuits he was very successful.



## PATRONS OF HUSBANDRY.

Correspondence on Grange principles and work and reports of transactions of subordinate Granges are respectfully solicited for this department.

## State Grange Annual Session.

(CONTINUED.)

## Concerning Resolutions.

At the time of publishing the resolutions adopted at the session, we were unable to give the writers' names, and can only do so in part now, we regret to say. Those on education and taxation were offered in part by Bro. Webster, and reported with modifications by Bro. Blackwood, Chairman of the Committee on Resolutions.

Bro. Bangs presented brief resolutions from Ceres Grange on irrigation. A more lengthy series offered by Bro. Caples, of Galt Grange, were adopted as a substitute for the first resolution of Ceres Grange, and all were subsequently laid on the table. At the last hour Bro. Webster presented those adopted, which seemed to give general satisfaction, embracing, as they do, very briefly the main and essential points of legislation needed.

Bro. Ostrom presented the anti-debris preamble and resolutions, which were adopted, without amendment, unanimously.

Bro. Adams presented the resolution on National Grange session in Sacramento, and that concerning the establishment of agricultural experimental stations.

Bro. Hancock offered the resolution adopted on transportation.

Bro. A. P. Roache, of Watsonville, introduced early in the session a very impressive preamble and resolutions in favor of woman suffrage. Not coming up for action until the closing moments of the session, when few were present, in deference to the opinions of several earnest Patrons (some of whom highly favored the resolutions) action was indefinitely postponed, although we believe a very decided majority of those present were in favor of their adoption under more opportune circumstances.

## Anti-Debris Resolution Adopted.

We present a slightly amended report of action had regarding the debris nuisance:

To convince all of the usefulness of our organization it seems only necessary to refer to a few of its accomplishments, when thoroughly united and in earnest. It never attacked a foe that it did not subject to law and equity, and which was maintained by the highest tribunals in the land.

The first grand triumph was in the effectual subjection of the creature to the will of the creator in the matter of governmental control of railroad and other corporations as exemplified in the Granger cases.

This State has not been without its foes, and strong and determined they were. The rivers were used as receptacles for the mountains in dissolution and with the most direful consequences to rivers and valleys, all under the plea of vested rights. The legal battle came, and the position so often expressed by the sufferers of the State and subordinate Granges have been sustained by the highest courts, both State and National, and in compliance with memorials by our people, from the last State Grange, the general government, recognizing its duty in the premises, instructed the Secretary of War to protect our navigable waters.

To this end, we, the State Grange, recommend prompt and speedy action by the Secretary of War, so that the injury may cease, and the money heretofore appropriated for the correction of the evil may become available for the purposes intended.

The following, offered by Bro. D. A. Ostrom, was unanimously adopted:

WHEREAS, After our late success some recognition should be made by the people of the Sacramento valley toward its steadfast friend, the State Grange; also to individuals thereof who have so determinedly and continuously stood by us in our long and bitter contest; therefore be it

Resolved, That we extend to all our heartfelt thanks for their timely assistance in the hour of our severe trial.

Bro. Krull, on the part of Enterprise Grange, presented a lengthy article proposing the establishment of a Beneficiary Department or Auxiliary Branch of the Order, whereby Patrons can insure their lives as in Fraternal Life Benefit Associations established by members of other orders elsewhere. It was reported on favorably by the committee.

Upon discussion the feature allowing those insured to retain membership in the association while not remaining members of and contributors to the support of the Grange, and the fact of not placing the management irrevocably under control of the State Grange, was deprecated by some members who are earnestly and sincerely in favor of adopting provisions for the further protection of the lives of brothers and sisters. It was moved to refer the report back to the committee, with the hope that amendments would be made acceptable to a majority of those present. The motion to refer back was lost and the report finally rejected.

There is a growing feeling in favor of adopting some further life beneficiary provision, and if the friends of this movement will persevere and present some more perfectly devised plan, we believe it will eventually be adopted. The

fact that there is less risk on farmers' lives, than the average, is a strong incentive in this direction. While on this subject it may be a kindness to some to refer them to the "Life Benefit Fund" provisions already in our State Grange constitution, whereby any Grange can provide for the payment to the heirs or representatives, on the death of a member, of any sum adopted by the Grange not exceeding the amount of \$2.50 for each member.

Possibly forming similar plans for operating in Pomona Granges or the State Grange would prove better. We are told that Stockton Grange has acted under like provisions for years and accomplished great good in several instances. We should like to receive correspondence from Patrons on this subject, the better to prepare the minds of all representatives at the next State Grange. Let each Grange bring the subject up for discussion; refer to the provisions already in the constitution, and adopt or reject the same. Plymouth, Temescal and Stockton, we believe, are the only Granges that ever took action on this subject.

## The Pomona Feast.

The contributions of fruits, flowers, etc., to the recent Pomona Feast at State Grange were as follows: John Bidwell, Chico, 2 crates melons, 2 boxes pomegranates, 3 boxes pears, 11 boxes grapes, 5 boxes peaches, 1 can syrup; C. L. Durban, Pentz, Butte county, 1 box grapes; H. G. Leeman, Grass Valley, 2 boxes grapes; Thos. Paine, Grass Valley, 1 box grapes. Yuba City: J. W. Hicks, 3 boxes peaches; G. W. Carpenter, 10 boxes raisins; R. C. Kells, 2 boxes pears, 1 box pomegranates, 11 boxes grapes, 20 boxes raisins, 2 pumpkins, 1 load melons; S. J. Stabler, 1 load melons; G. F. Starr, 3 boxes grapes, 3 boxes raisins; J. P. Onstott, 12 boxes grapes; Abbott & Phillips, 3 boxes peaches, 1 box apples, 1 box grapes, 1 box plums; T. B. Hall, 2 boxes grapes, 1 box apples, 1 box pears, 2 boxes almonds; H. C. Jones, 1 box quinces, 2 boxes pomegranates. From Hock Farm: Graves & Williams, 3 boxes grapes. Yuba City Grange, 5 boxes pears, 2 boxes grapes, 5 boxes peaches, 2 boxes plums. Contributors of flowers, Marysville: Mesdames W. C. Swain, C. H. Crowell, J. Greely, F. H. Freely, N. A. Rideout, N. D. Rideout, E. H. Hudson, F. D. Hudson, C. C. Harrington, M. Marcuse, Lizzie Smith, J. R. Garrett (wagon trimmed), Miss Lizzie Swain, crosses, and many others of the Marysville ladies whose names the committee were unable to ascertain. Yuba City: Mesdames W. P. Harkey, E. G. Van Arsdale (basket), Moody Clark, Charles Weeman, M. E. Sanborn, S. C. Deaner, G. F. Starr, R. C. Kells, T. B. Hull, G. W. Carpenter, J. B. Wilkie, B. F. Frisbie, H. C. Jones, B. E. Walton, George Ohlrey, W. P. Smith, H. M. Williams, and Mrs. Ida Pierson (anchor), Miss Pauline Newkom decorated (pumpkin).

## Temescal Grange Report.

Temescal Grange, No. 35, meets in Oakland on the first Saturday evening and the third Saturday afternoon of each month. One meeting only has been omitted during the past 12 months, and that by prearrangement on account of the National Encampment of the Grand Army of the Republic. Our meetings have been somewhat better attended on the average than during preceding years. We have 41 members, with an usual attendance of some 18. We have admitted nine applicants and lost seven, making a gain of two, with good prospects for further accessions to our ranks in the near future. Three of our members have died. Being located near the State Grange headquarters and the metropolis of the State, we have been repeatedly favored with visits of able and zealous Patrons from our own and other States. We hope that all brothers and sisters present will bear in mind that our Grange is very convenient for visitation by Patrons while sojourning in Oakland or S. F., and that their company is always cordially invited. While our location is one in which we cannot expect a large membership, we have, therefore, endeavored to make the best of our situation by aiming to secure and maintain a good and true membership rather than a large one, and we believe our success has been admirable in this direction.

There was a time when some of our members were fearful of incurring the disfavor of candidates by initiating them into so thin ranks. That time has long since passed, and Temescal seems steadily on the up-grade.

Our Grange was instituted before the organization of the State Grange, by N. W. Garrettson, Deputy of the National Grange, in June, 1873, with 15 charter members present, nine of whom have never been off our list. Among our members we are proud to name a genuine Webster, our gifted Dr. and Jeanne C. Carr, and Bro. J. W. A. Wright, the eloquent author of the "Aims and Purposes of our Glorious Order"—a heaven-inspired document that will live as long as any words of liberty ever written in American history.

To increase the regular attendance, as well as the membership of our Grange, during the past year, it has been our special effort not only to have the Grange always opened promptly, but to have some previous arrangement and announcement for interesting transactions. We have found these to be good features, worth continuing and worthy of recommendation all along the line of Granges.

In a word, we try to act up to the precepts of our Order—that whatever we attempt to do, let us strive to do well; and, although small in

numbers, I am glad to say that we are all earnest and constant in our endeavors not only to make our meetings pleasant and profitable to ourselves, but our work as effective and useful as possible to the Order at large and humanity everywhere.

A. T. DEWEY, W. M.

## California Exhibit at National Grange.

Shortly before his departure for the East, as we learn from the *Sacramento Record-Union*, Worthy Master Johnston appeared before the Executive Committee of the Citrus Fair Association at Sacramento, and stated that he was going to Philadelphia to represent this State in the National Grange. It is customary at the sessions of the National Grange to have exhibits of the products of the soil from every State in the Union. This had become quite an important feature, and as the Grange was largely attended by representative men from every portion of the Union, each State sought to make as good a showing as possible, and in order to assist in that direction, space was allotted for the exhibit of each section. He was very anxious that California's wonderful and varied products should be fairly represented, and, if so, he was sure she would not suffer by way of comparison with any other section of the Union. He recommended the taking back of a large and varied assortment of dried fruits, such as raisins, French prunes, etc. He also desired to have an abundance of them to give away—to allow those who visited the exhibit to partake. He thought there should be samples of oranges, grapes and all green fruits obtainable, as well as all the cereals. Any one who is willing to contribute to this laudable exhibit is requested to leave the same with Strong & Co., in this city. The dried fruits should be put up in small packages, with glass covers, with the card of the exhibitor and the name of the variety underneath the glass, where it can be plainly seen. The railroad company has agreed to carry this exhibit to Chicago free of charge.

The Committee passed a resolution indorsing the suggestion of Senator Johnson regarding his Philadelphia exhibit, promising to render him all the aid possible.

## Subordinate Grange Membership.

In response to blanks sent out by Secretary Chester, the following Granges only had replied at the time of the meeting of the State Grange: Enterprise, North Butte, Valley, Yuba City, Santa Rosa, Sacramento County Pomona, San Jose, St. Helena, Paso Robles, Watsonville, Temescal, Elk Grove, Alhambra, Stockton, Eden, South Sutter, Potter Valley, Magnolia, Roseville, Bennett Valley, Sacramento.

In which the aggregate loss by suspension for non-payment of dues, dimits and deaths is 75 males and 57 females. Total 132.

The aggregate gain is—Males, 69; Females, 83. Total gain, 152.

Granges with 100 members and over—5: Sacramento, Alhambra, Stockton, Enterprise and San Jose.

Granges with 50 members and over, and less than 100—9: Santa Rosa, 89; Valley, 87; Yuba City, 75; Roseville, 70; Elk Grove, 67; South Sutter, 62; Watsonville, 60; North Butte, 57; Potter Valley, 53. No charters surrendered.

The additions, Sacramento County Pomona Grange with 68 members, San Joaquin County Pomona Grange with 64 members, Tulare Grange with 18 members.

## Grange Items.

(Condensed from the *Patron*.)

SAN JOSE GRANGE initiated two candidates in the first and second degrees at the regular meeting Oct. 23.

THE POMONA GRANGE will have a permanent exhibition of the products of Sonoma county in Howell, Bryant & Co.'s new Central Market at Santa Rosa.

VALLEY GRANGE had a social at Odd Fellows' Hall, Pacheco, on the evening of Oct. 15. Over 100 persons attended, and there were readings and recitations, music and dancing.

SONOMA POMONA GRANGE.—Elected and installed Oct. 20, 1886: G. N. Whittaker, M.; M. Litchfield, O.; E. W. Davis, L.; N. Carr, S.; J. P. Whittaker, A. S.; Dan Mills, Sec.; A. J. Mills, T.; John Adams, G. K.; N. Martin, C.; Mrs. G. N. Whittaker, Pomona; Mrs. E. W. Davis, Flora; Mrs. N. Carr, Stewardess; Miss Emma Mills, L. A. S.

RAILROAD FARES AND FREIGHTS.—The conference of passenger agents in this city before adjourning Monday advanced overland rates to Chicago and New York to \$72.50 and \$93.30 for unlimited, and \$44 and \$61 for emigrant tickets. The freight agents took action which will probably result in making rates by all the transcontinental lines on the basis of 50 percent of the old tariff to through Eastern points.

FRUIT-GROWERS' CONVENTION.—Some notices of the coming meeting at Sacramento have given the date Nov. 13th. This is a mistake; the meeting will open Monday, Nov. 15th, at 11 o'clock A. M., in the Assembly Chamber of the State Capitol.

OUR AGRICULTURAL NOTES may be found this week on page 388.

## FRUIT MARKETING.

## Crying Need of Co-operation.

EDITORS PRESS:—Now that the election is over, I hope that we fruit-growers will unite on at least one proposition, which is even of more importance to us than who should be our Governor. For that purpose, allow me to suggest to you to direct the attention of all fruit-growers to the importance of their meeting in Sacramento, on Nov. 15th, to take such action as in their opinion may be necessary regarding the future marketing of their fruits. Let every fruit-grower consider it his or her duty to be present, and not depend upon a few in numbers to attend what, to them, is a matter of the greatest importance in their business.

Some fruit-growers think that they can stay at home and let others provide markets for them, and then they can either sell their fruits or ship them. This would be well enough if such could be done advantageously, but the fact is, if they do not act together they will have to pay higher rates for freight than they can afford, getting nothing for their fruits in return for their labor; or, they can sell them at such prices as will not pay them sufficiently to reimburse them for their own labor and the expenses incidental thereto. Already thousands of tons of grapes are going to waste for want of a market, and those that are marketed are only a source of profit to the railroads, box-makers, draymen and commission-men, and generally a loss to the grower. So it is with much other fruit. The grower who toils hard the year round has to be satisfied if his income meets his expenses.

In your last week's issue you have a statement made by your special correspondent, Mr. Weinstein, showing a statement for 400 half crates of grapes shipped to St. Paul, Minn., showing a loss of \$220. Even this statement is incomplete, as it does not include the expense of loading, bracing and drayage, which will further increase the loss say \$20 more. Now let me give you a statement of two accounts of sales that I received—one by slow freight received partially in bad order of 189 boxes pears and 475 plums:

Account of sales, total.....	\$500 15
Expenses, freight.....	\$266 45
Drayage.....	8 00
Commission.....	50 00—\$355 45
Returns to me.....	\$142 70

The other was sent with special train from Sacramento, fast freight, containing 611 boxes plums and 151 boxes pears, received in "good order."

Account of sales, total.....	\$606 70
Expenses, freight.....	\$403 10
Drayage.....	8 00
Commission.....	60 65—\$471 75
Returns to me.....	\$134 95

In both cases the expense of boxes, paper, packing and loading exceed the returns. Had I allowed the fruit to rot on the trees, I would have saved about \$50 in each case. The railroad in one instance got \$299.45; in the other, \$403.10, and I nothing.

I state here that we have no encouragement from the railroad companies to improve our condition. While they propose slight reductions in two instances, they propose an increase of rates on special trains for a better time schedule.

I suggest that Governor Stanford as president of the S. P. R. R. Co. be invited to our meeting. I believe that the Senator is sincere in his previous promise to us to do what he can to assist us. I am satisfied that the Senator would, upon examination, meet us in a proper spirit, thereby benefiting us, and much more largely benefiting the railroad company. Let the Governor meet us with his officers. I for one am willing to leave our case in his "own" hands for "his" arbitration.

The above statements are not exceptional; hundreds can be shown of the same nature. The question is: "How long can that continue?"

We have now two organizations in this State for the evident purpose of assisting the fruit-grower to market his fruits. Now is the time to meet, and criticize, and devise ways and means to either make those institutions act in harmony and give them our undivided support, or break them up, or find means to make them more efficient and useful, and even extend them and make them useful in the handling of our home fruits. Let every fruit-grower come to that meeting with the sole object of devising ways and means for his or her interest and those of their co-laborers. Let them leave every disposition to be contrary at home, and bury every feeling to rule or ruin, which has unfortunately been too much the case heretofore. We meet unions in every trade and calling, except with the farmers and fruit-growers, and we pay dearly for it. Let the few who have possibly made some money this year not flatter themselves that they can get along without acting together. Their time will soon come. Fighting so many insect pests makes fruit-raising laborious and expensive, and reduces largely the product of our labor, and if to this be added high freight and low prices, it must soon force us to virtually abandon our industry. Much more could be said here which would interest fruit-growers, but I have no disposition to lengthen this article or encroach further upon your space. Come,



every one, to the meeting in Sacramento on November 15th.  
A. BLOCK.  
Santa Clara, Cal.

### The Auction Method.

EDITORS PRESS:—As the Fruit-growers' Convention will soon meet in Sacramento, it becomes all those interested to make suggestions for a new deal in its affairs, so as to give at least some satisfaction to growers and shippers. With this object in view, I will state that I find the large majority in this valley favor the views of Mr. Weinstock of selling by auction, as it is by far the most feasible plan yet suggested. We would, in furtherance of his views, propose having the president and principal manager stationed at Sacramento. Let them be merchants or those thoroughly conversant with mercantile usages, and not growers or shippers, as they are to be persons serving growers and not their own personal interest to the exclusion of others. Besides this general manager, a clerk could be stationed at all the way points to superintend the receiving and loading of only the proper class of fruits. He could in the season announce himself open to offers for a carload to New York, Boston or Chicago, as the case may be, and allow growers to enter their names for as many boxes as they desired, and when the complement is filled to load and dispatch the car. By conferring with the general manager at Sacramento daily by telegraph, he could announce the desires of shippers and have cars forwarded. Let any one subscribing for freight be responsible for the freight whether he furnished it in time or not.

It could easily be so arranged that speculators at shipping points could not monopolize the shipping to the exclusion of small shippers by having equitable rules for the governing of this department.

Let every shipper designate his own receiving merchant at point of destination, with the understanding that all in that car is to be sold as soon as possible after arrival by the one auctioneer.

We want no boards of directors or other associations at these various points, but printed laws governing these clerks and stating their duties, expenses to be incurred, and other items of interest to all concerned.

There could be appointed at these various points a board of orchardists whose only duty would be to arbitrate any misunderstandings or dissensions that might arise between this clerk and shippers, so as to give small shippers equal chances with large ones, and by that means prevent any monopoly of freights.

The present system has proved a failure. We are now thoroughly satisfied that no one or two persons, let their ability be ever so great, can properly ship and dispose of the fruit products of this coast.  
VACA VALLEY.  
Vacaville.

### Stockton Notes.

(Written for the RURAL PRESS by Mrs. W. D. A.)

The rain that swept the State Oct. 22d was very light here, but many believe it all that will fall till winter sets in, and are steadily putting in summerfallow on black and red lands, hard to work when wet. Field fires have lighted the sky for two weeks, now, black and level fields wait the rain and plow. Hay, which is good and cheap, is stored.

With the exception of a few heavy dews, the fall has been excellent for drying raisins and figs. Raisins are so cheap that not many are made for market. Purple figs are mostly raised, cured by dipping in hot lye for home use. White Smyrna grow very large, and young trees of the White Adriatic will soon bear and should be cured for market in this best of all sunny valleys for rich, sweet figs. I must claim for San Joaquin grapes best flavor and yield, though I concede size of berry to lands with water near the surface. Sultanas and Black Moroccos are larger here than I ever saw elsewhere.

The company organized to test the gas known to be around Stockton bored to the depth of 1000 feet on the north bank of Mormon channel, opposite the paper mills, on La Fayette street, and got 400 gallons a minute, with an intense flow of gas that an incredulous individual tested with a match, getting whiskers and hair singed. Haas, of the company, says \$25,000 would not buy it.

It is said a San Franciscan has bought 20 acres in the belt at French camp, and will sink a well 2000 feet and build a hotel for invalids with bath and swimming-houses.

Thomas H. Williams received the Government bid for dredging Stockton channel—\$4900—and is at work.

Another steamer is to be put on the San Francisco route, the fourth on that popular line, giving people the day, both in San Francisco and Stockton, for business, and the night for travel and sleep. Steamers can carry freight cheaper than schooners, too.

Seven blocks of Main street are being paved with basalt. Citizens pay for paving in front of their property, so the slush of this level street will be a tale of the past. The streets have been greatly improved this year, and with four good gravel roads leading out, getting about will be a comfort and pleasure.

Little is talked of but the near election. It is to be hoped that honest and temperate men will be selected from the many candidates.  
Stockton, Oct. 29th.

### State Horticultural Society Meeting.

The regular meeting was held in Irving hall parlor, S. F., on Oct. 29th, President Hilgard in the chair. Mr. Wickson, secretary, read his annual report reviewing the year's work of the society, showing that all meetings of the year had more than a quorum in attendance, and that the proceedings were of general interest and value. The treasurer's report was postponed until the next meeting, as the treasurer, Mr. R. J. Trumbull, is in Southern California. Another reason for deferring the report was to give members a chance to pay up their dues, as the secretary's report showed that many were delinquent and the money is needed to make a good balance on the right side.

Mr. A. Kelle, of Yuba City, was proposed for membership.

A communication from W. H. H. Judson, of New Orleans, was read, offering to procure for members of the society 50 per cent of the money awards given them at the New Orleans Exposition. For his services Mr. Judson asked two and a half per cent commission. On motion of Dr. Gibbons the proposal was accepted, and Mr. Klee was requested to present a statement of the amount due the society at the next meeting.

It was voted to devote the awards received for fruits entered at New Orleans by W. H. Jessup for the society to the building of a monument to Mr. Jessup, who died at New Orleans while representing the society. The secretary was instructed to communicate with Mrs. Jessup concerning the matter and report the result at the next meeting.

Mr. Hatch presented a circular concerning the bill establishing experiment stations now before Congress, and the secretary was instructed to present the gist of the matter for action at the next meeting.

Mr. Wickson read a communication from the managers of the Central California Citrus Fair Exposition requesting donations of fruit; also the presence and co-operation of all horticulturists at the Citrus Fair to be held at Sacramento in December. On motion of Mr. Hatch, it was voted to comply with the request, and to zealously support the Citrus Fair.

The following officers were elected to serve during the ensuing year: President, Professor E. W. Hilgard; Vice-president, A. T. Hatch; Secretary, E. J. Wickson; Treasurer, R. J. Trumbull; Directors, I. A. Wilcox, L. Coates, F. C. De Long, W. C. Blackwood and D. Lubin.

Dr. Gibbons exhibited fine Glout Morceau and Vicar of Winkfield pears grown on his place in Alameda. Mr. Klee exhibited a very handsome cluster of dates grown by John R. Wolfskill, of Winters, Yolo county. The tree is 15 years old and has been in bearing five years. The variety is a chance seedling from the dates of commerce. Mr. Klee made some interesting remarks on the growth of the date, and alluded to his pamphlet on the subject, published by the U. S. Department of Agriculture, copies of which were given to members. He remarked the desirability of getting early ripening varieties of the date for growth in this State.

Professor Hilgard stated that he had addressed the former Commissioner of Agriculture, asking that U. S. Consuls in date-growing countries be instructed to report upon the date, and to secure suckers of the early-maturing varieties for trial in California. He received answer that the request was referred to the Department of State, and that there was no provision requiring consuls to do such work. Professor Hilgard thought that a request from the society to the present Commissioner of Agriculture might accomplish more, and the society by resolution decided to make it.

### Discussion on Fruit-drying.

Mr. R. B. Blowers was called upon to open the discussion on fruit-drying. He stated he had dried from 25,000 to 30,000 boxes of raisins in his drier, and that they had sold in the market as well as the best sun-dried. He said the most economical drying can be done in a large drier with exhaust fans. He had dried 4000 trays of fruit holding 20 lbs. each, with 9 cords of wood. [Mr. Blowers and others then discussed the use of sulphur in fruit-drying, a report of which is given on another page of this issue.] There was also a conversational discussion as to different methods of fruit evaporating, but no definite statements made.

### Insect Pests.

Some discussion was had on insect pests and the laws to abate them. Dr. Gibbons and Judge Blackwood held that the reduction of pests could be left to individual enterprise and self-interest. Messrs. Webb, Hatch, Klee, Kimball and others held otherwise, and the sense of the meeting was shown by the adoption of the following resolution proposed by Mr. Moulton:

WHEREAS, The vast and growing fruit and vine interest demands some forcible means to protect it against careless persons; therefore be it

Resolved, That this society appoint a committee of three to present for the consideration of the State Fruit-growers at Sacramento such remedies or draft of laws as to them seem best.

The following gentlemen were appointed the committee: W. G. Klee, of Berkeley; E. H. Rixford, of San Francisco; and S. F. Leib, of San Jose.

It was voted to invite the inventors, manufacturers and agents of fruit-driers to be present at the next meeting, to exhibit and explain their methods and inventions.

The meeting then adjourned to meet at Sacramento, in connection with the State Fruit-growers' Convention, on Friday, Nov. 19th, at 1 o'clock P. M.

### Fair at Arroyo Grande.

Early in September last a meeting was held at Arroyo Grande with a view to forming an agricultural society. Great interest was engendered, and on the 21st of that month the Arroyo Grande Agricultural Association was organized with the following officers: E. W. Steele, president; E. Leedham, vice-president; W. H. Findley, secretary; A. Phillips, treasurer; J. F. Beckett, J. Gregory, Geo. O. Taylor, W. N. Short, Dr. E. L. Paulding and J. H. Orcutt, directors.

Their constitution declares the object of the society shall be to promote all industrial pursuits of the country, especially the agricultural, horticultural, floricultural, mechanical and dairy interests, also the fine arts and domestic manufactures. One of the by-laws is that "No gambling nor game of chance will be allowed, and no intoxicating liquors will be allowed on exhibition or for sale on the fair ground." Four days later the directors decided to hold a fair and stock show on the 15th and 16th of October. At once, says the *Tribune*, all parties entered into the project with enthusiasm, determined it should be a success. There was no pulling back, no jealousies nor greed, but a general fraternizing and kindly combination to aid in the work. A simple membership fee of \$2.50 procured a fund to cover the extraordinary expenses, much of the labor being volunteered. Posters were sent out through San Luis Obispo and Santa Barbara counties, inviting people to join and compete, and a catalogue and premium list was published in pamphlet form.

All was done on the spur of the moment; the best the farmers had on hand was brought forward, and thus a more truly representative show was given than if preparations had been made a year in advance by extra cultivation of some one thing, or the forcing of the growth, or the training of stock. The articles exhibited were the honest product of the farm, and if of mammoth size, extraordinary weight and superior quality, they were still the natural products of the valley without special stimulation.

The fair was duly opened October 15th, in Arroyo Grande hall, which had been handsomely fitted and decorated for the occasion. The walls were ornamented with many works of art and the handiwork of ladies in quilts, rugs, afghans, etc., and tables covered with exhibits filled the floors.

Edgar W. Steele delivered a fitting and happy inaugural, and several others made brief addresses with frequent applause, after which the auditors became inspectors.

The greater part of the west side of the hall was filled with fruit by different exhibitors. J. F. Beckett's display was one of the most attractive. It included 25 varieties of choice apples, fruit of the melon shrub, figs and Japanese persimmons. Mr. Beckett planted his nursery and orchard about seven years ago, and shows grand results. W. H. Findley had 34 varieties of fruit, embracing apples, pears, figs, quinces, grapes, walnuts, almonds, strawberries, blackberries, etc. Mrs. N. J. Abbott's soft-shelled almonds were equal in size and quality to any imported from the Mediterranean. It was, of course, rather early for citrus fruits of the present season, but E. Leedham made a fair display of oranges.

The output of vegetables, also, was remarkable; but we must be content to name only a few of the most salient features. T. B. Record was conspicuous in the display of enormous squashes, one of which weighed 215 pounds, and a group of five 822½ pounds. These are of excellent quality, either for stock or table use.

Solid, handsome Marblehead cabbages, marked from 50 up to 86 and 90 pounds, were in the varied exhibit of Vice-Pres. Leedham. J. V. N. Young presented a great variety of products, fine in quality and prolific in growth, among which were a musk-melon weighing 20½ pounds, and corn, six varieties, with stalk 15 feet high, ears 13 inches long, 2 inches in diameter and solidly filled. One white onion weighed 3 pounds and 10 ounces.

Mr. E. W. Steele exhibited bald barley planted June 20th, upon which no rain had ever fallen, nor had it been irrigated. The yield was at the rate of about 50 bushels per acre, but with early sowing and a favorable year the same tract is expected to harvest 75 to 90 bushels.

Select specimens of the fruit and vegetables were sent to San Francisco, after the fair was over, and are particularly noticed on page 385.

Cheese shown by D. F. Newsom was from the milk of Angora goats. Last spring 20 of his goats lost their kids, and two of his children, aged 8 and 12 years, milked the goats and made over 600 pounds of cheese, worth \$150.

The stock show included nearly 50 fine draft horses and roadsters, single and matched; E. W. Steele's famous Holsteins; J. M. Price's Durhams; Angora goats, by D. F. Newsom; and a considerable variety of pigs and poultry by several parties.

While reading the local report of this, San Luis Obispo county's first fair, we have found its pervasive enthusiasm somewhat catching and can well believe that it was, as they call it, a grand success.

### Sixth District Fair.

The Seventh Annual Fair of the Sixth District Association came off at Los Angeles, Oct. 11th to 16th. Among the indoor exhibits, which were made in Turn Verein hall, the local press notes a table, 8 by 50 feet, which sustained a fine display of horticultural and agricultural products, mostly from Downey, comprising apples, pears, peaches, quinces, pomegranates, oranges, lemons, grapes, huge mangewurzels, corn, oats, barley, cabbage, squash, watermelons, potatoes, carrots, and boxes of sun-dried Muscat and seedless Sultana raisins of excellent quality. Ranchito furnished several boxes of English walnuts, grown by Messrs. C. A. Coffman and H. L. Montgomery. The largest of several mammoth squashes weighed 218 pounds and girt 7½ feet. Handsome specimens of second-crop Muscat grapes, from Fruitland district, were quite as large as berries of the first crop.

Choice nursery stock was exhibited by Mrs. Grellack and by T. A. Garey; and Mrs. Garey displayed two wagon-loads of plants and flowers.

E. C. Neidt & Co. exhibited insecticides and chemicals used in making the same; potash, soap, etc. A specialty of theirs is the No. 8 whale oil petroleum insecticide wash, which can be used without injury to the trees or fruit, and is readily prepared for spraying. It is soluble in water, and forms a milky substance when the proper proportion is added. The red scale exterminator is another of their preparations.

Cheese was shown from the Alamitos and Los Bolsas factories, and fine rolls of butter from Lynwood dairy.

C. N. Wilson and W. W. Bliss had good exhibits of honey.

C. & L. Garnier exhibited in a glass case a fleece of wool from a French merino ram two years old. The fleece is of 12 months' growth, and weighs 62 pounds. It was very fine.

At the park the show of live-stock was deemed much finer than last year. Indeed, the Durhams, entered by J. W. Waters, Jr., of San Bernardino, the Jerseys, by F. J. Barretto, of Downey, and the Holsteins, by J. W. Bixby & Co., of Alamitos, were said to constitute "the best herds of thoroughbred cattle ever seen upon the ground." Bixby's Holsteins won the sweepstakes for best and second best bulls and cows, and his two-year-old Hereford bull, Parker, received a premium. Other prize-winners were A. Smith's well-known bull, Pharaoh, and C. A. Coffman's Durham yearling and calf, Duke 2d and Duke 3d of Ranchito. Wm. Niles' fine Jerseys and Devons also attracted a good deal of attention. The list of graded cattle was not very large, but those exhibited were of the best, and are credited to Messrs. Niles, Barretto and Coffman.

Andrew Smith, of Redwood City, was there with his Berkshire pigs, and took most of the prizes, though C. A. Coffman was adjudged to have, in his Sallie and Tom, the best breeding sow and second best two-year-old boar.

The sole poultry exhibit, made by Jas. T. Brown, embraced Light Brahmas, Partridge Cochins, Croad Langshans, Plymouth Rocks, Wyandottes, white-faced Black Spanish, White and Brown Leghorns, Black Hamburgs, S. S. Hamburgs, Houdans, red Pyle game Bantams, gold Seabright Bantams and Bronze turkeys.

All the plows, farm wagons and agricultural implements on the grounds were shown by H. Giese.

The races were attended by crowds whose character was commented upon with severity, and both the *Times* and private correspondence complain bitterly that the gambling abomination out-herded anything of former years. We will hope the good examples of Contra Costa and Arroyo Grande and some other associations will yet be followed by every agricultural association.

### Thanksgiving.

#### Proclamation by the President.

By the President of the United States: It has long been the custom of the people of the United States, on a day in each year especially set apart for that purpose by their chief Executive, to acknowledge the goodness and mercy of God and to invoke His continued care and protection. In the observance of such custom, I, Grover Cleveland, President of the United States, do hereby designate and set apart Thursday, the 25th day of November, 1886, to be observed and kept as a day of thanksgiving and prayer. On that day let all our people forego their accustomed employment and assemble in their usual places of worship to give thanks to the Ruler of the universe for our continued enjoyment of the blessings of free government, for the renewal of business prosperity throughout our land, for the return which has rewarded the labor of those who till the soil, and for our progress as a people in all that makes a nation great; and while we contemplate the infinite power of God in earthquake, flood and storm, let the grateful hearts of those who have been shielded from harm through His mercy be turned in sympathy and kindness toward those who have suffered through His visitations. Let us also, in the midst of our thanksgiving, remember the poor and needy with cheerful gifts and alms, so that our service may, by deeds of charity, be made acceptable in the sight of the Lord.

In witness whereof I have hereunto set my hand and caused the seal of the United States to be affixed. Done at the city of Washington this first day of November, in the year of our Lord one thousand eight hundred and eighty-six and of the independence of the United States of America one hundred and eleventh. (Signed), GROVER CLEVELAND.

By the President,  
T. F. BAYARD, Secretary of State.





## Faith.

[Written for the RURAL PRESS by FANNIE ISABEL SHERRICK.]

Hark! do you hear that silver chiming  
From the bells in the church over there?  
The musical strains to a rapture swelling,  
And the organ's low-toned prayer?

Do you see the dove o'er the altar brooding,  
And the lilies still wet with dew;  
Do you hear the song of the kneeling circle?  
Is it complete without you?

Open the doors with your heart-love thrilling,  
And enter that temple of God!  
Can you stand in that high-domed solemn cathedral  
And say you are born of the sod?

Can you walk in the aisles of the forest chapels  
When the trees in the silence speak,  
And still the cry of your heart out-reaching,  
Denying the God you seek?

Can you gaze on that star that's shining in heaven,  
Sun of those worlds unseen,  
And doubt the power that guides and holds it,  
As it circles in space serene?

The great ocean swells to an emerald madness  
As it beats on its rock-bound shore;  
Do you think that the hand of man could keep it  
From bursting its confines o'er?

Faith! it is born of the seas and forests,  
It lives in each sun-steeped flower;  
The highest star and the lowliest grass-blade  
Are proofs of God's infinite power.

It is blazoned in gold on the shield of the sunset,  
And mirrored on mountain-wall;  
It cries aloud in each wind-swept valley,  
And sighs in the wood-bird's call.

Faith! it is born of your own heart-longings,  
And your soul with its burden of care;  
It lives in the sorrow that lifts you upward  
And the struggle that leads you to prayer.

It glows in the heart of each frail earth-blossom,  
Is humanity less than the sod?  
O hearts! can you turn from this earth and its  
wonders,  
Denying your faith and your God?

## A Story of All-Halloween.

[Written for the RURAL PRESS by M. B. D.]

"Here is a rosebud for you, Ethel, and some pansies, Joanna. Maud and I have crysanthemums; now for the bees."

Four small gilt pins, representing honey bees, were fastened upon a piece of paper, and this was quickly produced. As three of the young girls took one each and with it fastened her flower to the bosom of her dress, Joanna held up a tiny gilt beehive and merrily exclaimed, "My bee is hived with the ho-o-ney," drawing out the sound of "o" in the last word, until it seemed completely changed.

At this moment Mr. White, the Sunday-school superintendent, ascended the steps and raising his hat to the girls pleasantly, remarked: "I am glad to see you early. There is always work for busy bees;" and then passed on into the Sunday-school room.

His presence checked their merriment for a moment, and Nellie said reflectively: "I wonder if it is not wrong to make fun of them. Really, they are not silly a bit. We only make them out so by our nonsense."

"What do you suppose his name is, girls?" continued Joanna heedlessly, her large eyes half closed and her lips smiling archly.

Ethel answered in the same strain, "It is Shepard H-o-."

"There is just where the fun comes in," the other interrupted. "H. stands for honey—Shepard Honey. Maybe he is a herder of bees," and with this witticism she hid the lower part of her face in her handkerchief to smother her laughter, for they were in the vestibule of the church awaiting the sound of the bell that should call them into the schoolroom.

The young gentleman who bore the name which these girls were so merrily discussing was not a stranger in Bret's Camp, as their remarks might imply, yet Joanna had but recently made his acquaintance. He had called several times at her father's house to see her orphan cousin Julia Parker, whom he greatly admired and honored with every attention gallantry might suggest. He was in all respects an eligible suitor, too, being young, fine looking, and possessing enough of fortune's gifts to place the comforts of life within his reach. Besides, he was well read and agreeable in his disposition, yet he had long since ceased to be considered a "catch" by the little society circles of Bret's Camp, owing to his indifference to many things in which they took a deep interest.

But Julia Parker, with her fluffy hair and dimples that seemed always to make her blush

when they deepened upon her soft cheeks, had captivated his heart, so he lost no time in adopting a course of action which he thought would most agreeably disclose his feelings to her. His advances, however, had been met by such constant coyness on her part that he had nearly come to the conclusion that she disliked or even despised his offer. If he had known the cause of her indifference he would not have been so easily discouraged.

The mischievous little secret resulted from the fun-loving spirit of Joanna and her favorite schoolmates, who enjoyed teasing Julia because she was so very sensitive to their attacks. She was several years their senior, yet her nature was so retiring and her tender heart so used to bear in silence its own sorrows, that she never complained or even let them know how deeply their boisterous fun wounded her feelings, but sought to escape it by avoiding its cause.

The serene beauty of an autumn morning in the foothills made the winding roadways inviting, and in consequence the little Sunday-school upon the hill slope in Bret's Camp had an unusually large attendance. Among the many young men who had assembled, Mr. Honey was there, and the rich, clear tones of his voice added greatly to the volume and harmony of the songs which they sung. His deep, earnest eyes watched furtively for a girl's form that seemed to linger. They were strangely blind to the little golden bees so near them, and which were connected with many mysterious glances and whispers among the members of a certain class of young girls.

A light footstep and the soft rustle of drapery attracted their attention, and they saw Miss Parker come slowly up the aisle in her light-brown dress, relieved only by a blue ribbon that matched the color of her shy, lovely eyes. As she joined in singing a hymn she raised them and caught a glimpse of the bees that adorned the dress of her little cousin and the girls near her.

"Have one?" whispered Maud, offering the last of the gilt pins.

"No, thank you," Julia quickly answered, while the color surged up to her very temples, for Ethel responded wickedly, "You know she would rather have honey."

After the exercises Mr. Honey looked for her in vain. She had slipped quietly away, and he was keenly disappointed, for he had anticipated a delightful walk at her side down the winding roadway, now smooth and soft with rain-laid dust, to the fine old farmhouse where she made her home. Instead of this he walked forth alone along a dreamy wood road all flecked with brightly tinted leaves; but he noted not the beauty of nature or the fragrance of the fresh wood scents, for in his heart and brain a stern struggle was taking place. He was making himself believe that lovely Julia Parker, the choice of his heart, was refusing his proffered love in the most delicate manner she could adopt.

In the meantime the four sprightly girls who were the unconscious cause of his unhappiness had forgotten all about Julia and their impish fun at her expense in the development of new schemes interesting to their restless minds.

When Julia reached home she found no one in the sitting-room, so she curled herself comfortably into a commodious and well-cushioned easy-chair, and began to indulge in a gloomy reverie. The fire in the wide, open fire-place burned low, and beneath the flames a bank of red coals glowed above another of pale wood ashes, into which they slowly smoldered. She sat watching the fate of the embers, her chin resting upon the palm of her dainty hand, while she imagined their irregular shapes took the forms of grotesque and uncanny fire goblins which mocked at her sadness. Ere long the clatter of a horse's hoofs broke upon her musings, and raising her eyes to the window she saw Mr. White mounted upon a handsome bay saddle-horse cantering over the road toward his home.

The graceful, undulating motion of the animal and its rider called to mind how often she had seen them passing at that hour. He had done this so many years that she could not remember a time when some one else had filled his place in the church. "Must my life be like his—one long, monotonous path of duty?" she mused. "It would not seem so dreary if I could always wear such a pleasant expression and so bright a smile as he does. I wonder what the secret is?"

The imaginary fire goblins sputtered out a rocket of sparks, and she hastily reached for the tongs as she pushed her chair from the fire-side. But she had scarcely settled them when she heard the ringing laughter of her little cousin, who was coming in with several schoolmates; so she fled to her own room.

Nearly a week later, on the eve of All-hallow day—

When charms more potent wax  
Because of magic in the air,  
And maidens blithely spin their flax,  
Which now a witching spell will wear,

The glow of an autumnal twilight was gathering about the eaves of the stanch old farmhouse. Joanna's chamber was built high into its gabled roof, and was made light and airy by means of three French windows opening upon a small balcony. Three merry girls, and Joanna their hostess, had spent the early part of the evening with the family in the parlor. They had behaved remarkably demurely for young girls of their age. The eldest had scarcely seen 15 years, and living the active, joyous life which the young people led in those foothills, their usual manners were apt to be too lively

for the reposeful taste of their elders. At last their restless feet sped up to the great, gloomy chamber with such alacrity that John and Allen, Joanna's brothers, said to each other, "There must be something in the wind," at the same time emphasizing the remark with a significant nudge.

They were right in this conjecture, for the girls had no sooner closed their door than Ethel said: "You get the mirror out of the bureau, Joanna, and I will light the candles."

As she spoke she bent over several candlesticks fantastically arranged upon a small mantelpiece. The flickering yellow lights broke one by one each out of its own tiny waxen column, bringing into relief their forms against the shadowy walls and corners of the room.

Soon the lights played fitfully over the sparkling eyes and flushed, excited faces of the girls as they proceeded to unfold the mysteries of a charm. Little Nellie turned her dress pocket wrong side out in search of a red-chalk pencil that had been treasured there a week for this occasion, and Maud took from a pocket-book four sheets of white paper and some pencils.

A short pause followed these acts of preparation, in which each one almost held her breath with a sort of superstitious dread at what might be the result of their own audacity.

"Put the mirror down in the middle of the chamber," commanded Ethel, with a little effort as she consulted a watch.

Then, the spell being broken, the others joined in with their parts, which had been carefully rehearsed.

"The clock strikes ten. The hour has come  
When fairy feet may walk the earth,"

Repeated Joanna, placing the old oval mirror upon the floor. Just then the hall clock downstairs began its dinning, startling them all; but after a moment's hesitation Maud continued, resolutely:

"Our candle lights now softly burn,  
While we call in murmured mirth;  
O fairies fair! we pray return,  
And make our charms of magic worth."

She placed the lights at equal distances from each other upon the frame of the mirror, and leaving the slips of paper in the center of the glass quickly withdrew to a corner opposite that in which Ethel was standing.

Nellie, having found her chalk pencil, marked a circle upon the carpet, inclosing herself, her companions and the mirror within triple lines of scarlet, all the while singing in a low voice:

"O fairy forms as light as air!  
Within our circle red and bright,  
We chain you, though unwilling here,  
By flickering beams of candle light."

After this each one took a slip of paper from the glass, and turning her face to the wall, wrote upon it her most secret and ardent wish. Then advancing in concert, the four girls knelt around the mirror, and each one taking a candle fastened her note upon the glass by means of wax that dripped from the lights. Then placing the candles above the paper, they all arose, saying:

"Now, little fairies, tell us true  
If we shall have our heart's desires,  
By keeping plain and bright as new  
Our written words beneath these fires;  
And whether we shall wake or sleep,  
Bright ones, we pray your watches keep."

Nellie broke the red-chalk pencil into four pieces, and as the girls left the mirror they each drew several lines from it to the edges of the circle, still murmuring together the last couplet of the fairy song.

The sighing and creaking of the winds outside suddenly grew audible as they became silent, and the darkness of the night was so deep that the window panes looked like black mirrors reflecting in richly colored figures their own forms and the lighted candles. Each one felt a shiver as the almost naked branches of the trees now and then broke the outlines of these reflections, by bending over the balcony in the stronger gusts of wind and becoming visible in the uncertain light that streamed through the glass. After several minutes they huddled themselves together upon the great square bed like so many frightened kittens, and, twining their arms around each other in mutual fear and sympathy, they whispered comforting little phrases until more confident feelings regained their usual ascendancy.

While they waited, watching the tiny waxen columns grow shorter, the winds rose until the light flickered and sputtered ominously. Semi-transparent streams of wax flowed down upon the paper and rolled out upon the mirror, which in turn threw upon the ceiling strange figures that danced together in intricate mazes. Nellie noticing these at length, began to cry.

"O Ethel!" she sobbed, "why did you invite me to join in this horrid enchantment? I feel just awful. I know it is wicked, and I wish I had not come."

"Say, girls, if you do not mind much I would rather take my paper away," whispered Maud, her eyes glowing brilliantly, though her manner was calm as usual.

"Pshaw! Don't you all be ninnies now, when everything is going on so nicely," Joanna softly cried. "See my candle! the wax has stopped running and not a drop is on the paper yet. Oh, I know my wish will come true." And springing down upon the floor, she began to dance in her glee.

"Joanna! stop, for mercy's sake!" called Ethel in alarm. "If you touch the red lines, all—"

At that instant one of the windows blew open, and a gust of wind puffed out the candles, leav-

ing them in darkness. Joanna flew to the arms of her friends, and the four thoroughly frightened girls sat in almost breathless silence, while their ears were tortured with strange sounds that seemed indeed to come from fairy feet. Dense shadows appeared to shape themselves upon the balcony, which creaked and groaned as the boughs dashed themselves against it, and the heavens beyond were bleak and starless.

How long they shuddered together upon the great square bed they never could tell. It seemed ages to them. The winds tossed leaves in their faces, and increased the rattling for awhile, but at length died away, and they began to gain courage.

"Let us call to some one downstairs," suggested Nellie.

"Oh, not for the world!" replied Joanna, quickly.

"Then the boys, perhaps they have come up," Maud chimed in.

"I'll tell you what," said Ethel, confidently, "let us all take hands and close the window, then we'll light the candles and put everything straight."

Consequently, the four trembling little figures huddled closely together, groped their way to the window and closed it; then to the mantel shelf, where the candle was cautiously lit, and after some deliberation they again advanced to the mirror.

"The red lines have been broken," cried Joanna, with quick perception.

"You did that yourself, dancing about," returned Ethel.

In the meantime, Maud had bent over the old round mirror to re-light the candles. As the quivering beam from one of the flames grew steady, she clasped her hands and stepped backward with a stifled cry of terror. All eyes were instantly turned toward the glass, where they saw that a monster spider had woven a web over the face of it, pinning down their notes; and there he clung himself, in the very center of the gleaming silver, like a brown splash in which lurked some grim spirit of evil. Again all four sprung upon the bed as a haven of refuge, and there they tremblingly confided to each other that they believed they had done wrong to try charms.

"That is not all, either," sobbed Nellie; "we have teased poor Julia, and made her slight Mr. Honey."

"And it was not a bit right to think of such fun in church; for my part, I am just sorry," declared Maud.

"So am I," said Joanna and Ethel in a breath.

"Let us try to do something good to make up for it. If we could only make Julia happy, and—"

"I'll tell you what—we'll give Mr. White a present," Joanna interrupted.

The last idea met with approval, and led to a discussion that put the hideous spider and its dark web out of their minds, until they grew weary and fell asleep just as they were.

Bright sunbeams stole through the half closed shutters and fell upon the magic circle and the glowing mirror, when Ethel, who was the first to awake, opened her eyes. She called the others, and in a minute they were kneeling around the glass in wonder, for the sunlight dissolved the veil of obscurity that had rendered the spider and its giant web so fearful, and showed that they were merrily painted upon the glass. Who could have done it? was the first question that rose to their lips. Like a flash Joanna called out, "Our wishing was all wrong; let us burn the notes," and this was done. Still, try as they would, they could not solve the mystery of the painted spider net.

However, the point was settled beyond a doubt later, when they all sat demurely at the breakfast table.

"Are all the girls afraid of spiders?" Allen asked with a sly twinkle in his eye, and John continued to discuss the subject at some length. The girls were very much embarrassed, and were glad, too, that their elders did not seem to notice them. Their discomfiture was "just nuts" to the boys, as they told each other afterward.

The next Sabbath morning an unusually large congregation assembled in the church. Garlands of flowers were twined about the altar, and large ferns and plumes of cedar filled every niche and corner. Our little heroines were there with fair, eager faces that were the brightest and happiest expressions imaginable. After the exercises, and yet, just before the last hymn was sung, one of the young ladies threw off her cloak, and walking slowly up the aisle revealed to the expectant throng her slender form clad in purest white. She stopped at the foot of the altar and addressed the superintendent.

I cannot tell you what she said in the stately sentences that she had learned by heart, or justly describe the radiant and blooming countenance of Julia Parker. As she spoke the superintendent's look of surprise gave way before one which was equally indescribable; and, at last, when she held out to him an elegant watch as a token of gratitude and esteem, from the young people whom he had taken so kind and constant an interest in, the tears rose to his eyes.

He called the page of the hymn before replying. When the full sweet cadences of praise to God died away upon the air, he said a few simple words that showed how deeply his feelings had been touched.

He was a soldier in the Master's service, who served Him faithfully, braving many discour-



agements and severe hardships. As Sabbath after Sabbath passed away, he was always to be found at his post of duty, whether the jewels of rain clung to his garments, or the dust, beneath the hot suns of summer, covered them like a shower of gold. This little gift was richly merited. Indeed, it was but as a grain of sand to the splendid reward which he deserved, and which he has now secured, for years have passed since that Sabbath morning, and he dwells upon the shining shores beyond the gates of pearl.

When the exercises were ended, a murmur of satisfaction filled the church, and poured from the portals as the assemblage dispersed.

Mr. Honey was not disappointed this day, for he walked proudly by the side of one whose long cloak scarcely concealed the snowy drapery that gleamed out now and then, as she moved.

Joanna invited her little friends to dine with her at her home, and as they lingered over their nuts and candied fruit they discussed the success of their plans for making people happy with perfect satisfaction; and in the large airy parlor Julia Parker was consenting to accept the offer of her manly lover.

"Little one," he said tenderly, "do you really consent to bear the name that has caused you such unhappiness?" And she answered innocently: "I will be proud of it, Shepard; truly, I think it the sweetest name in all the world."

### How Shall we Dress the Baby?

[Written for the RURAL PRESS by JEWELL.]

Twenty years ago, when I was making my first baby's wardrobe, my mind was greatly exercised how best to combine health, comfort, and beauty, and thus do away entirely with the old-time fashion in baby clothes, so objectionable in every way.

The first thing to strive for was warmth and looseness, thus insuring to baby health and comfort. So I knit out of soft, white, Saxony wool, high-necked and long-sleeved shirts, coming to the knee; instead of the tiny linen shirts, so common at that time (with their flaps of linen, back and front, to pin over the petticoat or dress). The flannel band I left unhemmed, so as to be smooth and soft to the skin. The petticoat I made of flannel, sack-shaped, and buttoned on the shoulder—a crude way—and afterward it was superseded by flannel waists, long-sleeved and high-necked, with a row of buttons about the waist to fasten petticoats to. The dress was made long-sleeved and high-necked also, thus doing away with the everlasting sack, that was always in wrinkles behind for baby to lie on, and left unprotected the chest, which should be kept warm.

For socks I knit long-legged stockings with pretty bright shoes to them, thus keeping the legs warm. The dresses were trimmed with lace or embroidery, making the baby look pretty as well as comfortable and happy.

When baby was a few months old I was surprised to meet a lady from an Eastern city, who remarked that I had my "baby clothes in the height of the fashion, for they were dressing babies in long-sleeved and high-necked robes where she came from."

Since then the reform has crept along slowly, the length and breadth of the land, until now it is rare to find a full set of old-style baby clothes. Still I was given some to put on a new-born babe not long ago, which set me to thinking that there were some few mothers to be reached with the new heaven still.

The perfect clothing of the human body consists in having, first, equal distribution of material over the whole body; next, let it be soft, warm and loose; last, make the clothing pleasing to the eye—"A thing of beauty is a joy forever." The old way of dressing a baby had some of these requisites, and were an abomination to the child and nurse too. Count the number of thicknesses over the abdomen. Nine, and the neck and arms bare. No wonder the child was fretful and had colic.

Mothers, let me beg of you to try the new way of clothing your baby. A soft flannel band wide enough to reach from the armpits to the legs—unhemmed; a soft wool knit shirt, long-sleeved and high-necked, reaching to the knees; a flannel waist, also with long sleeves and high-necked, with flat linen buttons about the waist to button petticoats to; a pretty slip-yoked, or sack-shaped, makes a pretty outfit for day, and at night a long flannel night-dress is the best for various reasons. It is warmer and is not cold even if it gets wet. Instead of a shawl or blanket for night wear make a long sack of colored flannel, with a hood of the same to bring up over the head if you wish; thus insuring baby warmth, comfort and an opportunity of having plenty of fresh air in the sleeping chamber, which is as necessary for the child as the mother.

Los Gatos.

AN INSUFFICIENT PATENT.—"The controllable beehive" is advertised in agricultural papers. Any fool can control the beehive. It is the restless beggars that inhabit the same that are uncontrollable.

MRS. SARAH DAVIDSON, of Lower Boulder, Montana, shot a bear and with the bounty received for it she paid for a sewing machine.

CHINA and Japan buy our dried apples freely. Thus does American industry help to swell the population of the Orient.

## YOUNG FOLKS' COLUMN.

### The Young Folks' Club.

[Written for the RURAL PRESS by MRS. J. HILTON.]

Dear children, our club took a paseo lately through the Santa Barbara Fair buildings, and they want me to tell you what they saw, as far as it relates to the pets which interest the club. And right here they want me to say, first, that they hope there will be a place arranged where the coops of birds will be seen to better advantage than they were at the fair just past. The chicks do not show to advantage when the coops are on the ground.

There were White Brahmas, Langshans, Brown Leghorns and Plymouth Rocks in the chicken-coops, and carrier and Tumbler pigeons, guinea pigs and rabbits in some cages. There were the loveliest little "snow birds" (they looked like white canaries), and some smaller birds, called "strawberry birds," from Japan. A large green parrot amused the little ones by his ability to stand on one foot and hold a peanut in his other while he took out the meat to eat. He could talk quite well when he wanted to, but preferred to eat nuts.

On the road to Santa Barbara we saw a large flock of the handsome magpies. Who can tell the right way to split the magpie's tongue so as to make them talk? for they can talk if it is done right. I suppose some parrots and magpies are more intelligent than others, and some have a wilder nature than others. Do you remember my telling about our getting a linnet that we called "Dolly" and then changed to "Dick" because he learned to sing? Well, he has a wilder nature than one which E. H. caught, and which would eat from our fingers or lips and would allow us to handle it without being a bit afraid; but "Dick," with the same care and attention, will get frightened very easily. Poor "Dolly" was hurt by a wild bird and finally died; but "Dick" is as bright and happy as can be. I prefer the song of the linnet to that of the canary—it is full as pretty and varied and is not so shrill. Did any of you ever see a linnet and a canary in the same cage? I think some of getting a female canary for a mate for "Dick." I guess if I do I had better keep them in separate cages until they get used to one another; don't you?

Los Alamos.

### A Little Tease.

[Written for the RURAL PRESS by BECCA M. SAMSON.]

Harry Howard loved to quarrel, he loved to tease, he loved to make trouble, and when he wasn't doing one thing, he was doing the other.

One morning he went into the garden, cut off a long switch from the willow tree, and when he had trimmed and peeled the stick white and smooth as an ivory cane, he carried it in to his mother and said: "Mamma, here's a switch I made for you to whip Georgie with when he's naughty."

Now, Georgie was Harry's baby brother, and he was just the sweetest little fellow in the world.

He wouldn't be naughty. This particular morning he sat on the floor, where his mamma had left him, and played merrily with his blocks and picture-books; he only laughed when Harry made faces at him, and cooed when he pushed the blocks out of the way; he thought it was all for play, but it was really Harry's way of teasing.

Harry, at last, grew tired of waiting for his baby brother to get naughty by himself. He would have to help him. So this unkind little boy, taking care to see his mother wasn't looking, crept up to the good little baby on the floor, and said in a low voice: "See that switch over there on the sewing machine, by mamma? that's to whip you with when you're bad."

Baby didn't cry when he heard this; he only pursed up his mouth and said: "No, no, baby dood."

"No, you're not good, either," answered naughty Harry, "you're as bad as you can be; you're a little rascal, and if you wink your eyes at me like that, you'll be thrashed."

At these terrible words, poor baby opened his mouth and set up a loud cry.

"Hear him howl, mamma," called the delighted Harry; "he wants a thrashing with that switch, that's what he wants."

Now, mamma, who hadn't been so busy over her sewing as Master Harry thought, knew best who deserved a thrashing.

After she had kissed and quieted the frightened baby, she called Harry to her, picked up the nice switch he had so carefully provided for his little brother, and gave the little torment what he had intended for somebody else.

I tell you, somebody in that room was howling, presently. But it wasn't baby George.

Alameda.

GREAT EATERS.—Birds have wonderful appetites, and the insect-eaters must do great execution among the insect enemies of the farmers. This is illustrated by Prof. Wood's estimate that a man would have to consume in every 24 hours 67 feet of a sausage nine inches in circumference in order to eat as much in proportion to his bulk as the red-breast whose daily food is considered as equivalent to an earthworm 14 feet long.

## GOOD HEALTH.

### The Gas Treatment.

There seems to be quite a furor in Los Angeles in regard to the gas treatment for whooping cough and other throat troubles. The Los Angeles Express gives the following observations from a reporter who recently visited the gas works in that city, to learn what was going on there in this direction: "Passing around the building, the reporter was soon standing in front of an iron-grated door, and the sweet music of several infants could be plainly heard. The door was opened and the scribe passed in, where he found 19 children, their ages ranging from six months to five years, who were all accompanied by some grown person. At first the scribe was compelled to place a handkerchief over his mouth, in order to close out the gas which was powerfully strong; but gradually the feeling wore off and the sensation was similar to that of inhaling ether or laughing-gas. The scribe then interviewed several of the mothers present, and learned from them that by spending from 15 minutes to an hour each day the worst case of whooping cough would receive great relief. One lady informed the reporter that her little three-year-old girl coughed so bad that blood would issue from her nose and ears, and that they were about to give up all hope of her recovery, when she was told of the gas cure. She tried it, and in less than a week the little sufferer was cured. Then her baby was taken down; but a few more visits would bring it out all right. One and all declared that their children were greatly benefited by the treatment. It appears to be soothing and works upon the lungs, keeping them clear as well as the throat from filling, thereby avoiding the dreaded croup. The employees of the gas company are very courteous to visitors. They receive over 20 calls a day."

THE GERM THEORY IN DISEASE.—At the late meeting at Buffalo of the American Association for the Advancement of Science, the relations of germs to disease occupied a prominent place, and over half a dozen investigators made the discussions interesting. Dr. D. E. Salmon read two papers bearing on the causes of immunity from a second attack of germ diseases, and gave the following possible explanations: 1. Something is deposited in the body during the attack which is unfavorable to the germ. 2. Something has been withdrawn which is necessary to its development. 3. The tissues have acquired such a tolerance for the germ or for an accompanying poison that they are no longer affected by it. Dr. Salmon favored the last view, and gave details of a large number of experiments to substantiate his opinion. He said that large doses of the germs were more powerful than small ones. He attributed their action to a poison which was a result of their growth, and thought that a large dose had a greater effect because the poisons benumbed or killed the cells, thus giving the bacteria a better chance to grow.

TYPHOID FEVER IN PETALUMA.—There is an unusual amount of sickness in Petaluma at the present time, and business is suffering in consequence. The sickness is of that character which chiefly comes from bad and insufficient drainage, and typhoid fever is almost epidemic. There are not less than 30 cases of it in that town at the present time. The progressive people there are talking about a new and complete system of sewerage, which will conduct the drainage a considerable distance from the town, and also for an ordinance which will do away with cesspools and independent drains.

INJURIES TO THE EYE.—Two German physiologists have calculated the relative liability of injury to the eye, finding that if all parts of the body were equally exposed to injury, wounds of the eye would bear to wounds of other parts the proportion of one in about 600. As a matter of fact, the actual proportion is more than 20 times as great, or about 36 in 1000.

THE BIRD SLAUGHTER.—Iowa women make their opposition to the slaughter of birds practical. They have held a convention at Des Moines and resolved that "hereafter we will abstain from buying any plumage where the life of the bird is sacrificed to obtain the ornament." Humane woman might everywhere adopt the same sentiment and only do a plain duty.

SOAP TO CLEAN CLOTHES WITHOUT RUBBING.—Take two pounds of salsoda, two pounds of yellow bar soap, and 10 quarts water. Cut the soap in thin slices, and boil together two hours; strain, and it will be fit for use. Put the clothes in soak the night before you wash, and to every pail of water in which you boil them, add a pound of soap. They will need no rubbing, but merely rinsing.

IS THIS A FACT?—We have it on the testimony of a reliable man (says a cotemporary) that buttermilk mixed with fine sand, and applied to new woodwork outside, will stand for many years, and gives the most complete imitation of stone it is possible to get, and with it absolute preservation of timber.

## DOMESTIC ECONOMY.

### The Dust Question.

A housekeeper whose rooms were as nearly speckless as modern conveniences admit, a furnace being always a distributor for the entire house, long ago settled to her satisfaction that a damp cloth was the key to the difficulty. Not a wet cloth, for wet is the interpretation that the common mind will put upon damp, but a soft cloth, sprinkled in a slight degree, enough to make dust cling till it can't be taken off. Moldings, baseboards and all corners should be wiped in this way, and whoever tries the experiment will be amazed to see how the necessity for what is known as a general cleaning diminishes.

Sweeping is far less a frequent need than is supposed, and when it must be done, the damp cloth system is of equal avail. Put a spoonful of ammonia in half a pail of warm water and wipe the carpet with a cloth wrung out from this water. The dust is removed, the colors freshened, and any stray moths—a possibility everywhere in these days of furnaces—find a sudden end. Fluff, insidious and unconquerable, forming itself in mysterious rolls under beds and in corners, is reduced to its lowest forms, sinks into almost impalpable unpleasantness before the damp cloth, instead of sailing triumphantly before a broom.

The broom will still be essential, but as servant, not monarch, and where one cannot afford a carpet-sweeper, need never again involve the amount of hard work associated with it.—Ex.

DRIED RUSK AND MILK.—Two cups of milk, two eggs, half a cup of butter, half a yeast cake, dissolve in warm water; one quart of flour, one even teaspoonful of salt; mix the milk, butter, yeast and a pint of flour into sponge and let it rise five or six hours, or until light; beat in the eggs, salt, and the rest of the flour; roll out the dough into a paste more than half an inch thick; cut into round biscuits, set rows of them in a baking pan, rub the top lightly with butter and put another row of these; let them rise for half an hour before baking. Remove from the oven and let them get nearly cold before dividing the upper from the lower stratum, pile lightly in pans, and leave in a cooking oven all night to dry. They should not be browned at all in drying. Hang them in a clean bag in the kitchen closet or other dry, warm place. In two days they will be ready for use. Set a bowl at each place; lay a rusk, cracked in two or three places, in it, a bit of ice on this, and pour enough rich milk to cover the rusk well. In three minutes, if well dried, the desiccated biscuits will be soft and delicious. Pass sugared berries as an accompaniment.

CHOPS AND CAULIFLOWER.—Boil the chops and serve them in a circle on a hot platter round cauliflower prepared thus: Soak the cauliflower, face downward, in cold water for two hours—this takes out whatever insects may have harbored therein. Cut off all the green leaves and boil in salted water from 20 minutes to half an hour—it depends upon the size. Try with a silver fork from time to time to see if it be done. When thoroughly done, pour off the water, and pour over the vegetable a sauce made thus: Bring to boiling point a half-pint of milk, add a piece of fresh butter size of an egg, salt to taste, and the well-beaten yolk of an egg, stirring all the while; then add a teaspoonful of arrowroot smoothed in a little cream. Let it boil up once.

WAFFLES FOR BREAKFAST OR LUNCH.—Pass one pint of warm, soft-boiled rice through a sieve and add to it a small teaspoonful of salt, one tablespoonful of flour sifted with two teaspoonfuls of baking powder. Beat the whites of three eggs to a stiff froth. Beat the yolks of the three eggs as light as possible and mix with three gills of milk; stir the mixture into the rice and flour and add an ounce of melted butter; add the frothed whites; mix all thoroughly together and pour into the waffle-iron, baking a delicate brown. The waffle-iron should be heated, well greased and filled two-thirds full with the mixture.

APPLE JAM.—If apples are decaying faster than you can use them, apple jam may be made, which will keep for several weeks. To every pound of fruit, weighed after it is pared and sliced, allow three-quarters of a pound of sugar, and the juice and grated rind of half a lemon. Put the apples into a jar, and set this into a pan of boiling water. Let the apples stew until quite tender, then put them into a porcelain kettle with the sugar and lemon juice. Stir until soft, and let it simmer for at least half an hour.

MUFFINS.—Cream together one cupful of butter and one cupful of sugar; add three eggs and one pint of milk, stirring well; then add one quart of wheat flour with two teaspoonfuls of baking powder and one cupful of yellow Indian meal. Bake in muffin-rings in hot oven.

NICE CAKE.—One cupful of sugar mixed with two tablespoonfuls of butter; add one cupful of flour, with one teaspoonful of baking-powder, half a cupful of cornstarch, half a cupful of milk, and the whites of three eggs, flavoring with vanilla. Bake in a good oven.





A. T. DEWEY.

W. B. EWER.

Published by DEWEY &amp; CO.

Office, 252 Market St., N. E. cor. Front St., S. F.  
Take the Elevator, No. 12 Front St.

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A. T. DEWEY.

W. B. EWER.

G. H. STRONG

## SAN FRANCISCO:

Saturday, November 6, 1886.

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## The Week.

The agony is over but the anxiety remains. As we write on Wednesday there seems as much uncertainty about the result of the election as there was before the votes were cast. The die is cast, however, and mathematicians and statisticians will tell us soon in whose lap it has fallen. Election day was a gem of California autumn—bright, warm and beautiful—such a day that even the least patriotic could stand all day around the polls and serve the country. So far as heard, the great event passed with exceptional quiet and order, even though the issues were so vexed.

Last Thursday saw the formal uncovering of the Bartholdi statue, the ceremonies being as indicated in previous issues of the RURAL. The distinguished French and the distinguished Americans gathered around the statue and poured forth eloquence, and the clouds poured forth a libation upon the statue, upon the orators, upon the people, in the shape of an

October rainstorm. The elements ratified the action of Congress in declaring that no wine should flow at the celebration, and gave the sparkling raindrop to trickle down the necks of the nation's representatives and the nation's guests. The nation dared to do right and the heavens fell.

And now comes Thanksgiving. The President's proclamation may be found in another column. Let all begin early to arrange the visits and reunions which fill the heart with joy, and give new strength and courage for honorable deeds.

## Glad it is Over.

We hear the expression from nearly every one we meet: "I am glad the election is over." And we must say that, while we consider an election of great importance and think every citizen should regard with solemn interest the duty it brings, we join the general refrain. Somehow we have come to regard an election as we do steam whistles, locomotive bells, visits to a dentist, girls ding-donging all day on pianos, or a squalling babe—a disagreeable necessity. They bring a deal of unpleasant noise and pain. Party rancor, the embittered strife of rivals, the ugly features of demagoguery, the spirit of vituperation and dirt-flinging, seem to be inevitable accompaniments of every campaign. We can conceive it possible to hold elections when these ugly features will be refreshingly absent, but hardly this side of the millennium, and that important epoch seems very slow in putting in an appearance.

But then these periodically recurring seasons of strife and debate act as a very good safety-valve to let off a vast accumulation of superfluous zeal and energy. A government founded upon the will of the people, so full of whim, caprice, headlong impulse, insatiable hunger for novelty and change, and easily inflated by partisan zeal, may be liable to be caught some time in a big gust of passion and blown far out to sea. Our heated political discussions, in the newspapers, on the rostrum, on the street, are a very good escapement of party fumes and vapors. It is wonderful what a vast amount of steam we manage to blow off during a hotly-fought campaign. A quiet stranger looking on, hearing the charges and counter-charges hurled by opposing newspapers and candidates, might conclude the government is in a bad way and society about to dissolve into chaos and a midnight of anarchy; but after the battle is over, the smoke cleared away, the dead buried, sore-heads poulticed, and the victors have had their little shout, we all go our several ways, to shop, office or field, quite content that matters are no worse, eager to enjoy our Thanksgiving turkey, and when the bugle sounds we will all be on hand for the next affray.

## Flock Against Herd.

There is trouble brewing in eastern Oregon and Nevada between the flock-owners and the cattlemen as to who has better right upon public ranges. The Sagebrush Stockman, of last week, mentions at least three distinct phases which the conflict assumes. In Oregon, an organization of cattlemen in the Malheur region have notified the sheepmen to take their woolly stock off the public range, and the sheep-owners claim as much right to occupy this wild land as the cattlemen and decline to recognize the authority of the cattlemen; hence a bitterness of feeling between them has arisen that may culminate in more than angry talk. In Inyo county, California, there is also an issue between the flocks and herds.

In Nevada complaint is made by the cattlemen that the sheepmen wander all over the State, feeding whenever they can find a little grass, no matter on whose range it is, and when the feed is exhausted move on in search of fresher pastures. It is charged that this annual invasion wastes feed, as the owners of the migrating flocks herd them wherever they find the best feed, and move through the country like locusts, leaving devastation in their wake.

The points at issue, so far as Nevada is concerned, are to be reviewed this week by a joint committee composed of members appointed by the Nevada Wool-growers' Association and the Nevada Live-stock Association. It is to be hoped that this method of conference, and, if need be, arbitration, will prevail in the settlement of the question. No one in the world

knows the equities in the matter so well as the cattle and sheepmen themselves, and if they go into the courts they will find it costs a heap of money, engenders ill-feeling, and does less justice than can be had by conference and arbitration.

## South America a Formidable Competitor.

Hon. J. R. Dodge, Statistician of the Department of Agriculture, looks upon the temperate zone region as our great future competitor in the supply of several most important productions. He describes tendencies in the present state of affairs in that vast territory which promise to speedily advance its development and productiveness, and predicts that the world's markets will soon show the importance of this little-thought-of factor. He shows that until quite recently the great country was much as was the territory of the United States at the time of the revolution, practically unoccupied, except by a scattered aboriginal population of no industrial account. But a new era is dawning, and in his special report for October, 1886, Mr. Dodge sketches its features and what may be expected of it as follows:

Immigrants are of late pouring into the temperate zone, especially into the Argentine Republic, from Italy, Spain and other countries of Southern Europe, literally by millions, bringing money, agricultural implements (the more enterprising ordering them from the manufacturers of the United States), knowledge of modern agricultural methods, and a good degree of enterprise and ambition. The rapid extension of railroads opens up new lands, on which agricultural colonies are located, and wheat, flax and other products are already largely grown and seeking export.

From this immigration, railroads connecting the fat pampas with salt-water navigation, and the enticing cheapness of these productive lands, a competition with our meat and wheat and wool may come more serious than any heretofore suffered. India is populous and unenterprising, with old and worn soils, sending only 5 to 15 per cent of her wheat, and liable in any year to need it all to save her people from famine. The Argentine Republic has a virgin soil, few people to feed, and can soon send 50 to 75 per cent of wheat produced to foreign countries. India plows with a stick and thrashes with the hoof of oxen; the Argentine Republic and Chili are moving for the best steel plows and the finest American reapers and thrashers. Our competition in wheat is to be serious with South America, when apprehensions of Indian competition yield to pity for her famine-stricken people.

Mr. Dodge shows that the region mentioned, and especially the Argentine Republic and Chili, are being fostered by British capitalists who hold most of the public obligations of those countries. They are furnishing them their steamship lines, building their railroads, and apparently regarding the new direction as the most promising one in which their capital can be invested.

The present condition of trade between the United States and all South American countries is shown to be thus:

U. S. imports from South American countries .....	\$65,289,956
U. S. exports to South American countries .....	27,735,857

Our imports of coffee alone from Brazil reach a yearly value of \$30,346,792, or more than our exports to the whole South American continent. The countries which Mr. Dodge fears most in competition with our temperate zone productions—wheat, meat and wool—do not yet reach great totals in their aggregate trade; but the rate of increase is very rapid, and therein he finds the ground for apprehension. The course of affairs in the region named is worth watching, and those who are trusted with the duty of protecting the industries of the country should see to it that we are not pressed too hard by competition at home, however we may have to fight for favor in the open markets of the world.

## State Election.

The vote for Governor has been so close and returns are so incomplete at the hour we go to press, that it is quite uncertain whether Swift or Bartlett has carried the State, though the Republican seems a little ahead. The Republicans appear to have elected four out of six members of Congress. The city of San Francisco has gone decidedly Democratic, and that party will have a small majority in the Legislature on joint ballot, it appears.

The farmers yet hope that their movement has secured the election of Foote and Filcher for R. R. Commissioners.

## Port Charges.

We notice that the Contra Costa Gazette is righteously indignant because Mr. Wise, of the Harbor Commission, to secure the return to San Francisco of the wheat-loading business, makes this proposition in a letter to the Chamber of Commerce and Produce Exchange of this city:

If you gentlemen are really sincere in your desire to concentrate all freight here, recommend to the Legislature to put all of the bay and its tributaries within the reach of deep-water vessels, under the Board of State Harbor Commissioners, and let tolls and dockage be established at all places alike. But you may say that the people of the interior will object; but I say "no." The cereals do not go to Port Costa and other places to find a market, but as a rule are bought in the country on San Francisco prices, and if anything is saved in the way of discriminating freights in favor of Port Costa and other places, the producer gets the benefit of it. But he would be benefited if the State were to make all vessels at Port Costa, Oakland and other places pay toll and dockage as they do here, because this would increase the revenues to such an extent that we could largely reduce the port charges and continue all the work on the water front. If this were done, and if the railroad would give San Francisco the same rate of freight that it gives Port Costa, the producer would derive a still larger benefit, and the merchants who are now using Port Costa, if they are interested in the prosperity of this city, ought to strongly recommend the reduction to the railroad, and assist in passing the law which I have indicated.

We do not wonder that such propositions excite the ire of our cotemporary. We like San Francisco well enough and have our business interests here; but we don't like it well enough to favor measures which aim to subjugate the whole deep-water frontage of the bay to the local interests of the metropolis. We rather enjoy the building up of shipping points just as near the fields as possible. If it could be done we would like to run deep-water ships to Marysville on the north and Tulare on the south, and load the ships directly from the wheat fields. As this is not within the possibilities at present, we like to have the ships load as near the fields as possible, and if enterprising business men find a way to get the wheat aboard ship without extravagant port charges, it is all the better for the wheat-grower. Mr. Wise's proposition comes too late. Such a thing might have prevailed when the wheat trade was wholly in the hands of the grain ring and warehouse ring and the other rings of a decade ago, but now we have country warehouses and plenty of money to borrow upon their receipts; also a lot of places to load wheat where it is convenient and quiet and near by the fields, and it is idle talk to propose to get the Legislature to take away from the wheat-growers the advantages they have gained by years of effort. Go to, Mr. Wise; your idea belies your name.

## The Oleomargarine Law.

We thought that the oleomargarine-makers and sellers would find they had a very different class of people to deal with when the U. S. revenue detectives got upon their track than when they had merely to dodge the constables acting under laws which read well on the statute-books, but rarely get beyond the covers. These revenue detectives have had so much experience with illicit whisky and unstamped tobacco and the like, that they pounce upon oleomargarine like skillful and hungry cats upon fat gophers. The new law only went into effect on Monday of this week, and yet it was telegraphed from St. Louis on Tuesday that on that day many seizures of bogus butter were made by the internal revenue officers. The latter began their work early in the day, and went from house to house testing butter and confiscating all but the genuine article. Before the day had closed seizures were made at 12 different places.

It is announced from Washington that the reports received by Commissioner Miller show that all classes of manufacturers and dealers, including the retail men, propose to meet the tax and continue in business. The Internal Revenue Bureau had made all arrangements deemed necessary for the enforcement of the law. The demand for stamps has been very great and a large amount of the commodity is probably being put on the market the present week. The production of oleomargarine for domestic consumption is estimated by Commissioner Miller at the rate of 100,000,000 pounds a year, and the amount exported is also believed to be very large.

We have not heard that the revenue officers in this city have struck the trail yet.

SOME Tulare county items will appear next week.



# Sulphur Bleaching Dried Fruit and Nuts.

At the last meeting of the State Horticultural Society a discussion arose on the use of sulphur in fruit-drying and almond bleaching, during which points were brought forward which will be of interest to many of our readers. The subject was introduced in remarks by R. B. Blowers, of Woodland. After commenting upon the superior appearance of fruit dried in artificial driers or evaporators, in that speedy curing prevented oxidation, as shown by the dark color of the fruit when sun-dried, Mr. Blowers asserted that the oxidation is also prevented by the use of the sulphur bath, and if this is skillfully handled there need be no formation of sulphuric acid in the fruit; but, carelessly used, sulphur can do great harm to the fruit.

Prof. Hilgard said that sulphur is often too extravagantly used, and is applied so that it comes in contact with the fruit at the wrong time. Raisins had been sent him which were nearly white, and the fruity taste of which had been almost entirely destroyed by the sulphuric acid formed. The fruity odor is also destroyed. The fruit may thus become not only undesirable, but positively injurious. In Germany, according to the latest reports, they are now using a harmless substitute, which consists in dipping the fruit in a mild saline solution. For example, apples, which are apt to get very dark by oxidation, are dipped in water containing one-fourth of one per cent of common salt; that is, to 100 pounds of water there would be four ounces of salt used. Thus treated, the apples do not dry so dark. They do not, of course, have the pale, unwholesome color of sulphur-bleached fruit, but are of a rich color, which would seem to be far more desirable than the whited-sepulcher tint of sulphur bleaching as too commonly conducted.

Mr. Blowers said that dipping in pure water would have the same effect to a certain extent. He favored, however, the *wise* use of sulphur. He melts the sulphur at a low temperature, dips strips of cloth in it and lets it cool. To bring it to bear upon the fruit, the latter is put in a close chamber as soon after cutting as possible, and strips of this sulphured cloth are lighted. They burn slowly, and there is not sufficient carbonaceous material in the cloth to raise the temperature high enough to volatilize the sulphur. Throwing the sulphur upon a pan of coals and subjecting the fruit to these fumes, results in charging it with sulphur deposit and sulphuric acid. Such fruit is unwholesome.

Col. Webb remarked the present disposition of the Eastern market toward sulphured fruit. Over-sulphured fruit has become unsalable, especially in the New York market. California fruit is therefore discriminated against, while the fruit from the evaporators in Delaware, Maryland and New Jersey is popular because they know how to use sulphur properly.

Dr. Gibbons, of Alameda, said it should be evident that sulphur ought to be skillfully handled; it should be regarded as a scientific operation.

Prof. Hilgard impressed the need of having a care not only as to the amount but also of the time of the application. This should be made before the fruit is put in the drier, or just after it is put in, and not after the evaporation has proceeded. Dried fruit will absorb and retain an excessive amount. It is decidedly wrong to sulphur, as it is sometimes done, driving the fumes ostensibly upon a tray of fruit which has just been put in, while in fact the fumes are carried by the draft beyond the fresh fruit, which only absorbs a little over to the partially-dried fruit which absorbs too much—in some cases all the sulphur volatilized being taken up by the fruit over which it passes, so that one can detect no sulphur at the escape-pipes of the evaporator. It is decidedly wrong to sulphur continuously; it is wrong to keep a drier charged with sulphurous gas through the whole drying process. The use of sulphur in fruit-drying is only one of many cases in which legitimate processes are misapplied and dangerous results produced.

Judge Blackwood stated that he dried chiefly fruits in which a dark color was desirable, as prunes, and with some varieties it is necessary to use materials to make them dark enough. On the French prunes he uses a little logwood: the Bulgarian prune dries dark enough. He

dries his fruit down pretty dry and then he dips in boiling water, places in a pile, covers with a cloth, and 24 hours afterward packs them in boxes. He had used pure boiling water, but hereafter he would put in a little salt. He mentioned the case of a neighbor who had sulphured his fruit so that by the following spring it had absolutely no desirable flavor.

Dr. Kimball showed a very fine Bulgarian prune of his drying.

The use of sulphur in almond bleaching was introduced by James Shinn, who mentioned the case of a neighbor of his who had sulphured his nuts and generally did well, but year before last he over-sulphured them and they had no taste. He gave him the nuts to plant, but the germ had been killed; they would not grow. He had applied the sulphur when the nuts were but partially dried after gathering.

Mr. Hatch said there were tons of almonds spoiled every year by sulphuring before they are well dried. The nuts must be thoroughly dried, then sprinkled and sulphured.

Prof. Hilgard gave the *rationale* of this process, which is approved by practice, as follows: If sulphur fumes are applied to green or partially dried nuts the sulphur is absorbed

been told that in California and other countries where no rain falls for a long period, and comparatively little in the rainy season, they would live the year round in no hives except the protection afforded by such combs as they could build, and by their own clustering shedding the rain with their wings turned like shingles."

## The Young Men's Christian Association.

The State Convention of the Young Men's Christian Association assembled Oct. 21st in the First Presbyterian church, Los Angeles. The convention was opened by a short jubilee service under the leadership of George W. Marston, president of the San Diego Association, followed by a collation and speeches of welcome.

The kingdom of heaven does not come with beat of drums, bonfires, rockets and display of banners. It comes without observation, an immanent, informing force, working in the heart of society as silently as the leaven hidden in the meal. We have a good example in the history of this organization. A very slight acquaintance with the mode of its operation and the results of its achievements shows it to be



CALIFORNIA BEES LIVING AND PROSPERING WITHOUT A HIVE.

and transmitted even through the shell into the kernel; the sulphur acts continuously and forms sulphuric acid. If the nut is dried thoroughly, and then sprinkled and then sulphured, the sulphur is taken up merely by the film of water on the shell and its action is speedily accomplished and affects only the surface.

Dr. Gibbons and Mr. Moulton briefly mentioned the effect of sulphur upon germs of insect and fungoid life as incidental to its other action as described above. The points brought out in the discussion are important and should be considered by all who are using sulphur in their productive enterprises.

## The Bees' Testimony.

Bee-keepers bear frequent testimony to the perfect adaptation of California climate to their industry by their reports of large honey yields, multiplication of stocks and by their freedom from the dangers of "wintering," which are a constant and important factor in the success of Eastern apiarians. The bees themselves not infrequently bear testimony to our "glorious climate," and one way in which they do it is shown in the engraving on this page. It represents a hiveless swarm operating with full vigor without shelter, and was made by *Gleanings in Bee Culture* from a photograph sent to the publisher by H. H. Hillier, of Pasadena, Los Angeles county. Bees will make such dwelling places and will occupy them safely for several months, even in wintry climes, not being injured by frequent rainstorms; but the editor of *Gleanings* says: "We have also

one of the most conspicuous developments of the Christian religion in this century, and one well worthy of the study of the social philosopher. Herbert Spencer has written an elaborate treatise on Sociology without mentioning it. But this is not strange. Science is more busy catching new bugs, impaling new beetles, hunting ferns and studying the solar refrangibility of cucumbers, than in the study of the marvelous psychic phenomena of the age. The statistics of this association reveal some wonderful results, and yet we know that statistics give very little insight into latent moral forces. The census of Rome at the time of Nero would have cast no light upon the fact that there was existing in the bosom of that great city a hidden germ of spiritual power destined to break the chains of polytheism and turn the pantheon into a museum of dead gods. And yet the reports of this association show that it has halls, libraries, reading-rooms and social parlors in nearly every considerable town and city in the world; that every day its altar-fires of devotion burn brightly in the densest centers of business and trade.

This association in some respects may be considered as a sketch and outline of the church of the future—caring nothing for creeds, unconcerned about the squabbles of polemic theology, but holding fast to the basic truths of all religions, the central idea that gives all these churches all the vitality they possess. It has one well-defined purpose—the rescue of men, especially young men, from idleness, intemperance, the seductive vices of city life, and has worked toward that end with a harmony, singleness of aim, faith, hope and patience that

has no parallel. It counts among its active workers many of the keenest and most successful business men of the land—men who live in the world, come daily in contact with every phase of civilization; men who have had to struggle to gain a footing in society and know what temptation means. They give freely of their substance and have the satisfaction of knowing that it goes where it was intended. Perhaps there is no organization so extensive where there is so little money lost in the lubrication of the machinery. These workers find thousands of young men in the great cities without the blessings of a home, and tender them friendship, a reading-room, a pleasant place to spend the evening in social enjoyment, food when hungry, work when idle, a bed when shelterless, and support and sympathy when tempted. They are plainly doing a work that the church cannot do, a work that no other agency is doing; and the power and benefit of such an organization in this city and elsewhere should be recognized and liberally sustained by all who seek the welfare of society and the salvation of men.

## Grown in San Luis Obispo County.

Some very handsome specimens of fruit and vegetables from the western part of the above-named county have been sent to Secretary Street, of the Immigration Bureau, and are now in view at No. 10 California street, in this city. They were among the exhibits, we understand, at the recent fair of the Arroyo Grande Agricultural Association, and were forwarded by the secretary of that society. The biggest thing in the collection is a cabbage-head 5 feet 3 inches in girth and weighing 48 pounds. One White Lisbon onion, marked 3 pounds 10 ounces, measured over 22 inches about, and has beside it Danvers onions, both Globe and flat, some of which can fall but little behind it. Red and white potatoes of unusual size, Southern Queen and other sweet potatoes, lie adjacent.

Several great green and russet pears range from 1 lb. 13 ozs. to 1 lb. 15 ozs. each. Five Vicar of Winkfield, 4 lbs. 8 ozs.; 5 orange quinces, 6 lbs. 15 ozs.; 5 R. I. Greenings, 4 lbs. 6 ozs.; 5 Fall pippins, 5 lbs. 10 ozs.; 5 Y. Bell-flower, 4 lbs. 4 ozs., indicate the size of the fruit. There are also fine quintets of Easter Beurre and other pears, Newtown and Skinner pippins, Twenty Ounce White Winter pearmain, Smokehouse, Golden and Roxbury Russet, Hyslop Crab, Kentucky Red, Reinette, Winesap and Jonathan apples.

These pears and apples are peculiarly showy, having been thickly coated with varnish, which not only makes them look bright, but will, it is hoped, protect them alike from early decay and the ravages of insects and inconsiderate bipeds.

AN IMMENSE BUSINESS.—Armour & Co., the Chicago meat-packing firm, the employees of which furnished the chief portion of the men who inaugurated the recent great strike in Chicago, is probably the largest packing house in the world. The following statistical items of their business for the year ending March 31, 1886, will be of interest: Their sales for the year amounted to \$43,000,000; they killed during the year 1,133,479 hogs, 330,652 cattle and 635,262 sheep, and produced 55,142,952 pounds of lard, 85,918,460 pounds of salted meats, 51,508,386 pounds pickled meats, 4,062,459 pounds spiced meats, 8,219,630 pounds green hams and shoulders, 54,008,729 pounds smoked meats, 33,696,460 pounds canned meats, and 22,461,522 pounds fertilizers. Armour & Co.'s buildings cover 30 acres of ground, and furnish a floor area of 88 acres. Their chill-room and storage area is stated at 20 acres, and their storage capacity at 90,000 tons. During the summer season they employ 4000 men, and during the winter season 5000. Their annual payroll exceeds \$4,000,000.

STRIKES AND MACHINERY.—Newly invented machines have been substituted for several processes in tanning leather as a consequence of the recent strikes and lockouts in Massachusetts, and the occupation of the "beamster" and "green shaver" is practically gone. There is no greater incentive to the inventor of labor-saving machinery than the present labor-striking mania.

THE wheat crop in Russia this year is reported by the N. Y. *World's* correspondent an utter failure.



## Orchard Industry in Tulare County.

[Written for the RURAL PRESS by W. A.]

EDITORS PRESS:—Knowing that you take a lively interest in all matters pertaining to the agricultural development of the State, I send you a short account of the opening of a new industry, or new to this county—the canning of fruit—and I may safely assert the success of which will revolutionize in a great measure the present mode of farming the fine lands of this county. It can be said, without fear of successful contradiction, that no county in the State possesses a larger body of sedimentary soil, or sandy loam, which is acknowledged by all to be the best fruit and vine land known, where naturally moist enough, or where irrigation can be practiced. Yet there are thousands of acres of this quality of land now devoted to wheat culture, yielding a light and very doubtful revenue, owing to low prices and uncertain supply of winter rains. If the canning industry proves successful, these acres, incumbered as they now are with old machinery and an occasional mortgage, will soon be transformed from wheat fields to orchards and vineyards, for as a rule the water which will mature a wheat crop will suffice for the orchard and vineyard where the land is properly cultivated. But in a larger portion of the fruit belt, artesian water can be had by sinking, and in large districts after the trees and vines have attained the age of three years no irrigation is required when the annual rainfall exceeds seven inches, good cultivation being all that is needed to secure a good crop and promote a healthy growth of tree and vine. Alfalfa, the great forage plant and one of the chief factors of the wealth of this county, fails of being profitable under like conditions. It must have plenty of water at intervals through the summer, unless its roots can reach the moisture, and in large areas of excellent fruit soil this cannot be accomplished. Hence, the cultivation of fruit on the wheat lands will commence as soon as a profitable home market shall have been insured, and on the result of the working of the cannery much will depend. A few years ago the lands of Paige & Morton were a

## Dreary Sheep Walk.

Later grain and alfalfa fields, but now fast being transformed into the finest orchard and vineyard in the San Joaquin valley. The lands commence about three miles west of Tulare, and embrace about 3000 acres of choice sedimentary loam, all under ditch and all within the artesian belt. The lands lie between two creeks—a belt of fine old oaks extends along the sides, giving the place the appearance of a park rather than of a "farm on the plains." There are several hundred acres in alfalfa, some 400 head of horned cattle, and still larger grain fields. The latter will soon give place to orchard trees and vines, but the alfalfa being "in the timber" will retain a longer place. It is well worth while to visit the place and mark, by contrast with the surrounding country, the improvements which a few years' time, a judicious outlay of money and the indomitable will and energy of Jas. A. Morton have accomplished.

A drive due west from the city, of about three miles, brings one to the lands which comprise the "home farm." The "Home House" stands and the orchards begin a half-mile from the eastern line. The drive, or private road, continues due west past the house, through the farm, bordered on each side by two rows of fruit trees of various kinds. From the house to the county road, on the north, an avenue has been laid out, bordered with umbrella trees. Here is a small orchard of apricots, one of peaches, and the vines all raisin grapes, the oldest now three years old and bearing heavily. Here are 250 acres of grapes, and on the ranch are 450 acres of stone fruits, but the larger part is on "the other ranch," or "White House," further westward. Although called the "other ranch," the land is all connected—all one body, and could be inclosed by one continuous fence.

## Artesian Wells

Have produced plentifully on every portion of the tract yet prospected, the average depth to flowing water being about 360 feet. This winter probably 600 acres will be put to grapes and fruit, the home nursery furnishing the stock; and thus will the work go on, until the ranch—excepting the timber belt—will be planted in fruit trees and vines. In driving in from Tulare, the view is, at this season of the year, exceedingly fine when contrasted with the surrounding stubble-fields. Wide stretches of orchard and vineyard, clothed in foliage of densest green, at once attract the eye and charm by their novelty. The fields are scrupulously free of weeds, for the orchard and vineyard brook "no lover near the throne." The trees and vines are set with mathematical precision—in rows whichever way one views them. A whitewashed barn and granary and a small, cozy dwelling, standing under a lone old oak, are the first to attract attention from a distance. Then the two small orchards appear, then the vineyard, then a belt of timber, and, further on, the White House orchards and nursery, and the cannery by the artesian well, claim attention. Hitch up your team, pass by a dozen long, lank, lean greyhounds curled up under the

shade of the old oak, who lazily look at you from half-closed eyes, as if wondering why anything having legs should take the trouble to move around in this delicious fall weather. Perhaps one may make a half-blind attempt to knock a troublesome fly from its nose, but he can go no further. He has run the festive jack-rabbit until "worn and weary, half distraught," he has come home to rest, nothing more. If at home, Mr. Morton, the resident partner of Paige & Morton, will greet you cheerily, and, if possible, show you over the place; if not—and his time is so closely occupied that he rarely has leisure to do so—he will send a man along who can show what has been accomplished. Mr. Morton is built on a generous plan, large, massive, and with will and mind well suited to his solid figure. Under his push and daring, for he was often berated for his "want of business sagacity" by those who would risk nothing to improve their lands, the sheep walks have become the finest and most valuable farm in Tulare county. Yes, it required time and patience to win this acknowledgment from grudging competitors, and though Job and Mr. Morton's tempers cannot be compared together, the firm have won the distinction of having the most valuable farm in the county, and will have the credit of really being the founders of the fruit industry of Tulare county, because they have been proving by a liberal expenditure of money that it can be made the most profitable investment, and the most surely remunerative for the small or large land-owner. Before the advent of

## The Cannery.

Which I will now consider, beyond the local, there was little or no market for green surplus fruit. Dried fruit might not pay, but for choice canned fruit there was always a ready market. With the orchard in bearing, naturally came the fruit-drier and the cannery. This season, despite the objection of those "I-told-you-so's," Mr. Morton decided to erect a small cannery as an experiment. It was built at the White House, and is in charge of R. Wheeler, of the Wheeler Process Canning Co. In vain did Mr. Morton urge on the many with whom he talked regarding the subject the necessity for providing a market for surplus fruit, for finding employment for the youth of both sexes, and many other cogent reasons. He was generally met with: "Oh, pshaw, it won't pay." "You can't get boys and girls to work at it;" "Better sell to the Chinese;" "You'll just throw away your money," and a thousand other objections equally weighty, why he should not strive to improve the county, and while bettering the value of the Paige & Morton property, better the condition of those around him. Like most such enterprises, it was established by the firm with hardly the moral encouragement of the community, so slow is the average man to get out of the old-traveled roundabout road his fathers trod, and try the newer, shorter-cut, though comparatively untraveled trail to prosperity. It is immaterial to your readers, the size of the building, but the cannery was erected large enough, it was supposed, for present wants, and possibly large enough for future demands. With this understanding of the case, let's look at the

## Cannery Work.

And see what has been accomplished under the supervision of Mr. Wheeler. I have his word for it that his force of boys engaged in picking have given him less trouble than the best organized gang of Chinese pickers he has ever employed. They have left the trees in better shape, have broken and injured less wood-growth, have given him better selected fruit, and on the whole have proved far more intelligent, docile, practicable and valuable than any orchard help he had previously employed, for that help had invariably been Chinese. Now, here is Mr. Wheeler's refutation to the charge that "our boys won't work." He says they work cheerfully and intelligently, with an eye to future preferment and the interest of their employers when rightly dealt with. The cannery now employs from 40 to 50 boys and girls, and has had no trouble in finding a supply of help equal to the demand, though this is the first season of cannery work. They all belong in the immediate neighborhood, many boarding at home, while those who live farther away are provided for at the company's boarding-house. Mrs. Wheeler, wife of the superintendent, has charge of the dormitory, where the company provide the "bunks," and the girls furnish their own bedding. The house in which Mr. Wheeler and family reside is large, clean and comfortable, the upper story being used for the girls' sleeping-rooms. The "boarding-house" is a large, elegant tent, which will be taken down when "the season" has passed. An artesian well throws a stream of pure water into a reservoir near by.

Now let's go into the cannery proper and in detail examine the work and learn as much as possible from a brief survey of the mysteries of fruit-canning. Seated around the cool, airy room, at convenient tables, are a bevy of bright-eyed, happy-looking girls, ranging in age from eight years up to—well, let's stop at years, for among these busy workers I notice two "schoolmarm's" whose nimble fingers are now earning as much money weekly as the busy brain can command for the more laborious work of schoolteaching. The cannery has an "earth floor" which keeps it cool, and the furniture, seats, tables and benches are of the most primitive kind. It is a place of labor, for labor—not of or for show. Everything works with the precision of a clock. Mrs. Wheeler,

the able assistant of the superintendent, supervises her white working force admirably. Here let me remark that

## No Chinamen Need Apply

At the cannery. It is the embodiment of white labor. Our sons and daughters are not brought in competition with the Mongol. All work is paid for by the piece, and if a Chinese contractor would offer to do the work at half rates he could not have the chance. Messrs. Paige & Morton have established, by and with the advice of the Wheeler Canning Co., a schedule of rates for labor which is liberal, but it is for white labor only. Not a Chinaman can be found at cannery work, and as long as white labor can be obtained, none will be permitted.

The working rates will appear partially in detail, and your readers can judge of the advantages offered the young of both sexes by the establishment of this or other canneries when conducted in a liberal spirit, and with a view to a permanent investment of capital. To commence, the nimble-footed boy's sole ambition has heretofore been to do something vigorous, for he has a superabundance of animal life, is turned loose in the orchard after having been instructed in the art of picking fruit; and, by the way, here is where the value of white labor commences. Let me explain: The boys have a natural relish for fruit, especially if they have to "crib it." There are not many of us who have not in our younger days gone miles out of our way to crib roasting ears, fruit and melons, when perhaps we had plenty at home; but there was no fun in taking what we could have for the asking, or what was ours by right of inheritance. The boy of to-day is about what his father was 40 or 50 years ago—probably a little improved if his surroundings have been ordinarily good. Placed as a picker in the orchard, he feels the responsibility of his new position and has a new incentive to do well—pride in retaining his place and the confidence reposed in him. There is no fun in stealing this fruit; he can get all he wants by reaching out his hand, hence he doesn't want it. But he does want to see it reach the cannery in good shape, for on that depends his position, his pay and the success of the enterprise, which shall give him employment next season. On the contrary, the Chinaman has no such feelings. His hours of labor, if by the day, are filled by him without care of his employer's interests; if by the piece, the broken limbs of the fruit trees and the careless, slovenly manner of handling the fruit attest his utter indifference to the welfare of any other but himself. I have been particular in noting these points, for but few have written encouragingly of our boys' efforts to establish a reputation as reliable workers. True, they have had few opportunities—none whatever in this neighborhood—to prove their metal before the opening of this work; but wherever tried under reasonable rules and regulations the white boys have won and held their way against their foes—the Chinese. But then the opportunities are so few in which to test their merits.

Well, the boys pick the fruit, which is hauled to the cannery and weighed, the picker receiving credit for each box and a check for each dozen, as the price is so much per dozen boxes. It comes in in good shape, for the picker has been taught how to select and knows he will be better paid for good work. In the cannery the fruit is assorted into first and second class and pie fruit. A blemish on a peach mars its value for first-class or glass jar fruit, while not hurting it for tin cans. But that which is too small for tin cans or too soft for first-class glass or tin work is put in large tin cans and labeled "pie fruit."

From the weigher the fruit goes to the "peelers," who with their machines take off the rind and pass it to the pitters and cutters. When the peeler has prepared a certain number of boxes he draws from Mrs. Wheeler a check which entitles him or her—for girls and boys alike work at all branches of the trade—to a certain sum. This is repeated through the day and when labor closes for the day each one knows the amount earned by self. Following the work of preparing a peach for canning, the halver and pitter, after completing their work, draw their checks and the fruit is passed along to those who place it in the cans. If in glass, the girls who do most of this work fill the jars carefully with selected fruit, a piece too small, soft or with a blemish being rejected. The labor is light, but in this as in all the departments skill and judgment are required in selecting, and again the bright-eyed youths are of far more value than their Chinese competitors, and the work leaves their hands first-class in every particular. When a dozen jars or cans are ready, a boy removes them to another table where the work is further advanced. Thus it goes, a dozen cans or jars go from the peelers, pitters and cutters, through the packers, those who put on the rubber bands preparatory to covering, through the hands of those who fill the jars with syrup, to the one who "heads" them or puts on the covers, to the solderer if in tin, then to the range where they are cooked, then back to the solderer if tin, if of glass to the one who replaces the clamp which renders the jar air-tight, then through the hands of the labeler, until at last the prepared fruit rests in the warehouse ready for shipment. I cannot go into details of this work for two reasons, I have not the knowledge and I think you have not the space to spare. But each portion of the work is paid for by the dozen, as the fruit when marketed is sold in the same manner, and when the work of preparing a

hundred dozen cans has been accomplished the exact cost of fruit and labor has been ascertained. Perhaps your readers may ask,

## What do the Employees Earn?

Well, they earn according to their strength, energy, skill and the hours they labor. As nearly all the work is by the piece, the quick-fingered lad or lass earns more than their slower competitors, and those who work steadily earn more than those who play part of the time allotted to work. A little girl of eight years earned 60 cents one day in labeling, but she had an extra appetite for work that day. One young lady earned \$3 in filling glass jars one day, but she must have been angry with her beau and worked off her ill humor at the cannery. Those, of course, are exceptional cases. The young child can earn from 20 to 40 cents per day in labeling; the young lady from \$1 to \$2 in filling jars or cans. The pickers, peelers, pitters and those who follow other branches can earn a like amount. I think a fair average of the earnings of the members of the whole force would be \$1 per day each; of the larger class of boys and girls, \$1.50 per day when the time is fully occupied. With increased knowledge and skill, for it must be remembered that all the employees are in their first season, the boys and girls of 15 years and upward can earn from \$1.50 to \$2 per day of 10 hours, and have a light, agreeable employment, free from Mongol competition. Another season the cannery will be enlarged to thrice its present capacity if the season bids favorable for fruit. It has a regular capacity of 100 dozen cans per day—has run as high as 130 dozen when pushed. It is calculated that 150 boys and girls will be employed next season, all things being favorable. The fruit handled this year has been pears, peaches, apricots, plums, nectarines and grapes. The canning of tomatoes for the Eastern trade will soon commence, and a large trade is expected in this line.

## Now as to Results.

We have but to learn whether there is money in the business for the operators and projectors of the enterprise. I cannot answer that question, but should judge there was profit in the work. Tulare furnishes the finest fruit of the State. The great drawback of transporting the green fruit to the bay with the attendant loss is avoided, and only the marketable, prepared fruit is sent. It must be a better article put up here, for the fruit is fresh, gathered at the proper time for preparing, avoiding the bruising and decay belonging to long transportation and rough handling. With equal facilities for canning, possessed by the San Francisco canneries, a better article of prepared fruit can be produced here, where the fruit is taken fresh from the trees or vines as wanted.

Premising that there is a profit in canning fruit in the city canneries, there must be at least an equal show for a profit on capital invested in a cannery in the immediate center of the fruit region of this valley. If so, the future of the enterprise is an assured fact, and Messrs. Paige & Morton may be considered public benefactors in having inaugurated an enterprise which thus far bids fair to maintain a new industry. Its worth to our boys and girls is incalculable, inasmuch as it opens to them a new field of industry. Its value to the county can hardly be estimated. Already are the cannery agents purchasing all the choice fruit to be had in the immediate neighborhood, and those who saw no profit in shipping small quantities of fruit below now see a profitable and permanent employment in fruit-growing, where for years they have barely made a living in growing grain for a far-away market. Orchards will rapidly replace the grain fields, for the market for choice canned fruits can never be overstocked. The demand now is and will continue in excess of the supply, for the choicest fruit is that canned where grown, and it requires capital to build and conduct a cannery. Paige & Morton should be credited with having created and conducted the first successful cannery trade in this part of the State, and with having demonstrated that capital rightly employed is a blessing to the community in which it centers. But above all should they be commended for providing employment for the youth of the community in which their property is located. One word about

## The Wheeler Canning Process.

And I leave the question of "providing employment for our youth," as far as canning is concerned, for other topics regarding the progress of this county. That question has been solved by Paige & Morton in favor of the youth, as evidenced by those now in cannery employ. The system known as the Wheeler system or process was evolved from the active brain of R. Wheeler, for many years a newspaper writer of San Francisco. Becoming interested in the fruit question, he turned his attention to canning, and from the old evolved a new system which bids fair to supersede all other processes of canning. By his method, goods in glass are subject to no more loss than is met with in putting goods in tin by the old method. His fruit, whether in tin or glass, is cooked by superheated steam, while in the old way it was boiled in vats or large receptacles. It is well known that fruit in glass brings better prices, yet the breakage and wastage in putting fruit in glass by the old method amounted practically to prohibition, often exceeding 30 per cent of original stock. By his method canneries can run glass jars as low as two and a half or three per cent loss, which is a heavy item in favor of the new method. His loss with green hands in



this cannery this season, from "swells" and other causes in tins, has been nominal, and less than two and a half per cent from breakage and swells in glass; and, with employees thoroughly conversant with the work, the loss would be nominal as now in tin work. Mr. Wheeler is enthusiastic in his praise of Tulare county fruit, and never tires of expressing his preference for white help in the cannery. He is an enthusiast on both subjects, and probably one of the best-informed men regarding the fruit interests of the coast now engaged in the work. Success to the enterprise, its projectors and founders, and due credit should be given to the one who devised or invented the Wheeler canning process, for it bids fair to become a familiar member of the commercial family of every fruit-growing county of the coast.

Tulare, Cal.

**LAND IN S. L. O. COUNTY.**—The West Coast Land Co., of which C. H. Phillips is manager, has published a descriptive catalogue of the lands included in the Rancho Paso de Robles, with a very neat map of its subdivisions, as surveyed in August last. Of the adjoining Santa Ysabel, Eureka and Huer-Huero ranches, also, brief accounts are given. These lands, embracing 100 square miles of virgin soil, lying all together, in the heart of San Luis Obispo county, are for sale by the above-named company, which was incorporated last spring. The tract is well wooded with white and live oak, has an abundance of living water, and is traversed throughout its length by the S. P. R. R. A concise statement of the agricultural and climatic excellences of the county is prefixed, and the whole is presented to moneyed, home-seeking immigrants in a comely little pamphlet of 23 pages. We are informed that 12 lots were sold the first day, in the new town of Crocker, where railroad construction ceases for the winter, and that building was begun on 10 of them immediately; also, that sales on the Paso Robles ranch, the first ten days, amounted to over \$60,000. The boom has reached there, assuredly.

**JAPANESE NURSERY STOCK.**—H. H. Berger & Co., of 317 Washington St., S. F., make a specialty of importing choice nursery stock from Japan. Their fall catalogue for 1886 includes a great variety of ornamental trees and plants—including climbers, palms, ferns, lilies and orchids—as well as an assortment of seeds of Japanese forest trees, shrubs, etc. They claim a thorough acquaintance with the botany of that country, and gardeners of note there, and select their stock from nurseries in Tokio and Musashi, paying Japan a personal visit every year for that very purpose.

#### Consumption Cured.

An old physician, retired from practice, having placed in his hands by an East India missionary the formula of a simple vegetable remedy for the speedy and permanent cure of Consumption, Bronchitis, Catarrh, Asthma, and all Throat and Lung Affections, also a positive and radical cure for Nervous Debility and all Nervous Complaints, after having tested its wonderful curative powers in thousands of cases, has felt it his duty to make it known to his suffering fellows. Actuated by this motive and a desire to relieve human suffering, I will send free of charge, to all who desire it, this recipe, in German, French, or English, with full directions for preparing and using. Sent by mail by addressing with stamp, naming this paper, W. A. NOYES, 149 Powers' Block, Rochester, N. Y.

#### Complimentary Samples.

Persons receiving this paper marked are requested to examine its contents, terms of subscription, and give it their own patronage, and, as far as practicable, aid in circulating the journal, and making its value more widely known to others, and extending its influence in the cause it faithfully serves. Subscription rate, \$3 a year. Extra copies mailed for 10 cents, if ordered soon enough. If already a subscriber, please show the paper to others.

#### Our Agents.

OUR FRIENDS can do much in aid of our paper and the cause of practical knowledge and science, by assisting Agents in their labors of canvassing, by lending their influence and encouraging favors. We intend to send none but worthy men.

JARED C. HOAG—California.  
G. W. INGALLS—Arizona.  
E. L. RICHARDS—San Diego Co.  
R. G. HUSTON—Montana.  
Geo. McDOWELL—Fresno and Tulare Cos.  
O. F. BERGMAN—Tehama and Colusa Cos.  
J. H. SMITH—Plumas and Sierra Cos.  
J. C. SWEENEY—Sonoma and Mendocino Cos.

#### A New Wonder

Is not often recorded, but those who write to Hallett & Co., Portland, Maine, will learn of a genuine one. You can earn from \$5 to \$25 and upwards a day. You can do the work and live at home, wherever you are located. Full particulars will be sent you free. Some have earned over \$50 in a day. Capital not needed. You are started in business free. Both sexes. All ages. Immense profits sure for those who start at once. Your first act should be to write for particulars.

**NAPA VALLEY NURSERIES.**—We have received a copy of the new catalogue of these nurseries, which, as we recently stated, are now the sole property of Mr. Leonard Coates, who established them. Mr. Coates shows a good assortment of novelties and standard varieties.

#### Cheap Money for Farmers.

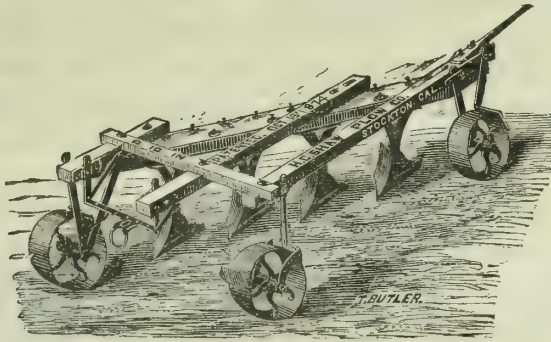
Farmers in this State will be glad to learn that they can borrow on mortgage any amount, from \$5000 to \$500,000, from S. D. Hovey, 330 Pine St., San Francisco, at 6 to 7 per cent and taxes.

#### Farmers and Travelers

Sojourning in Marysville will find the Western Hotel the best in the city, being clean, quiet, comfortable and reasonable in prices. Geo. Wappel, proprietor.

## H. C. SHAW PLOW WORKS.

20 000 IN USE!



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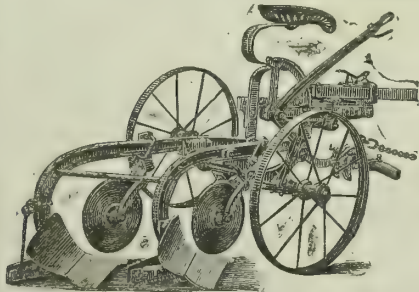
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## THE JAY EYE SEE STEEL SULKY

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Weight only 400 pounds. Can't be Strained or Broken in any land. Easily managed and Light Draft. Try one and be convinced. Made with 14 or 16 inch bottoms and sold same as Iron Sulkys.



## THE J. I. C. GANG

Made with 2 12-inch or 2 14-inch Steel Bottoms.

Is constructed, like the Sulky, entirely of Steel. Weight only 550 pounds.

THE LIGHTEST DRAFT AND STRONGEST SULKY PLOW IN THE MARKET.

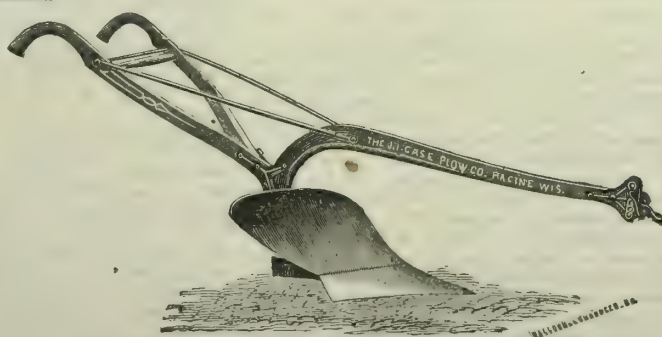
## THE "J. I.

CASE"

Steel Beam,

CENTER DRAFT

PLOW.



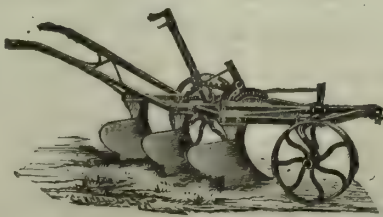
It is absolutely Center Draft. It draws lighter, owing to its Center Draft. It cannot be clogged, as there is no standard. It is perfectly balanced, and can be operated by a boy. The Beam is warranted against breaking or bending.

SAVE TIME, LABOR AND EXPENSE BY USING THE

"FARMERS' FRIEND," 3, 4, and 5-PLOW GANG.

For Orchards,

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Large & Small

Ranches.

PRICES.—3 GANG (WITH STEEL).....\$40 00  
4 GANG (OR CHILLED).....50 00  
5 GANG (SHARES).....60 00

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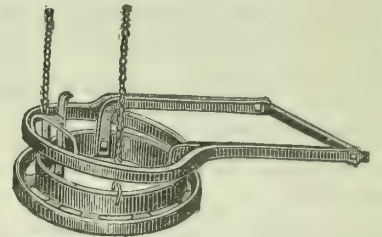
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UNCLE Sam has found it at last! A sure remedy for Torpid Liver, Sick Headache, Habitual Constipation, Chills and Fever, and all affections of the Kidneys and Liver. This is a New Compound, and one trial will convince you that it is the Cheapest and Best Remedy in the Market for Diseases of Kidneys, Liver and Stomach. If you want a pure vegetable compound, that is positively guaranteed to contain no mercury, go to your Druggist, and get a Bottle of the Arkansas Liver and Kidney Remedy. Price, \$1.00 per Bottle.

For Sale by all Druggists.

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### ORGANS.

Highest Honors at all Great World's Exhibitions for nineteen years. 100 styles, \$22 to \$900. For Cash, Easy Payments, or Rented. Catalogue, 46 pp., 4to, free.

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Do not require one-quarter as much tuning as Pianos generally. Descriptive Catalogue by mail.

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## AGRICULTURAL NOTES.

## CALIFORNIA.

## Alameda.

**MAMMOTH POTATO.**—S. F. Call, Oct. 30: There was an exhibition yesterday, at the Merchants' Exchange, a large potato, grown in Alameda county. It is of peculiar form and weighs five and ten-sixteenth pounds. The ship captains stare at it in amazement as they talk of the possibilities of our glorious climate.

**FRUIT SENT EAST.**—Haywards Journal: Pear shipments have about ceased. There have been about 35 carloads of fruit shipped East from San Lorenzo during the fruit season, and, at \$300 per car, the freight amounts to \$10,500.

**MEXICAN ORANGES.**—A dispatch from Nuevo Leon states that the orange crop is exceedingly large, notwithstanding the disastrous weather of last winter, which destroyed many of the trees.

## Butte.

**VINES BOUND TO LIVE.**—Fourteen years ago a gentleman living near Oroville leased a piece of land to some Chinamen to be worked for mining purposes. The land was then covered with a fine lot of grapevines in full bearing. In 1882 the land came again into the owner's possession. It was filled with old shafts and mining debris and a large share of the vines were covered up or destroyed. During the past four years the abandoned vineyard has been used as a cattle pasture. Last winter, however, it was fenced, and this fall Mr. Yetter has picked and sold 15,000 lbs. of grapes from the vines and made 39 barrels of wine. The vines were not irrigated nor cultivated during the whole time. Truly a grapevine is a hard thing to kill.

## Calaveras.

**APPLES.**—Citizen, Oct. 30: Some of the finest mountain apples we have seen of late were grown upon the orchard of Wm. Mullinex, near Avery's, this summer. They were of average size, as sound as a rock, of excellent flavor and splendid edible qualities. He has sold the entire fruit of the orchard to a party at Vallecito. The apple worm is unknown at that altitude, and the fruit grown in that vicinity promises to command a high price in the market of the future.

## El Dorado.

**LAND AND CLIMATE.**—Latrobe Cor. Record-Union: This is mostly a grazing country, but is also adapted to wheat, barley, oats, and fruit and vegetables. The land is a red loam; rocky in places, poor, thin, steep and stony. The land in the western part of the county has all passed out of Government hands, except some that is broken. To the east, Government land becomes plenty. Forty miles east of this place it is most all Government land, and timber good and plenty. Grizzly Flat is situated where the snow falls to a considerable depth. They farm successfully there. Three miles east of that town there is very little of the land sold, and it is open to homestead settlement. The timber grows so tall and thick there that very little grass grows. I have lived in this county 34 years, and there is no better place for the home-seeker than El Dorado county. He can get any kind of land he wants. Italians have started a settlement southeast of Latrobe, paying from \$9.50 to \$15 per acre. There is good land in the neighborhood for \$10 per acre. It seldom snows at this place, and in a great portion of this county oranges can be successfully grown.

## Fresno.

**MONEY IN MUSCATS.**—Expositor, Oct. 15: Henry Davihill purchased of Mr. Foster, near this city, a half acre of Muscat grapes on the vines. He now has 268 trays of raisins nearly dry that will average nine pounds to the tray. He has refused six cents per pound for them, which would, at that rate indicate a gross receipt of \$289.44 per acre, and shows that notwithstanding the large expense connected with raisin-growing there still must remain a good margin in the business. Col. Forsyth has purchased from Mr. Grout the raisin grapes off 1024 seven-year-old vines. Some two tons were rejected as indifferent fruit, but the amount paid for weighed 38,372 pounds. The usual number of vines to the acre is 680, and the prices paid have not been less than \$15 per ton on the vines, and average about \$20. Now get out your pencil and figure out whether Fresno lands are worth \$100 per acre or not.

## Humboldt.

**WOOL AND COYOTES.**—Standard, Oct. 23: H. C. Hanson and Robert Porter own the Fort Baker Ranch, where they have just finished shearing 20,000 sheep. Seventy shearers were employed in the operation. Mr. Hanson says there is an abundance of dry feed this year and sheep are in prime condition. The fall clip is clean and of good length, and if anything above the average in weight. There is the usual complaint among sheep-owners of the depredation of the coyotes. Mr. Hanson says their losses from these pests during the past year number not less than 2500 head. Other sheepmen have suffered in like proportion. This is a serious question, and it looks as if many will have to abandon the growing of wool unless some check is put upon the depredations of these semi-wolves. There seems to be but one remedy, and that is, to offer a bounty for killing the coyotes. A reasonable allowance would probably induce persons who have the leisure to engage

in the business of killing these animals for the reward offered. We believe the county should pay for the extermination of the coyotes.

**A BIG VINE.**—Mr. Hanson says there is a grapevine growing on the Fort Baker Ranch, of the Mission variety, which is as large as the thigh of a man's leg, from which he has gathered 400 lbs of grapes. Fruits of all varieties do well there.

## Inyo.

**ENCOURAGING THE SETTLERS.**—Independent: Last spring W. L. Hunter inclosed and cleared sagebrush land at Georges creek. He has a good crop of corn from the land; many an acre of it would to-day yield three tons of first-class hay, but it won't be cut, as he already has more than enough in stack to feed his 60 head of cattle and a lot of horses. Potatoes are now piled up in great heaps upon the ground; pumpkins and squash the same; beans gave a heavy yield. Black walnut trees were brought from Illinois and planted; they have made fine growth. White ash, black locust and other trees are all doing well. A young orchard of apple, pear, peach and other fruit trees was set out and all have grown well, and two years hence Mr. Hunter will have fruit. His land is no better than thousands of acres now lying idle in Owens valley.

## Napa.

**KILLING OFF "VARMINTS."**—Register, Oct. 29: Chas. Wassum and John Taylor, of Berryessa, have within the last six months captured, by trapping and shooting, 21 coyotes and 56 wildcats. These animals have been doing destructive work among the sheep and hogs of that section, and the farmers, some time ago, insured their extinction by jointly agreeing to pay liberally for their scalps. For coyote scalps they pay \$30, and Messrs. Wassum & Taylor have put considerable money in their purse by taking the warpath against these pestiferous creatures. In the mountains bordering Berryessa, Mr. Chas. Cabler has also won some fame by "downing" four large California lions. It is only during late years and because flocks and herds have increased up that way that these wild beasts have given any trouble.

## Nevada.

**GOLD AND GRAPES.**—Grass Valley Tidings: The other day Ross Cooley drove up in front of W. K. Spencer's store and told Mr. Spencer that there was a box in the wagon for him. The box was filled, at one end, with big bunches of purple grapes, luscious and plump; the other end was occupied by big chunks of quartz rock which showed free gold and rich sulphurets. The vines that bore the grapes grew on the croppings of the ledge that gave out the gold-bearing quartz. In Grass Valley district such grapes and quartz are very common; it is a habit the district has in the bearing line—fruits above and gold below; and cabages once grew on the top of Allison Ranch ground, from which gold, in millions, has been taken. This is a pretty good country, and the climate is finer than that of Italy.

## Sacramento.

**UNEXCELLED RAISINS.**—Record-Union, Oct. 23: Some of the finest raisins ever produced in the State, and equal to the best from foreign lands, were brought to the city this week from the vineyard of Mrs. G. G. Briggs, near Sausalito Station. They were from the first crop of Muscatel grapes, and cured by W. T. Greenwood, who thoroughly understands raisin-making and packing. They were very large, fully retained the bloom of the fruit, and were most delicate in texture and flavor. Such a quality of raisins maintained will soon make home productions first to be sought for, and, with a proper protective tariff, our raisin-makers will reap rich reward.

## San Mateo.

**GRAPES AND RAISINS.**—The Times and Gazette, after acknowledging the receipt and praising the quality of a large box of muscatel raisins, this year's crop, from the vineyard and drying-house of Mr. S. L. Jones, goes on to say: Mr. Jones has done a great deal to demonstrate the fact that at least one portion of San Mateo county is well fitted to the culture of both table and raisin grapes. He has spent thousands of dollars in developing a property that was naturally unproductive, in that it was heavily timbered or closely thicketed, requiring such extensive tree felling and grubbing that the cost of the vineyard has been made far greater than the average cost of profitable vineyards in this State. It has been fortunate that Mr. Jones has had at once the wealth and the persistent energy to battle with natural obstacles until he has made his investment yield a handsome income. And although it is not claimed that the vineyard, orchard and farm pay a satisfactory return upon their cost, yet it has been proven by their products and net returns that men of small incomes who may live by other means while their vineyards are growing, and who are not afraid to work, can make small vineyards and orchards pay in the foothills of Portola valley.

## Santa Cruz.

**FRUIT-DRIER BURNED.**—Watsonville Transcript: Last Thursday, just after supper, the fruit-drying building of J. A. McCune, Green valley, was discovered in flames. Owing to the extreme dryness of the building (there having been a fire in the furnace for about 15 hours a day during the past three months) it was totally destroyed in a very few minutes. The building and contents, including about \$900 worth of green and dried fruit, was a total loss. The

dried fruit was ready to ship, the most of it being already packed. The total loss is about \$1800, the building and drier being insured for \$600. The fire was quite a set-back to Mr. McCune, almost his entire year's work besides a large amount of fruit purchased being a total loss.

**PAJARO APPLES.**—Pajaronian: L. G. Sresovich, one of the pioneer fruit-growers and buyers of this coast, and who annually buys the greater part of the apple crop of this valley, is seriously thinking of removing his driers to this valley. At present they are located in San Jose. Mr. Sresovich was one of the first buyers of Pajaro apples. Through his commission house he sent Pajaro apples to Australia, China, Japan and other foreign lands, and there built up for our fruit a most enviable reputation. His interests here are already large, and if he makes this change it will be in the line of the development of his business.

**THE HEROIC METHOD.**—Courier-Item, Oct. 21: C. C. Martin, of Glenwood, has been giving his extensive apple orchard heroic treatment this season in hope of ridding it of the codlin moth. He has stripped every tree of all its fruit, leaving not an apple of the whole crop, hoping by sacrificing this year's crop to eradicate from his premises the pest that is proving so destructive to the apple orchards of this county.

## Santa Barbara.

**BEANS, CORN AND SPUDS.**—Santa Maria Times: The Oso Flaco bean yield this year will surpass any previous one in yield; the potato crop will be better than the average; corn is very good everywhere. Some very fine stalks measured over 12 ft. high in the Nipomo Flat, at Mr. Holt's. Jose Dominguez has a corn-stalk around which a beanstalk has climbed to the height of 8 ft., and myriad pods are hanging from the branches.

**A NOVEL HIVE.**—While Mr. Shuman, who resides west of town, was gathering his pumpkins, he loaded one on the wagon from which he noticed bees issuing. It was a veritable beehive. The bees had gained access through a crack in one side of the vegetable and taken up permanent quarters. Mr. Shuman took out eight pounds of fine honey. Is there any other land under the sun where the farmer can raise his own pumpkins and honey on the same vine?

## Santa Clara.

**RAISINS.**—Santa Clara Cor. San Jose Times, Oct. 30: A number of fruit-growers in this section, who have during the grape season been experimenting on raisins, state that the results have been very satisfactory, and as to quality and flavor the product is unsurpassed. A few of them will complete the packing of their raisin crops next week. One grower has been experimenting in curing grapes with the aid of a drier, and thus far the raisins turned out have proved a success.

## San Diego.

**PEANUTS PROMISING.**—San Jacinto Register, Oct. 14: A gentleman who has cultivated peanuts in the Southern States, and visited the best peanut sections of the Sacramento valley, was a few days ago shown specimens of peanuts raised in this valley, and unhesitatingly pronounced them superior to those raised in the Sacramento valley. He formerly lived in Tennessee, and grew peanuts there, and is well qualified to speak with precision on this matter. (Of course, we only claim this superiority for the San Jacinto valley, and do not care to divide the honor with all Southern California.) The gentleman alluded to says our peanuts are equal to the North Carolina nuts, being close-grained, with large, smooth pods, well filled with fine meat. There is, doubtless, in the raising of this nut in our valley, a fine field for remunerative labor.

## Shasta.

**HORTICULTURAL ITEMS.**—Redding Free Press, Oct. 16: R. S. McMurry, four miles south of Redding, has an orchard of peach trees two years and a half from the bud, which average 18 feet high and of like size other ways. They bore a heavy crop this year. They have never been irrigated. We challenge the State to beat this. If any one doubts the virtue of red land for the production of fruit and grapes, he only needs to examine the orchard and vineyard of Joe Frietas, four miles southeast of Redding, to satisfy himself that there is no better land for that purpose. He can also satisfy himself in regard to grain, vegetables, etc. Mr. Frietas has had to dig 110 feet for water. The young orange trees in and around the town are full of fruit, and when the citrus fair begins at Sacramento, Southern California will find the semi-tropical north ready to compare notes. Mrs. S. E. B. Myers has raised this year single bunches of Muscat grapes weighing seven and a half pounds. Mr. L. Snyder, another rancher near town, can show bunches weighing from five and a half to seven pounds each. Some of the finest soft-shell almonds in the county may be seen at Mr. Kern's place on Pine street.

**PROMISING ORCHARD.**—Free Press: W. P. Sebring, living eight miles east of Redding on section 19, township 32 north, range 3 west, put out from the 11th to the 16th of February last a young orchard consisting of the following varieties of fruits: Apple, pear, cherry, prune, plum, peach, apricot, nectarine, orange, olive, almond, pecan, English walnut and fig. The ground for this orchard was thoroughly plowed and pulverized several times before planting, and has since been constantly cultivated by plowing and pulverizing. The trees have made

a most remarkable growth of from two and a half to six feet. Prior to the rain, growing moisture could be found anywhere in this orchard six inches below the surface. The land is the red, gravelly brush land so common in this vicinity, and this orchard on the "worthless" hills is the wonder of all the dwellers on the alluvial lands along Cow creek.

## Siskiyou.

**A NORTHERN RANCH.**—A correspondent of the People's Cause says the great cattle and stock ranch of Alex. Parker is situated about nine miles from Callahan's, along the range of Scott's mountains, and contains about 1500 acres of good meadow and grazing lands, with surrounding ranges of at least five miles extent. The scenery is quite enchanting, high mountains in the background and near at hand gurgling mountain streams are heard continually. The taller peaks are already covered with snow, which looks beautiful through the pines. There are generally between 2000 and 3000 head of cattle on this ranch, and their hay crop is immense. I notice that all the out-buildings on the premises are decorated with huge deer horns. I saw not less than 500. Mr. Parker informs me that for the 20 years he has lived here they averaged killing two deer per week until recently. There have also been a great many bear killed in this vicinity. Mr. Parker is a man of indomitable energy, shrewd judgment and business capacity. He came to California in 1854 with very little of this world's goods, but fortune has rewarded his industry and he is now ranked as one of the wealthiest men of Siskiyou county. He is the owner of a valuable placer mine on the south fork of Scott river, for which he was offered \$50,000 in cash. He is the senior partner of the firm of Alex. Parker & Sons, at Etna, who are doing about as extensive business as any firm in Northern California. Mr. Parker has one of the best and largest bearing orchards I have seen, principally apples and plums. He informs me for small fruit such as strawberries, currants and blackberries, this section is unsurpassed. It is 35 miles from here to the present terminus of the railroad, but when completed will only be about 17 miles.

## Sonoma.

**EQUINE SURGERY.**—Index-Tribune, Oct. 23: A veterinary surgeon of Santa Rosa performed a surgical operation about two weeks ago on a mare belonging to Capt. H. E. Boyes, of this place, and removed a stone from the animal's upper jaw, oblong in shape and three and a half inches in length. The stone had evidently got into the mare's mouth while feeding and becoming wedged in between the back teeth and the cheek, had gradually worked its way into the flesh until completely hid from view. The stone was removed from the outside, and the animal, which was doing poorly before the operation, is fast picking up.

## Sutter.

**HEAVY HARVESTS.**—Yolo Democrat, Oct. 23: This is an unusually busy time for the Sutter county farmers, it being their harvest for the corn, bean and buckwheat crops which are uncommonly large. Our neighbors grow immense quantities of sweet potatoes, broomcorn, squashes, pumpkins and melons almost in sight of our doors, while the majority of us are in perfect ignorance as to the wonderful productions and beauty of homes just across the river.

## Tehama.

**VINES BY THE SQUARE MILE.**—People's Cause, Oct. 23: The Stanford vineyard at Vina now embraces 3825 acres, all but 1000 of which are in full bearing. Next year it is the intention to set out another 1000 acres, which will bring the acreage almost up to 5000—a perfect sea of vines. This year it is expected that between 600,000 and 700,000 gallons of wine will be made, and this quantity will increase each year as new vines come into bearing.

## Tulare.

**STEAM PLOW.**—Delta, Oct. 23: G. S. Berry, who harvested his grain this year with a combined harvester operated by steam (a detailed description of which was given several months ago), is now using the same machine for plowing. The header and separator and the small engine were detached, and a gang of 25 plows attached to the rear of the machine. He plows 35 acres a day easily, employing five men and using for fuel the straw left in the field from last harvest. He finds as great a saving in the expense as during the harvest season.

**PEACHES.**—Register, Oct. 22: The peach season in the East is very short and also of uncertain occurrence. In Tulare it begins early, ends late and comes with as much certainty as Fourth of July. Peaches begin to ripen from the first week in June, and from that date until Thanksgiving people may have them freshly plucked, upon their tables every day, if they will. Mr. J. B. Zumwalt brought us in some peaches this week that are scarcely ripe. He had them until Thanksgiving last year and will have them up to that time this year. Moreover, peach trees will bear continuously and profitably in Tulare from 14 to 25 successive seasons.

## Yolo.

**POMEGRANATES.**—Democrat, Oct. 21: Fine large pomegranates are now in our markets. This fruit, which is considered a semi-tropical one, grows in profusion in Yolo county, 20 trees being in bearing in Woodland at the present time. The product of these trees varies from 10 to 250 pomegranates, and the fruit grows to a monstrous size.



BEWARE OF IMITATIONS.

THE "NEW DEAL" SERIES OF WHEELED WALKING PLOWS.

Manufactured by JOHN DEERE & CO., Moline, Ill.

The Latest and Greatest Improvement of the Age in Plows. One Season's Experience has Thoroughly Demonstrated their Adaptability to the Various Soils of California.

UNIVERSALLY PRONOUNCED AN UNQUALIFIED SUCCESS!

For Lightness of Draft, Ease of Management, Strength, Durability, and Quality of Work,

THE "NEW DEAL" IS WITHOUT A PARALLEL.

It is much neater in appearance than any wood frame plow, and weighs some 300 pounds less than any other Gang Plow sold in California. The beams are made *entirely of Steel*, which give at once lightness, great strength, and durability. Having no tongue, and the team being hitched close to the work, it can be run as close to the fence as an ordinary single plow.

FOUR GANG.



One of the greatest points in favor of the "New Deal" Plows is their **ECONOMY**, an important feature in these times. They are not expensive, and the amount and quality of work that can be done with them simply cannot be approached by any other plows manufactured. The "New Deal" is no untried experiment, but the outgrowth of years of study and observation, with a full appreciation of the demands of the times, and fully approved by the most rigid tests.

3-Gang, 8-inch.....	\$75 00	4-Gang, 10-inch.....	\$90 00
3-Gang, 10-inch.....	80 00	5-Gang, 8-inch.....	100 00
4-Gang, 8-inch.....	80 00	5-Gang, 10-inch.....	110 00

All with Extra Points.

Also Agents for the JOHN DEERE MOLINE GANG, SULKY and SINGLE PLOWS, SOUTH BEND CHILLED PLOWS, SCHUTTLE FARM and SPRING WAGONS, KEYSTONE DISC HARROWS, all kinds of Large and Small Farming Implements, HOWE SCALES, Etc.

HAWLEY BROTHERS HARDWARE COMPANY, SAN FRANCISCO.

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SQUIRRELS, GOPHERS, RATS, ANTS, ETC.

PRICE GREATLY REDUCED.

Safe and easy to apply; complete in its work. It is the cheapest and best now on the market. Send for new circular and reduced price-list. Address

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C. P. BAILEY,

IMPORTER, BREEDER AND DEALER IN

ANGORA GOATS,

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Took first premium at the World's Fair, New Orleans, on all his entries of Angora Goats. Has this year raised more Mohair, and it has sold for more money than the combined product of any other four goat-raisers in the United States.

If you want to be successful in the Goat business, buy your bucks of a successful breeder.

One hundred head of fine young pure-bred Angora bucks now ready for sale.

Feed the Land and it will Feed You!

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MECHANICS' TOOLS A SPECIALTY.

310 and 312 Main St., Stockton, Cal.



## The Latest Fashions.

## Ladies' Toilet.

FIG. 1.—For toilets that are to be completed in tailor style the mode is especially adapted, the material here represented being serge and the edge finish a binding of silk braid. The four-gored skirt is shaped to hang evenly all around, whether it be worn over a long or short bustle, and has upon its gores a kilted drape that extends almost to the belt. The plaits in the kilt are very wide, and the bottom is finished with an invisibly sewed hem. Drooping over the top of the kilt is a short, round *tablier* that is much wrinkled by plaits in its back edges, its lower edge being bound with braid. The back drape has all its draping made by plaits at the belt, and falls almost to the edge

simple manner. Serges in white and colors are fashionable and handsome for "tailor" costumes. Silks, surahs, velvets, plushes, etc., are equally suited to the mode, and combinations of two or more materials may be stylishly achieved.

The hat is a fine felt, trimmed with a ribbon and plumage.

## Misses' Dress.

FIG. 2.—The combination here achieved shows lace net, bronze velvet and figured cream cashmere, and results in a *chic*-looking dress for indoor wear. The skirt is gathered all round at the top and finished with a belt. It is of the cashmere, and has a very deep hem and three moderately deep tucks in the bottom, all made with invisible stitches.

The *guimpe* is drawn in about the waist by a

top of the lacing and may be of a contrasting material; but this may be omitted, as in this instance, and show the *guimpe* all the way down. The bodice and skirt or the *guimpe* and skirt may be alike, if desired. Scarlet and white *guimpes* are very pretty with almost all materials, and may be of cashmere, surah, silk, satin, flannel, lace, embroidery, etc. All kinds of wool and silk fabrics, as well as all sorts of mixed goods, may be made up in this way, and for dressy wear very beautiful effects may be realized.

## Hats and Bonnets.

FIG. 3.—This hat is of brown-and-mode-fancy straw, sufficiently pliable to permit of the brim being bent in the way most becoming to the face. In this instance it is drawn up at the back, the curve being so gradual that it

and the velvet facing which shows so conspicuously is of the same shade. A band of velvet is about the crown, and in front are long loops of velvet, while a large "dude" bow is at the foot of the loops. Toward the side where the brim rolls are two sharply pointed wings poised against each other in such a way as to bring out the beauty of each. One is a dull white and the other of the faint mode shade that is often seen in natural wings. If better liked, pale-yellow wings or those showing yellow and brown may be substituted.

FIG. 6.—This hat is of dark-gray felt, in shape a sailor, with a brim that curves slightly on the edge. The trimming is simplicity itself. A folded band of dark green grosgrain ribbon passes smoothly round the crown, and in front is a round cluster of ribbon loops which, while



Fig. 3.—LADIES' HAT.



Fig. 4.—LADIES' HAT.



Fig. 5.—LADIES' HAT.



Fig. 1.—LADIES' TOILET.



Fig. 6.—LADIES' FELT HAT.

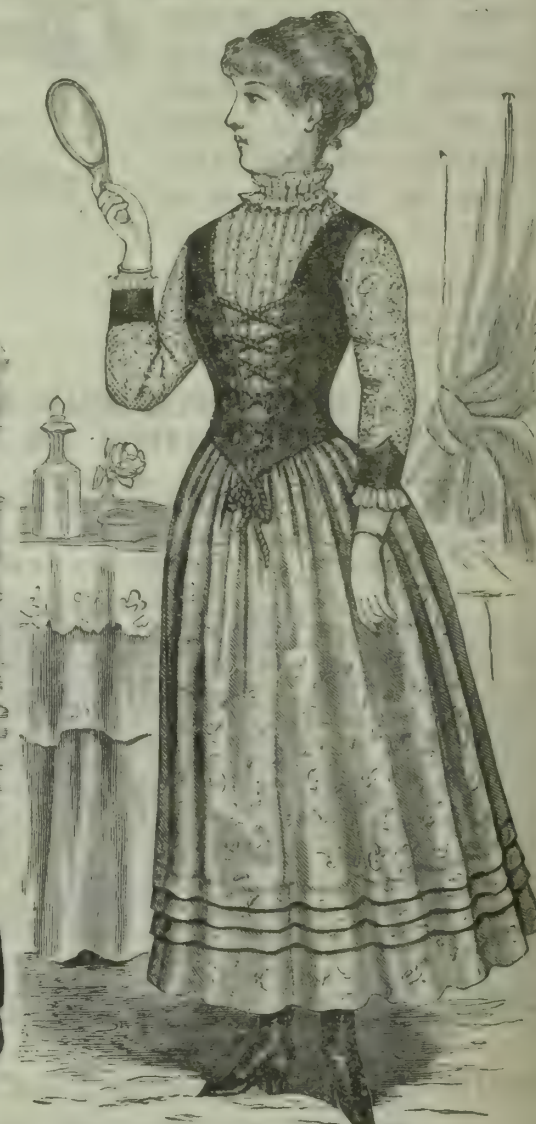


Fig. 2.—MISSES' DRESS.

of the skirt at the center. Its edges are bound with braid.

The basque shapes two pretty tabs between two points over the *tournure*, is very short on the hips and forms double points below the closing, which is made with button-holes and braid buttons. The edges are bound with braid, and the exquisite adjustment is made with double bust-darts, under-arm and side-back gores and a curving center seam. The high standing collar laps at the throat, and is almost concealed at the back by a rolling collar that joins small lapels in notches, the lapels meeting at the bust. The rolling collar and lapels make suitable the adoption of the fashionable chemisette with its high collar, and a masculine tie. The coat sleeves fit beautifully, and are trimmed in simulation of deep, round cuffs with a row of doubled braid that is continued down the outside seam to the edge, a row of buttons and simulated button-holes being arranged in front of the braid.

Clothes, flannels, *tricoli*, camel's hairs, cashmeres and all varieties of suit goods, including checks and hair-line stripes, will be fashionably made up in this way, and stitching or braid will usually complete them. The braid may be in flat applications, as a binding, or used in any

shirr-tape in a casing and closes at the back. It is perfectly plain, but in this instance its visible portion is covered with plaited lace net that produces a very dainty effect. The neck is high and close, and the standing collar is covered with a lace ruching. The sleeves are in coat style and fit the arms closely. They are made of the net and trimmed with pointed cuffs of velvet and a frill of lace falling toward the hand. Over the *guimpe* is worn a handsome bodice of the velvet that is deeply pointed at the back and front and is much arched and very short over the hips. The fitting of the bodice is close, and is made by bust darts, under-arm and side-back gores and a curving seam. At the neck the bodice is low and round at the back and is cut away in front so that the front edges meet only at the lower edge and flare widely toward the shoulders, thus exhibiting the front of the *guimpe* in V outline to the waist-line. Below the bust the front edges have eyelets in them, and through these is laced a thick silk cord that is tied at the bottom. A lacing is also made down the center seam of the back. A large sash-bow of watered ribbon is fastened at the back.

In the pattern the bodice is provided with a center-front that extends no higher than the

shows but slightly at the side. A narrow band of velvet encircles the crown at the foot, and the decorations—a mass of golden-brown and mode ostrich tips—are arranged at the back so as to droop far over the crown. Short, fluffy tips are given preference over the long ones, as the result achieved is decidedly more artistic. On a black hat the feathers could be pale-yellow or cream-white.

FIG. 4.—This hat is decidedly suggestive of the Tyrolean shape, and is in the real mountain color, Lincoln-green. The broad brim is underfaced with green velvet and shows where there is a curve slightly to one side. Two broad loops of green velvet extend from the front far over the crown on each side, and standing straight up just between them are two wings of the natural gray hue which contrasts so well with the green. The air of this hat is one of jauntiness, and it almost seems to tell that the wings were the result of the unerring shot of some special admirer.

FIG. 5.—Decidedly picturesque in effect, this hat belongs to the class that is either very becoming or not becoming at all. It has a very high crown, and a brim that is medium in width where it is turned down and quite wide where it is rolled up. The color is an American brown,

they add to the height, are yet so prettily arranged that they do not take away from the breadth of the *chapeau*. Ribbon matching the felt in hue can be used with good effect, but the combination of colors described is not only a fashionable one, but is also adapted to most of the fancy suitings in vogue. On brown, dark-green may be used, and on deep blue a dull Egyptian red is desirable.

TIPSY HOGS.—At Mr. Furber's, near here, 45 out of 50 hogs became completely intoxicated by eating pomace (the refuse grapes), which contained a little too much of the "goody-good part." The spectacle was more interesting than watching a drunken man. We did not learn whether or not they made quite as big fools of themselves as some men occasionally do, but we say probably not.—*Cloverdale Sentinel*.

GAREY'S NURSERIES.—These nurseries, formerly O. W. Childs', are under the personal oversight of that veteran horticulturist and nurseryman, Thos. A. Garey. Their isolated location, nine miles out of Los Angeles, is deemed favorable to their continued freedom from all sorts of harmful bugs.



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Junction Market, Pine and  
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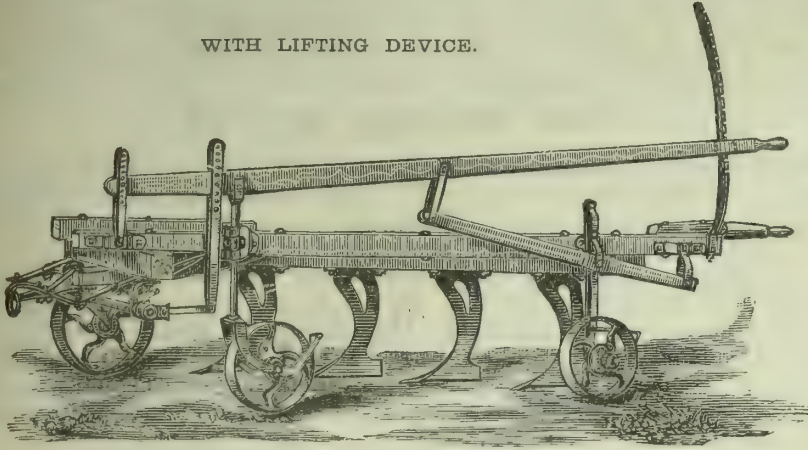
SACRAMENTO:  
Nos. 9, 11, 13, and 15  
J Street.

## IMPROVED GRANGER GANG PLOWS.

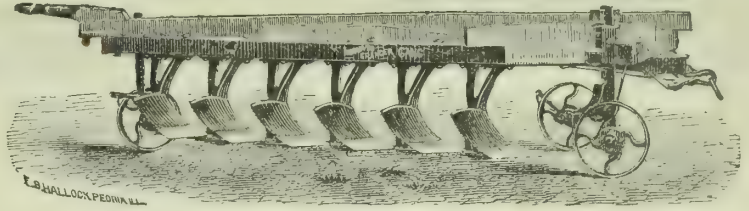
SIMPLICITY, DURABILITY AND CHEAPNESS COMBINED.

All Parts are made Interchangeable, Indispensable to the Economical Farmer—Making every Man his own Blacksmith.

WITH LIFTING DEVICE.



WITH ONE EXTRA SHARE TO EACH BOTTOM.



GRANGER GANG PLOW, WITH DETACHABLE STEEL MOLDBOARDS AND CAST CAST-STEEL SHARES and CAST LANDSIDES.

No. 11, Three Gang, 8-inch.....	\$60 00	10-inch.....	\$ 65 60
No. 12, Four Gang, 8-inch.....	65 00	10-inch.....	75 00
No. 13, Five Gang, 8-inch.....	75 00	10-inch.....	85 00
No. 14, Six Gang, 8-inch.....	85 00	10-inch.....	90 00
No. 15, Seven Gang, 8-inch.....	95 00	10-inch.....	100 00

Extra Molds, 8-inch, \$2.50; 10-inch, \$3.50. Extra Shares, \$1.25 and \$1 50 each.

### IMPROVED GRANGER GANG PLOWS,

With the Celebrated Gale Chilled Iron Bottoms, with One Extra Share to each Bottom. Granger Gang Plow, with Detachable Moldboards, Shares and Landsides.

No. 11b, Three Gang, 8-inch.....	\$52 50	10-inch.....	\$62 50
No. 12b, Four Gang, 8-inch.....	60 00	10-inch.....	70 00
No. 13b, Five Gang, 8-inch.....	70 00	10-inch.....	80 00
No. 14b, Six Gang, 8-inch.....	80 00	10-inch.....	85 00
No. 15b, Seven Gang, 8-inch.....	90 00	10-inch.....	95 00

Seed Sowers, Attached When Ordered, for Either Front or Rear Sowing.

3 Gang Sower attached in front.....	\$6 50	Sower attached in rear.....	\$8 00
4 Gang Sower attached in front.....	7 00	Sower attached in rear.....	9 00
5 Gang Sower attached in front.....	8 00	Sower attached in rear.....	10 00
6 Gang Sower attached in front.....	9 00	Sower attached in rear.....	11 00

### EXTRA FOR HARD WOOD FRAMES.

For Three Gang.....	\$5 00	For Five Gang.....	\$ 8 50
For Four Gang.....	7 50	For Six Gang.....	10 00

The above Gangs are made only by the Benicia Agricultural Works, Benicia, Cal.

See that you get the genuine and take no other. Every one warranted to be as represented.

**IMPROVED GRANGER GANG, WITH CAST CAST-STEEL SHARES.**

No. 11a, Three Gang, 8-inch.....	\$75 00	10-inch.....	\$80 00
No. 12a, Four Gang, 8-inch.....	80 00	10-inch.....	90 00
No. 13a, Five Gang, 8-inch.....	90 00	10-inch.....	100 00
No. 14a, Six Gang, 8-inch.....	100 00	10-inch.....	105 00

The cut explains the above-named implement so clearly that an extended explanation is unnecessary. It will be seen that there is an arrangement of levers, whereby all the wheels can easily be raised or lowered, or fastened in any position by a simple movement of one lever. Its advantages for plowing uneven ground, and for various other purposes, are so apparent that an enumeration of them is not necessary.

### Improved Granger Gang, with Lifting Device and Gale Chilled Iron Bottoms.

No. 11b, Three Gang, 8-inch.....	\$67 50	10-inch.....	\$77 50
No. 12b, Four Gang, 8-inch.....	75 00	10-inch.....	85 00
No. 13b, Five Gang, 8-inch.....	85 00	10-inch.....	95 00
No. 14b, Six Gang, 8-inch.....	95 00	10-inch.....	100 00

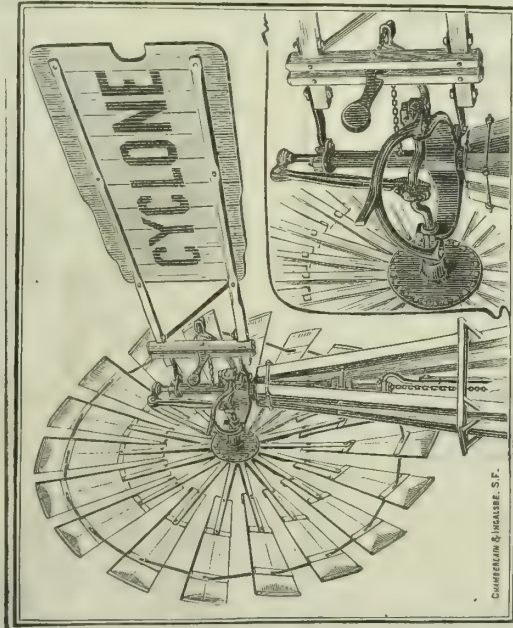
### GALE CHILLED IRON BOTTOMS.

In order to meet the requirements of some of our customers who have gravelly or gritty soil, we are prepared to furnish Chilled Iron Bottoms with any of our Granger Gang Plows.  
Remember that the GENUINE GRANGER GANGS are made only by the Benicia Agricultural Works, Benicia, Cal.

IMPROVED GRANGER GANG, as now constructed, is conceded to be the Best Bench Beam Plow in use. It has superseded the reversible Mold Gang wherever introduced; it being more durable, lighter draft, does not require the amount of team, and leaves the ground in much better condition. Its success has been unparalleled, and meets a long felt want for a cheap and effective Gang Plow in a very satisfactory manner.

N.B. We also carry a large stock of STOCKTON or REVERSIBLE MOLD-BOARD GANG PLOWS, which we will sell at GREATLY REDUCED PRICES.

**YOU DON'T REALIZE**  
How many acres of land a big Wind-mill will irrigate!  
**WE HAVE THEREFORE**  
Issued a Pamphlet giving some information on this point,  
**You Can Have One**  
By sending a postal card to us.  
**All Infringements Forbidden.**



**PATENTED.**  
These Mills are the BEST, CHEAPEST, STRONGEST and LIGHTEST,  
AND ARE  
**SELF-REGULATORS.**  
**PACIFIC MANUFACTURING CO.**  
934 & 936 Mission St., S. F.  
**DON'T FORGET THE PRICES.**

12-ft. Mills,	\$65	16-ft. "B" Mills,	\$110
14-ft. " "	75	18-ft. " "	125
16-ft. "A" Mills,	90	20-foot "A" "	150

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SANSOME STREET,  
Opposite Wells, Fargo & Co.'s Express, one door from  
Bank of California, SAN FRANCISCO.

This Hotel is in the very center of the business portion of the city. The traveling public will find this to be the most convenient as well as the most comfortable and respectable Family Hotel in the city.

Board and Room, \$1.00, \$1.25 and \$1.50  
PER DAY, ACCORDING TO ROOM.

Hot and Cold Baths Free. None but most obliging white labor employed. Free Coach to and from the Hotel.

MONTGOMERY BROS., Proprietors.

**RED CLOVER.**  
Needham's Red Clover Blossoms and Extracts prepared from the Hossoms, cure Cancer, Salt Rheum and all diseases arising from an impure state of the blood. It will also clear the complexion of all pimples, eruptions, etc. Is a sure cure for Constipation, Piles and many other diseases. Is both laxative and tonic. For full particulars, address W. C. NEEDHAM, Box 422, San Jose, Cal. Needham's Red Clover cures after everything else fails.

**LEFFEL'S IMPROVED IRON WIND ENGINE**  
The Lightest, Strongest and Easiest Regulated Wind Engine in the world. Send for Circulars to the Springfield Machine Co., Springfield, O.  
ALL WORKING PARTS MADE OF MALLEABLE IRON

**MAX TRACTION ENGINE.**  
Strongest, most durable, and best for all purposes. Address, A. B. FARQUHAR, YORK, PA.

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A variety of good Tools, Patterns, etc., with business for sale cheap by a party retiring from business. A splendid opportunity for an enterprising mechanic. Address A. B. O., care of this paper.

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**THERE IS MONEY IN CHICKENS!**

The "Peerless" has the only Regulator that Regulates the flame of the lamp. That it has no equal, seeing is believing.

From five to fifteen minutes in 24 hours is all that is necessary to devote to the machine.

The "Peerless" has the best heater, the best self-egg-moistener, and best pure air supplier of any machine manufactured. Its great and crowning feature is its automatic lamp or heat regulator. Its simplicity is taking. Acknowledged to have no competitor.

Send for circulars, etc.

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Factory—Corner California and Lindsay Streets, Stockton, Cal.



## Lands For Sale and To Let.

### CHEAP LANDS FOR SALE.

**5680 Acres** of rolling adobe hills, situated in Tehama County. Well watered by numerous springs, etc. Several thousand acres suitable for cultivation. Good two-story House, Barn and other out-buildings. Seven miles of fine wire fence.

**FIRST-CLASS CATTLE OR SHEEP RANGE.** The Cheapest tract of land in Tehama County. Price, \$6.00 per acre. Fair time and interest.

Also, a tract of 20,000 acres adjoining, can be bought at a great bargain. Title, U. S. Patent.

For terms, etc., apply to

J. E. CROOKS, Benicia, Cal.

N. B.—Upon timely notice, intending purchasers will be taken from Cottonwood to the land and returned free.

### A NEW COLONY

On the new extension of Southern Pacific Railroad, on the lands belonging to R. T. BUELL, Esq., near Los Alamos, Santa Barbara county, Cal. Parties desiring to visit the property now, can go via San Luis Obispo and take the cars from thence to Los Alamos, thence by stage to the Colony. 20,000 acres of the best lands in California, subdivided into 20, 40 and 80-acre farms; \$20 to \$30 per acre. **INTERNATIONAL IMMIGRANT UNION, 401 California St., San Francisco.**

### \$10.00 PER ACRE.

On the C. P. R. R., in Placer county; one-half mile from Applegate; one-half hour from Auburn; fine climate; plenty of water; school, postoffice and telegraph near; easy terms; title perfect. Apply to

S. C. OSBORN,  
Applegate, Placer Co., Cal.

## WEST COAST LAND CO.

SAN LUIS OBISPO, CAL.

Incorporated March 27, 1886.

CAPITAL, \$500,000.

#### DIRECTORS.

GEO. C. PERKINS,  
JOHN L. HOWARD,  
ISAAC GOLDTREE,  
R. E. JACK,  
C. H. PHILLIPS.

#### OFFICERS.

JOHN L. HOWARD, President.  
ISAAC GOLDTREE, Vice-Prest.  
R. E. JACK, Treasurer.  
C. H. PHILLIPS,  
Secretary and Manager.

### THE PASO ROBLES, SANTA YSABEL, and EUREKA RANCHES,

Recently purchased by the West Coast Land Company, are now offered for sale in subdivisions.

This immense body of land, including 12,000 acres unsold of the Huer Huero ranch, belonging to C. H. Phillips, comprises 64,000 acres of rich, virgin soil. It lies in a compact body, in the center of San Luis Obispo county, and is within from 9 to 20 miles of the sea coast. It is covered with white and live oak timber, is one of the most picturesque bodies of land in the State, and requires

### NO IRRIGATION.

It has an abundance of living water, and where not sufficient for domestic use, good water can be had at a depth of from 10 to 40 feet. It has an average annual rainfall of 21 inches, exceeding by six inches that of Santa Clara county, one of the most prosperous counties in the State.

The extension of the Southern Pacific Railway from Soledad southward traverses these lands for 15 miles throughout their entire length, placing the property within eight hours of San Francisco.

These lands are offered at from \$10 to \$30 an acre, and are all susceptible of the highest cultivation. In salubrity of climate, productiveness of soil and location as to market, they are equal to lands in Los Angeles and other counties, which readily bring from \$100 to \$200 and upward; and as to price and terms, offer the best inducements to those seeking homes on any part of the Pacific Coast. The survey of the

### PASO ROBLES RANCH

Has been completed. The maps and catalogues are now ready, and will be sent free on application.

This ranch, containing 20,400 acres, has been subdivided into 230 lots. It is 12 miles from the sea coast, and is 20 miles north and west from San Luis Obispo city.

This ranch was one of the earliest granted by the Mexican Government and having been held by the same party for over 30 years, has never before been offered for sale. It consists exclusively of land of the choicest character, and is second to none in the State for the production of wheat, wine, fruits, raisins and olives.

### TITLE, U. S. PATENT.

### TERMS OF SALE.

One-third cash; balance in 4 equal payments at 2, 3, 4 and 5 years; interest, 6 per cent per annum. The mortgage tax paid by the mortgagee makes the interest about 4 per cent net to the purchaser. A deposit of \$25 will be required in all cases to cover expenses of sale.

C. H. PHILLIPS, Manager,

West Coast Land Co., San Luis Obispo, Cal.

Send for Catalogue and Map.

### BURNHAM'S ABIETENE!

NO COMPOUND, but Nature's Remedy for Rheumatism, Neuralgia, Throat, Lung and Kidney troubles, a Specific for Croup. Every family should have it. Beware of imitation. The genuine article has the name of WM. M. HICKMAN Druggist, Stockton, on the label.



**C. SANBORN, ARCHITECT,**  
Builder and Superin't.  
Preliminary Drawings and Estimates furnished gratuitously. Plans and Specifications prepared with accuracy. No. 6 Eddy Street, S. F.

CHOICE LAND AND WATER FOWLS for sale at all times of all the most popular and profitable varieties. Please inclose stamp for new circular and price list to R. G. Head, Napa, Cal.

### TO OWNERS OF HORSES, COWS, ETC.



Convince yourself by trial that the most speedy and effective cures are made by the use of **Homoeopathic Medicines**, and that this is by far the CHEAPEST treatment. Horse-car companies in New York who have adopted this treatment have found their losses by sickness and death very materially diminished. We can give the highest references in this State to prove the superiority of this treatment over any other. Send for our "Guide" and "Veterinary Index," pamphlets of 64 and 42 pages, respectively, containing most valuable information. Sent FREE by mail upon application to

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234 Sutter St., San Francisco, Cal.



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Positively cured in 60 days by Dr. Horne's Electro-Magnetic Belt. Guaranteed the only one in the world generating continuous Electric & Magnetic current. Scientific, Powerful, Durable, Comfortable and Effective. Avoid frauds. Over 10,000 cured. Send Stamp for pamphlet. **ALSO ELECTRIC BELTS FOR DISEASES.**  
**DR. HORNE, INVENTOR, 702 MARKET ST., SAN FRANCISCO.**

## FRESNO COUNTY.

## BRIGGS' SELMA TRACT.

This most desirable tract, comprising 1280 acres of first-class gray ash and sandy loam land (situated one and one-half miles from the fast-growing town of Selma, the second in the county, and two miles from Fowler, both being S. P. R. R. towns), has been subdivided and will be sold in 20, 40, 60 or 80-acre farms. The distributing ditches are now being constructed, and convenient roads are laid off. The main canal is 60 feet in the bottom.

### THE WATER RIGHTS

Consist of stock in the canals and entitle the owner to one-eighth of 2 feet 6 inches of water, being  $2\frac{1}{2}$  times the usual amount supplied to colonies. The owner of the water stock has a pro rata vote in the management of the canal, and the expense per year is about \$3.50 on a 20-acre lot.

A school-house is to be erected on the land this year, and it has two within two miles of it at present. Fresno, Selma, Fowler and Kingsburg are good local markets for produce. Opportunities to labor with or without terms are abundant, and land can be rented for wheat-growing in the neighborhood. The health of this region is perfection, and, in common with the plains generally, is an excellent sanitarium for persons affected with pulmonary and rheumatic complaints.

The best raisins in the world, wines unsurpassed, the finest grapes, the best peaches, apricots, plums, prunes, nectarines, figs and olives, and in fact all the choicest fruits and vegetables of the world are grown in this favored region. Raisin vines three to six years old yield per acre from four to seven tons, and increase to eleven. Wine grapes three to six years old yield from four to eleven tons per acre. Alfalfa is cut from four to six times a year, and yields from one to two tons per acre at each cutting.

Two good cows and 100 hens furnish more than half the living for a family, and can be kept, with a team, on three acres of alfalfa, the growth of which is incredible in this favorable combination of soil and climate.

A comfortable house for a small family can be built for \$150.

The low price, taking into consideration water and transport facilities, should especially recommend this to seekers of homesteads.

Price, \$25 to \$37.50 per acre, on very easy terms to actual settlers.

For further particulars call on or address

O. J. WOODWARD, FRESNO, CAL.

L. SHARPE, SELMA, CAL.

## NAPA VALLEY NURSERIES.



CENTENNIAL  
CHERRIES

THE FINEST SHIPPING AND CANNING CHERRY IN THE WORLD.  
LEONARD COATES, NAPA, CAL.

### FLOWERS, BOUQUETS, ETC.

With the many improvements inaugurated at my Nurseries during the season, I am now better prepared than ever to furnish all manner of designs for exquisite Bouquets, Flowers for Marriage Ceremonies, private and public Parties and all other Entertainments. Will also rent shrubs in pots or boxes for Hall or House Decorations. Mourning Wreaths and other Funeral Designs to order at the shortest notice, and on reasonable terms. **EMIL BOURGUIGNON, Sainsevain Villa, near Narrow Gauge Railroad, 1/2 mile from Depot. Telephone No. 34, free to all patrons. Floral Depot, 72 N. 1st St., San Jose.**

### STENCIL PLATES.

We have an arrangement by which we can furnish our readers with Stencil Plates for marking boxes, bales, and sacks of produce, at reduced rates during the continuance of this notice in our columns. Address

**DEWEY & CO.,**  
252 Market St., S. F.

**DEWEY & CO.'S SCIENTIFIC PRESS PATENT**  
AGENCY is the oldest established and most successful on the Pacific Coast. No. 259 Market St. Elevator 12 Front St., S. F.

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RADICALLY CURED BY  
Dr. Pierce's Great Discovery. Thousands of patients cured AT THEIR HOMES. No operation! It does the work  
DRS. PIERCE & SON, 704 Buena Vista St., San Francisco, Cal.



The Fair at Visalia.

The Sixth Annual Fair of the Tulare Valley Agricultural Association opened on Monday, Oct. 11th, and was well attended throughout the week, the gate receipts amounting to about \$1200. The Delta pronounced it the most successful that has yet been held; and the Times says the directors feel encouraged to make extensive improvements for the accommodation of exhibitors during the coming season, not the least of which will be the erection of a nice pavilion.

The stock exhibit, though not so large as some had looked for, proved fine in quality and very interesting.

Awards—Horses.

For horses of all work the first prize was awarded to T. D. A. Collins' Stonewall, three years old.

Draft horses—T. Rochford's St. Paul, 1st; H. Hellman's Mark Dunham, 2d.

Roadsters—Best stallion, Diamond Denmark; best yearling, Clipper; best suckling colt, Bessie Hubbard; best mare, Bessie B, all R. O. Newman's. Animals competing in this class were exhibited in harness.

Standard trotters—Best stallion, Milton R; best yearling, Strathway; best suckling colt (sired by Anteo); best mare, Maud Medium, all to H. Hellman.

Families—Best stallion (not thoroughbred) and five colts, George Dodge's Legal Tender.

Jacks—Best jack, R. O. Newman's Domingo; best suckling mule and best span of mules, exhibited by same; best yearling mule, exhibited by A. Mitchell.

Cattle.

Durhams—Best bull, Hyde & Moore's Kaweah Duke; the same parties exhibited best bull calf, Kaweah Duke V; best three-year-old cow, Miss Leslie IV; best two-year-old, Kaweah Maid II; best heifer calf, Kaweah Maid III, and also received premiums for herd.

Jerseys—Best bull, J. B. Smith's Blucher.

Devons—Best bull, S. & J. Evans' Joe Hooker; best cow, Cherry, exhibited by same.

Holsteins—Best two-year-old bull, exhibited by Thos. Rochford; best one-year-old, exhibited by Geo. A. Parker; best cow, Nellie, and calf, exhibited by J. W. Brown.

Graded cattle—A. I. Westons' bull, Duke, cow, Sallie, and calf.

Bees and Honey.

Josiah Gregg was awarded a special diploma for the best colony of Italian bees; also for the greatest amount and best quality of honey made by one colony of bees.

L. Walker & Son.

The late disastrous fire that swept over the lower part of the city completely destroyed the interior of the wool-scouring establishment of L. Walker & Son, at 360 Townsend street, S. F. In this short time new and improved machinery has been added and they are now at work scouring wool. During the last week they have received large consignments of wool, which are now under process for our domestic and foreign market. It is quite creditable and shows the push of this house in resuming operations so soon.

THE PEERLESS INCUBATOR.—An advertisement of the Peerless Incubator which was mentioned favorably in our reports of the Stockton Fair, may be found in another column. We have an engraving of the Peerless which we expected to use this week, but must defer it until another time.

FRUIT, SHADE  
—AND—  
ORNAMENTAL TREES.

We have at our Nursery, on the Buhach Plantation, Merced County, a fine assortment of choice Trees, Shrubs and Vines, which we will sell at prices to suit the times. We have Bartlett and Winter Nels Pears, French Prunes, several choice varieties of Figs, among which is the

WHITE ADRIATIC FIG,

The True White Fig of Commerce, and particularly well adapted to California, Black English Walnuts, and Eastern and California Black Walnuts, a choice selection of

TABLE GRAPES,

Consisting of Black Ferrara, Black Cornichon, Black Prince, Emperor, Flame Tokay, Muscat of Alexandria, Schiraz and Verdal. We also have

Evergreen and Deciduous Shade and Ornamental Trees, Climbing Plants, and Blackberries.

For catalogue and prices, address

G. E. LADD, Supt.,  
Atwater, Merced Co., Cal.

Or BUHACH PRODUCING & MFG CO.,  
154 Levee St., Stockton, Cal.

California Inventors

Should consult DEWEY & CO. AMERICAN AND FOREIGN PATENT SOLICITORS, for obtaining Patents and Caveats. Established in 1860. Their long experience as Journalists and large practice as Patent attorneys enables them to offer Pacific Coast Inventors far better service than they can obtain elsewhere. Send for free circulars of information. Office of the MINING AND SCIENTIFIC PRESS and PACIFIC RURAL PRESS No. 252 Market St., San Francisco. Elevator, 12 Front St.

PACIFIC COAST WEATHER FOR THE WEEK.

[Furnished for publication in this paper by NELSON GOROM, Sergeant Signal Service Corps, U. S. A.]

DATE.	Portland.			Red Bluff.			Sacramento.			S. Francisco.			Los Angeles.			San Diego.		
	Rain.	Temp.	Wind.	Rain.	Temp.	Wind.	Rain.	Temp.	Wind.	Rain.	Temp.	Wind.	Rain.	Temp.	Wind.	Rain.	Temp.	Wind.
Oct. 27-Nov. 3.																		
Thursday.....	.40	54	S	.00	63	0	.00	66	S	.01	58	SW	.00	66	SW	.00	63	SW
Friday.....	.00	45	S	.00	62	SE	.00	61	S	.04	59	SW	.00	62	SE	.00	63	SW
Saturday.....	.02	48	SW	.08	55	NW	.06	48	NW	.60	51	NW	.00	64	SW	.00	62	W
Sunday.....	.00	41	SW	.04	57	N	.16	42	NW	.00	57	NW	.00	62	W	.00	60	W
Monday.....	.00	47	S	.00	58	N	.00	52	NW	.00	55	N	.00	65	SW	.00	60	NW
Tuesday.....	.00	45	NW	.00	61	N	.00	56	NW	.00	60	NE	.00	71	S	.00	66	N
Wednesday...	.00	47	SE	.00	61	N	.00	60	SW	.00	60	NE	.00	77	NE	.00	70	N
Total.....	.42			.12			.22			.65			.00					

EXPLANATION.—Cl for clear; Cy, cloudy; Fr, fair; Fy, foggy; — indicates too small to measure. Temperature Wind and weather at 12:00 M. (Pacific Standard time), with amount of rainfall in the preceding 24 hours.

List of U. S. Patents for Pacific Coast Inventors.

Reported by Dewey & Co., Pioneer Patent Solicitors for Pacific States.

From the official report of U. S. Patents in Dewey & Co.'s Patent Office Library, 252 Market St., S. F.

FOR WEEK ENDING OCTOBER 26, 1886.

351,563.—ORE FURNACE—J. & W. Applegarth, Fresno, Cal.

351,423.—DUSTPAN—T. D. Brown, Oakland, Cal.

351,666.—SAW BIT GRINDER—N. W. Spaulding, S. F.

351,542.—EGG TESTER—Vansant & Cooke, Dixon, Cal.

351,727.—FLY CATCHER—Z. F. Xevers, S. F.

NOTE.—Copies of U. S. and Foreign patents furnished by Dewey & Co., in the shortest time possible (by mail or telegraphic order). American and Foreign patents obtained, and general patent business for Pacific Coast inventors transacted with perfect security, at reasonable rates, and in the shortest possible time.

IN TULARE COUNTY.—Another page of this issue contains a very interesting account of the development of the Paige & Morton property in Tulare county. The enterprise which is now showing such satisfactory results is the pioneer in the line of vineyard and orchard growing in the vicinity. It is being conducted with skill and zeal. The visitor is delighted with the manner in which the large areas of trees and vines are kept up, neatness and good culture being apparent on every hand. Besides the propagation of trees and vines for planting on the land owned by the firm, there is a nursery large and well stocked, which will be found of convenience to those in the neighborhood who desire to improve their farms in the direction of horticulture. Both as a stimulating example and in the way of furnishing material for improvement, the enterprise of Paige & Morton promises to be of signal benefit to the Tulare district. The space which we give to the matter in this issue is, we think, warranted by the importance which really inheres in the artesian belt of country in which it is situated.

We hear that Batchelor & Wylie, of this city, have just sold one of their Acme steam fruit-driers to go to Australia.

Seventh District Awards.

The Salinas Index corrects the list of premiums at their late fair (page 378) as follows:

Draft horses—Best stallion, two years old, McEntee Bros.' Chief Justice; best sucking colt, M. Barry's Colonel Lamar.

Carriage horses—Best single buggy horse, H. Cavanaugh's Monte.

Sweepstakes—Best stallion, with four colts, McEntee Bros.' Henry Clay; best mare, with four colts, H. Corey's Rosa; best stallion, any breed or age, R. Corey's Comet; second, W. B. Ford's Bob Ingersoll; best mare, any breed or age, J. B. Iverson's Lady Jones; second, H. Corey's Belle; best gelding, any breed or age, McEntee Bros.' Speculation; best colt, any breed or age, foaled in 1886, H. Corey's Comet, Jr.

KNABE  
PIANOFORTES.

UNEQUALLED IN  
Tone Touch Workmanship and Durability.

WILLIAM KNABE & CO.  
Nos. 204 and 206 West Baltimore Street, Baltimore.  
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HALL'S  
SARSAPARILLA

Cures all Diseases originating from a disordered state of the BLOOD or LIVER. Rheumatism, Neuralgia, Boils, Blotches, Pimples, Scrofula, Tumors, Salt Rheum and Mercurial Pains readily yield to its purifying properties. It leaves the Blood pure, the Liver and Kidneys healthy and the Complexion bright and clear.

J. R. CATES & CO. PROPRIETORS,  
417 Sansome St. San Francisco

TREES! TREES! TREES!  
BY THE DOZEN, 100, 1000, or 100,000.

Our Stock this Season Cannot be Excelled on the Coast, Neither in quantity, quality, varieties, size of trees, nor for health and vigor of same. We offer \$1 each for every scale bug found on our nursery trees.

OUR PRICES ARE VERY LOW THIS YEAR.

Send for our new and beautiful lithograph-cover Tree and Seed Catalogue. See in it description of

OUR NEW TRAGADA PRUNE,

The very earliest, good shipping Plum. There are fortunes in it. Also our new and fancy

JAPANESE ORANGES, CAMPHOR TREES, TEA PLANTS,

And other novelties. Our Seed Store carries an immense stock of Seeds of every variety at bottom figures, both wholesale and retail.

Send for Catalogue; it is the finest in the State—an ornament to any parlor table. See our Stock, if possible, or write to us. Address

W. R. STRONG & CO.,

SACRAMENTO, - - - CALIFORNIA.

33d } STOCKTON NURSERY. { 33d  
YEAR. } WHITE ADRIATIC, { YEAR.  
SAN PEDRO, SMYRNA, and ENDRICH FIGS.

Praparturiens, Macrocampa, Mayette, and Chaberte Walnuts, Chestnuts, Persimmons, Mulberries, Olives, Oranges, Lemons, Pears, Apples, Peaches, Apricots, Cherries, etc. Plums and Prunes on Myrobalan Stock, Grapevines, Ornamental Trees, Shrubs, Palms, Magnolias, Clematis, New Roses and Hothouse Plants.

TRY THE PERSIAN MULBERRY.

NO SCALE.—I wish particularly to call the attention of Fruit-growers to this fact. I have repeatedly had my nursery examined by experts, and upon no occasion have they found any scale or any indication of scale. The nursery is isolated from orchards, both old and new, and as I take every precaution in importing new varieties to get only clean stock, I feel perfectly warranted in guaranteeing every tree sold by me free from scale and other pests that are proving so disastrous to the fruit interests of the State. SEND FOR CATALOGUE.

E. C. CLOWES, Proprietor, Successor to W. B. WEST.

STOCKTON, CAL., October 27, 1886.

This is to certify that we the undersigned have this day thoroughly inspected the Stockton Nursery; that we found no Scale or indication of Scale, and that to the best of our knowledge and belief the Stockton Nursery is free of this dreaded pest.

WM. H. ROBINSON, Quarantine Guardian San Joaquin Fruit District,  
JOS. HALE, County Commissioner of Horticulture.

THE GREAT REGULATOR!



No medicine is so universally used as Simmons' Liver Regulator. It won its way into every home by pure, sterling merit. It takes the place of a doctor and costly prescriptions. It is a family medicine containing no dangerous qualities, but purely vegetable; gentle in its action and can be safely given to any person, no matter what age.

WORKING PEOPLE

Can take Simmons' Liver Regulator without loss of time or danger from exposure, and the system will be built up and invigorated by it. It promotes digestion, dissipates sick headache, and gives a strong, full tone to the system. It has no equal as a preparatory medicine, and can be safely used in any sickness. It acts gently on the Bowels and Kidneys and corrects the action of the Liver. Indorsed by persons of the highest character and eminence as

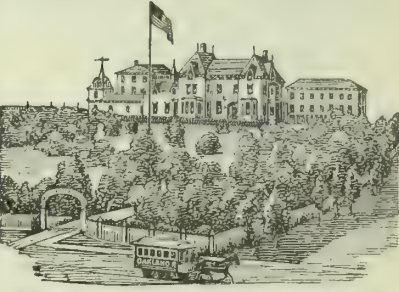
The BEST Family Medicine.

If a child has the colic it is a sure and safe remedy. It will restore strength to the over-worked father and relieve the wife from low spirits, headache, dyspepsia, constipation and like ills. Genuine has our Z stamp in red on front of wrapper, prepared only by

J. H. ZEILIN & CO., Philadelphia, Pa.

Educational.

California Military Academy, Oakland, Cal.



Special Feature—Commercial Department. Next Term begins July 19, 1886. Send for circular.

COL. W. H. O'BRIEN, Principal.

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The Business Training School of the Pacific Coast. Graduates assisted in obtaining employment. Send for College Journal. Address E. C. Atkinson, Sacramento, Cal.

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Send for Circular

Dr. Pierce's Electric Belt.

This small, truthfully Grandest Medical of the BELT is supplied with a continuous current. It cures, without medicine, all diseases and weaknesses of male or female, that can possibly be relieved or cured by Electricity and Magnetism. Dr. Pierce's Belt is the only one which will produce electricity with or without acids; giving when charged a current of high tension, which can be instantly felt by the wearer. Contains all the latest improvements, including an improved Electric Suspensory for Men. In fact it is warranted to be the only complete and durable GALVANIC BODY-BATTERY ever invented. Satisfaction guaranteed. Prices very reasonable. Avoid inferior imitations. Call or write for our FREE descriptive pamphlet, No. 2. MAGNETIC ELASTIC TRUSS CO. 304 N. SIXTH ST., COR. OLIVE ST. LOUIS, MO., and 704 SACRAMENTO STREET SAN FRANCISCO, CAL. AGENTS:—PETER VAN SCHACK & SONS, 138 & 140 Lake Street Chicago, Ill.; M. W. ALEXANDER, Druggist, Fifth & Olive sts., St. Louis Mo.; J. H. WIDBER, Druggist, 3d & Market sts., San Francisco. Quickly cured! If ruptured send for our Pamphlet No. 1.

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BEAUTIFUL EVER-BLOOMING

ROSES

Our Great Specialty is growing and distributing ROSES. We have all the latest novelties and finest standard sorts, in different sizes and prices to suit all wants. Over 1-100 named varieties to choose from. We send strong Pot Roses safely by mail to all Post Offices, purchaser's choice of varieties, all labeled, 3 TO 12 PLANTS \$1. \$8 to \$15 according to value. Two year Roses by express. Our New Guide, 38 pages, elegantly illustrated, Free. Address THE DINGEE & CONRAD CO., Rose Growers, West Grove, Chester Co. Pa.

ORANGE CULTURE

A practical treatise by T. A. GAREY, giving the results of long experience in Southern California. 196 pages, cloth bound. Sent post-paid at reduced price of 75 cts. per copy by DEWEY & CO., Publishers, S. F.



## Breeders' Directory.

Six lines or less in this Directory at 50c per line per month.

### POULTRY.

T. D. MORRIS, Sonoma, Cal. Tuolouse and Embden Geese, Bronze and W. Holland Turkeys, and all leading varieties of Thoroughbred Poultry.

D. H. EVERETT, 1616 Larkin St., S. F., importer and breeder of Thoroughbred Langshans and Wyandottes.

AXFORD'S IMPROVED INCUBATOR.—400 eggs, \$50; 150 eggs, \$25. Guarantee satisfaction. For particulars address, I. P. Clark, Mayfield, Cal.

J. N. LUND, Box 116, Oakland, Cal. Wyandottes, Langshans, L. Brahmas, P. Rocks, B. Leghorns, B. B. R. Game Bantams, T. Guineas, Hom'g Antwerp Pigeons.

D. D. BRIGGS, Los Gatos, Cal. Fancy Poultry breeder.

O. J. ALBEE, Santa Clara. Thoroughbred poultry.

E. C. CLAPP, South Pasadena, Cal. Light Brahmas and Plymouth Rocks. No fowls for sale. Eggs from first-class stock, after Nov. 1st.

CALIFORNIA POULTRY FARM, Stockton, Cal. Send 2-cent stamp for Illustrated Catalogue.

W. C. DAMON, Napa, Wyandottes, W. and B. Leghorns, P. Rocks, L. Brahmas, Pekin Ducks.

MRS. M. E. NEWHALL, San Jose. White and Brown Leghorns, Langshans, Plymouth Rocks, Light Brahmas, Pekin Ducks and Bronze Turkeys.

E. H. FREEMAN, Santa Clara, Cal., importer and breeder of Wyandottes, Langshans, L. Brahmas, P. Cochin, B. and W. Leghorns, B. B. R. G. Bantams, Houdans, Buff Laced Polish and Plymouth Rocks.

JAS. T. BROWN, 18 Georgia St., Los Angeles, Cal. Breeder of Thoroughbred Poultry of the leading varieties. Send for circular and price list.

### HORSES AND CATTLE.

PETER Saxe & SON, Lick House, San Francisco, Cal. Importers and Breeders, for past 14 years, of every variety of Cattle, Horses, Sheep and Hogs.

WILLIAM NILES, Los Angeles, Cal. Thoroughbred Poultry, Cattle and Hogs. Write for circular.

J. R. ROSE, Lakeville, Sonoma Co., Cal., breeder of Thoroughbred Devons, Roadsters and Draft Horses.

THE BEST HERD OF JERSEYS, all A. J. C. C. registered, is owned by Henry Pierce, San Francisco.

P. H. MURPHY, Brighton, Perkins P. O., breeder of Shorthorn Durhams, and Poland-China Hogs.

ONTARE RANCH, three miles west of Santa Barbara, Santa Barbara county, California. Coach Horses, Draft Horses, Trotting Bred Horses and pure Holstein-Friesian Cattle. Young cattle and matched teams always on hand. Francis T. Underhill, Proprietor. C. F. Swan, Manager.

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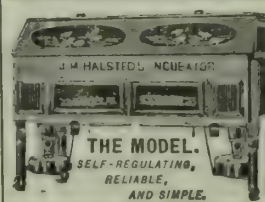
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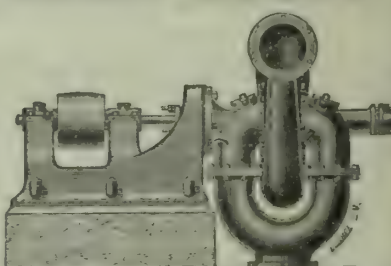
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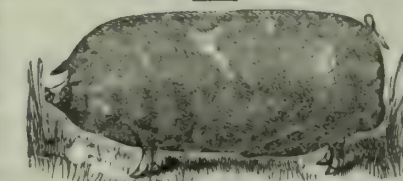
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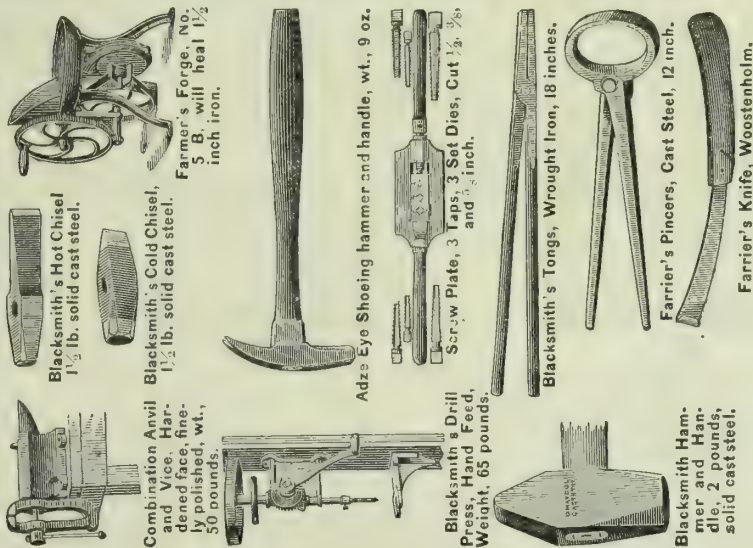
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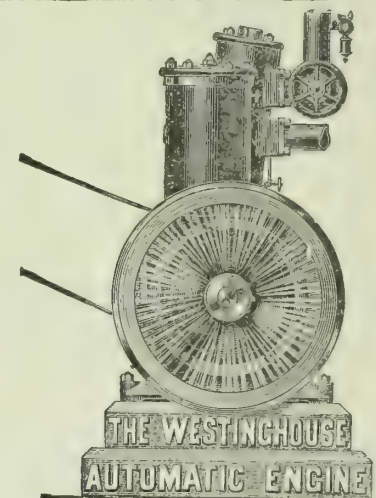
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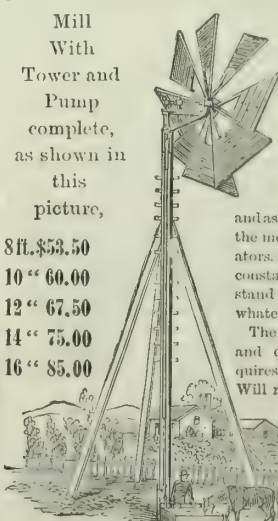


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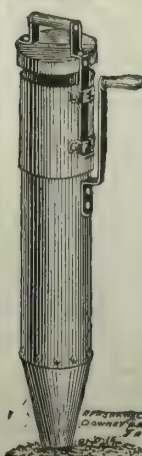
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**ANGEL'S LIVER PILLS** cure rheumatism and headache.



## S. F. MARKET REPORT

NOTE: Our quotations are for Wednesday, not Saturday, the date the paper bears.

## Weekly Market Review.

## DOMESTIC PRODUCE, ETC.

SAN FRANCISCO, Nov. 3, 1886.

The week was broken into by rains on Saturday, and election yesterday. From the effects of the latter it has not recovered. Heavy frosts Monday, Tuesday and this morning, are reported from many sections of the State, doing considerable injury to green vegetables. The English wheat market shaded off twice during the week, with the following closing to-day:

LONDON, Nov. 3.—Cargoes off Coast, quiet, but steady. Cargoes on passage and for shipment, firmly held. California wheat off Coast, 33s 3d to 33s 6d. California wheat just shipped, 34s 6d. California wheat nearly due, 34s. English country market, steady. French country market, do. Liverpool wheat, spot, very quiet. Liverpool wheat, Cal. 6s 7½d to 6s 10½d.

## Foreign Review.

LONDON, Nov. 1.—The *Mark Lane Express*, in its review of the British grain trade during the past week, says: The deliveries of native wheat have been small at 6d@1s above the previous week. The sales of English wheat were 48,910 quarters at 30s 3d against 56,590 quarters at 31s 4d during the corresponding period of last year. Country flour is firm and 6d dearer. A fair trade is doing in barley at an advance for the finest of 2s, and for seconds of 1s. Foreign wheats are firmly held and values are unchanged. Corn has risen 3@6d. Linseed has gained 1s. Three cargoes of wheat have arrived. One cargo was withdrawn and two remained. At to-day's market wheat was firm, though there was less demand. There was a short supply of corn and sales were freely made at 6d advance. Barley was steady. Oats, beans and peas were unchanged.

## California Products at the East.

NEW YORK, Oct. 31.—Beans—Choice California Limas, scarce; quoted at \$1.65@1.80.

Dried Fruits—California raisins coming into the markets show such a decided improvement in quality over those of last year that the trade is taking them in preference to imported, that is, the leading brands. Outside and irregular brands are not meeting with a ready sale. London layers, \$2.35@2.40. Loose Muscatis are quoted at \$1.85@1.90.

Canned Goods—The principal transaction of the week was the sale of 40,000 cases of "Centennial" tomatoes, closing out the entire stock remaining in the packers' hands, at 92½¢ cash. The market naturally is much stronger, and higher prices are soon considered probable. Corn continues in demand, and prices are very firm. Salmon is firmer, but not quotably higher. Salmon, Columbia river, \$1.55. California canned peaches, \$2.25. Pears, \$2.25. Plums and grapes, \$1.80@2. Apricots, \$2.15@2.25.

Honey—Extracted, 4½¢.

Seed—Choice California yellow mustard, scarce and firmly held, at 4¼¢@4½¢, but off quality is obtainable at 3½¢.

## California Fruit at the East.

CHICAGO, Oct. 30.—Receipts of grapes have been large since our last report, and the market is firmer, choice Muscatis selling at from \$2.75@3 per 40-lb crate, and Tokays bring \$3@3.25. The weather has been very favorable. The receipts of grapes from nearly all points are becoming lighter, and the season for these is almost over, promising a better market for California grapes. Pears are also firm. In fact all classes of green fruits which are now arriving are firm, with the exception of quinces, which continue low, selling at about \$1 per box. Winter pears are firm and there has been no material change in the prices for dried fruits for the last three weeks. The receipts are light and the markets firm, all lots meeting with a ready sale. Evaporated apricots are worth 20@25 cents per pound, as to quality; pared peaches bring 20@23 cents, and unpared, 12@14 cents per pound. Prunes range from 6½¢@9 cents per pound, according to size and quality.

NEW YORK, Oct. 31.—California plums, \$2@3 ½ box; pears, \$3@5 ½ box; quinces, \$1@1.50; grapes, Tokay and Muscatis, \$1.50@4 ½ lb case.

## New York Hop Market.

NEW YORK, Oct. 31.—The hop market was very quiet without apparent change in any particular. First-class goods, domestic or foreign, move off in moderate lots to a fair extent at steady prices, but brewers continue to be extremely critical, and stock that is not first-class proves a drug on the market even at round concessions. New York State, 1886, common to medium, 25@30¢; do 1885, prime to choice, 16@19¢; do common to medium, 12@15¢. Pacific coast, 1885, 28@32¢; Pacific coast, fair to good, 25@27¢; Pacific coast, 1886, prime to choice, 13@16¢.

## New York Wheat Market.

NEW YORK, Oct. 31.—The wheat market has been active, excited, very feverish and variable, and the closing prices show a material decline for the week. Spot closed ½¢@¾¢ lower. Options closed as follows: November, 84½¢; December, 85¢; January, 87½¢; February, 89½¢; May, 93½¢.

## Eastern Wool Markets.

NEW YORK, Oct. 31.—Wool remains quiet but unchanged. Holders, as a rule, manifest no inclination to grant concessions, though buyers claim the tendency is in their favor, and they look for concessions at an early day. The sales of the week included 50 bales and 33,000 pounds California at 19 @25¢; 10,000 pounds scoured do at 63@65¢.

## London Wool Market.

LONDON, Oct. 30.—The fifth series of wool sales has been postponed until November 30, when about 125,000 bales will be offered, including 72,000 bales of new clip Australian. The market has been quiet since the last sales.

## Local Markets.

BARLEY—The market has ruled exceedingly strong, throughout the week, owing to large buying orders for the better grades. The orders are chiefly

from England, where the crop is short. The supply of bright in this State is being rapidly reduced. The market closed very strong. The following are to-day's Call Board transactions: Morning Session: Buyer season—300 tons, \$1.08; 200, do \$1.08½; 1000, do \$1.08½; 300, do \$1.08½; 100, do \$1.08½; 100, do \$1.09; 200, do \$1.09½; 200, do \$1.09½; Buyer, 1886—100 tons, \$1.02½; 400, do \$1.01½; 100, do \$1.01½; 200, do \$1.02. Seller season—100, 98¢; 100, do 98½. Seller, 1886—100 tons, 99¢; 100, do 99½; 400, do \$1.00. Brewing buyer season—200 tons, \$1.28½; 400, do \$1.28½; 100, do \$1.28½. Afternoon Session: Barley—Buyer season—100 tons, \$1.09½; 300, \$1.09. Buyer '86—100 tons, \$1.02; 300, \$1.02½. Seller season—200 tons, 99¢; 100, 99½; 200, 99½; 400, 99½. Seller '86—300, \$1.00.

BEANS—Under free receipts the market eased off, but at the close there is a steadier feeling owing to holders not pressing the market, but storing in preference.

DAIRY PRODUCT—Butter has a steadier tone to-day for fresh in rolls, with a firmer tone for pickled and solid. Cheese is in light stock.

DRIED FRUITS—The market is reported active for the more choice, at unchanged prices. The demand is for shipping and also on coast orders.

EGGS—California eggs are scarce, but usually well-informed dealers profess to believe that receipts will increase from now on, which will affect prices, but equally as well-informed parties think values will keep well up, as Eastern shipments will fall off.

HOPS—Holders do not appear disposed to press the market, consequently trading is light for the present.

WHEAT—The stock of wheat here and at Port Costa is placed at 97,350 tons. Of this quantity fully one-half if not more is owned by farmers who hold, as a rule, at \$1.45 to \$1.50 for choice shipping. The shipping in port to load wheat has a carrying capacity of 160,000 tons, of which amount they have in about 15,000 tons, leaving 145,000 tons yet to be put in, so that to get the quantity desired, it is claimed shippers will have to pay well up. The sample market is strong to-day for white shipping with \$1.37½ bid at Port Costa for good and \$1.38½ for choice shipping; one sale is reported made at \$1.40 afloat. Exporters are buying considerable coast wheat which is generally of poor quality and will require choice white to bring a cargo up to a certain standard. Call Board transactions to-day were as follows: Morning Session: Buyer season—200 tons, \$1.43½; 400, \$1.43½. Afternoon Session: Buyer season—1500 tons, \$1.43½; 200, \$1.43½.

[COMMUNICATED.]

## Market Information.

## Cereals.

The nine groups of countries into which the wheat-growing and consuming portion of the world is divided show the following comparisons of estimated production and requirements for the current year, in quarters of eight bushels each:

FIRST DIVISION—NORTHWESTERN EUROPE.		
	Yield, qrs.	Wants, qrs.
United Kingdom.....	7,920,890	26,000,000
Belgium and Holland.....	3,500,000	5,750,000
France (two-thirds).....	21,803,800	27,000,000
Total.....	33,224,690	58,750,000

SECOND DIVISION—MEDITERRANEAN EUROPE.		
	Yield, qrs.	Wants, qrs.
France (one-third).....	10,915,400	13,000,000
Spain and Portugal.....	16,000,000	16,500,000
Italy and Sicily.....	19,000,000	19,250,000
Turkey and Old Provinces.....	14,500,000	12,500,000
Total.....	60,415,400	61,250,000

THIRD DIVISION—CENTRAL EUROPE.		
	Yield, qrs.	Wants, qrs.
The German Empire.....	12,000,000	15,250,000
Switzerland.....	200,000	1,350,000
Austria-Hungary.....	15,000,000	14,000,000
Roumania.....	2,500,000	2,000,000
Total.....	29,700,000	32,600,000

FOURTH DIVISION—RUSSIA.		
	Yield, qrs.	Wants, qrs.
Total.....	33,000,000	27,500,000

FIFTH DIVISION—ASIATIC COUNTRIES.		
	Yield, qrs.	Wants, qrs.
Asia Minor.....	5,250,000	4,500,000
Syria.....	2,000,000	1,750,000
Persia.....	3,250,000	2,750,000
India.....	36,000,000	31,000,000
S. E. Asia, including Burmah, Siam and Tonquin.....	7,000,000	6,500,000
Total.....	53,500,000	46,500,000

SIXTH DIVISION—AUSTRALASIA.

An export surplus of half a million quarters is the largest figure that we feel justified in taking for the whole Australasian group.

SEVENTH DIVISION—UNITED STATES, ETC.		
	Yield, qrs.	Wants, qrs.
United States.....	54,921,000	40,000,000
Mexico.....	500,000	550,000
West Indies.....	50,000	1,000,000
Central America.....	50,000	1,000,000
Total.....	55,521,000	42,550,000

EIGHTH DIVISION—CANADA.

Without giving details, 700,000 quarters is the probable exportable surplus for Canada, including Manitoba.

NINTH DIVISION—SOUTH AMERICA.

Chili is estimated at 600,000 qrs. surplus, La Plata, 300,000 qrs. surplus, Brazil and Colombia, 25,000 qrs. required, Peru and Bolivia, 100,000 qrs. required—making a net surplus of 550,000 qrs.

Analyzing the estimates on the lines of political or national divisions, the following table of approximations of requirements and surplus of wheat for the current year, in quarters, is submitted:

	Requirements, quarters.	Surplus, quarters.
The United Kingdom.....	18,079,110	
France.....	7,253,800	
Belgium and Holland.....	2,250,000	

Spain and Portugal.....	500,000
Italy and Sicily.....	250,000
Ottoman Empire.....	3,000,000
Germany.....	3,250,000
Switzerland.....	1,100,000
Austria-Hungary.....	1,000,000
Roumania.....	500,000
Russia.....	5,500,000
Persia.....	500,000
India, etc.....	5,500,000
Australasia.....	500,000
United States.....	14,921,000
Mexico.....	50,000
West Indies.....	950,000
Central America.....	950,000
Canada and Manitoba.....	700,000
Chili.....	600,000
La Plata.....	300,000
Brazil and Colombia.....	250,000
Peru and Bolivia.....	100,000
South Africa.....	400,000
China.....	250,000
Egypt.....	250,000
Total.....	35,632,910

Export buyers of wheat lowered their bids the past week, but sellers were slow to respond, causing, at the close, buyers to advance to their original figures, \$1.37½ to \$1.42½ for fair to choice white shipping.

On November 1st, the stock of wheat and flour in Liverpool, England, was as follows: Wheat, 480,000 to 500,000 quarters; flour, 250,000 to 260,000 bbls., against the like time in 1885; wheat, 800,000 to 825,000 quarters, and flour, 300,000 to 350,000 bbls. This year's stock in November is far below the average, and emphasizes the statistics heretofore published of the wheat shortage abroad, and that Europe will want all of our surplus at advancing prices.

Oats have a steadier, firmer tone for the better grades, but fair to good are in liberal supply, with prices favoring buyers.

Corn is in lighter receipt, yet the demand is offish, and sellers have hard work to maintain prices. It is generally thought that better prices will obtain later on.

Rye is in good demand at a slight advance.

The following are the stocks in the warehouses in this city and at Port Costa on Nov. 1st: Barley, 19,845 tons; oats, 736; corn, 850; bran, 700.

The exports last month aggregated as follows: Wheat, 1,195,990 cts.; flour, 124,494 bbls. (equal to 373,382 cts. in wheat; total in wheat, 1,569,372 cts. or 78,469 tons); and barley, 181,994.

On November 1, the stock of grain at Port Costa and in this city was as follows, in tons: Wheat, 97,350; barley, 19,845; oats, 736; corn, 850; of the barley, 5845 tons were brewing, 14,820 feed.

## Dairy Product.

There is an improved demand for pickled and solid, but fresh butter in rolls is hard to sell at last week's prices. It is claimed, though, that in pickled an advance is likely to occur soon, which will perhaps improve fresh.

Cheese continues very firm under a moderate stock and a good demand.

California eggs are scarce and wanted at full quotations. Eastern eggs are in good supply, as are Utah's by express.

## Feedstuff.

Bran, middlings and other feedstuffs are without essential change.

Choice to extra choice hay continues in good demand, with prices in sellers' favor. Poorer grades are reported in large supply, with buyers disposed not to bid up.

## Fruits.

Heavy rains on Saturday last caused dealers to advance their views on table grapes from 5 to 15 cts per box on Monday, but the higher asking price could not be maintained owing to heavy receipts, and consequently last week's low prices obtained. To-day, the market is stronger. Wine grapes are in liberal offerings, but for the most part being of poor quality are very hard to sell.

Strawberries are in lighter receipt, owing to rains and heavy frosts doing considerable damage.

Peaches continue to come to hand in a small way, but owing to the lateness of the season are very hard to sell.

Figs are about out of market, causing quotations to be nominal.

Quinces continue slow, owing to canners buying sparingly, and retail dealers having a light trade for them.

The market continues to be glutted with poor apples, which sell at the best obtainable prices. Choice apples are in good demand, which allows consignees to maintain better prices.

The supply of poor pears is lighter, which creates a better feeling for good to choice. Some choice Winter Nellis, from Oregon, sold at from \$1.50 to \$2 per box.

The market is better supplied with oranges, but as yet the trade takes sparingly, causing sales at lower figures for those not choice selected.

Limes and lemons are in large supply, with prices in buyers' favor.

## Honey.

Choice continues in good demand for home trade, but poorer grades are slow, and hang unless concessions are made. It is reported that the demand from both England and the East is light, but owing to light stocks with us no lower prices are reported for choice.

## Live-stock.

In beef cattle there is nothing new to report since last week's issue. Mutton sheep are firm, under a strong holding in the interior. Hogs continue to press the market, causing the low prices current last week to still obtain. In much cows there is nothing new to report. In the horse market there is a fair inquiry for roadsters and matched teams, but for draft horses the demand is very light. For the latter a better inquiry is expected, provided there is a severe winter.

The following are to-day's meat prices: Beef—Stall-fed, 6¼¢@7¼¢ lb; grass-fed, extra, 6@6½¢; first quality 5¼¢@5½¢; second, 4¼¢@5¢; third, 4@4½¢. Calves, small, 9@10¢; larger, 7@8¢ lb. Mutton—Ewes, 4¼¢; wethers, 5¢. Lamb—Spring, 6½¢@7¢ lb. Pork—Live hogs on foot, 2½¢

@3¼¢ for grain and dairy fed; 2¼¢@2½¢ for soft; dressed, 5@5½¢ for hard, and 4¼¢@4½¢ for soft. Grass-fed stock sell on foot, gross weight, at one-half the price they fetch dressed; stall-fed, on foot, fetch one-third less than they sell at dressed.

## Raisins.

Receipts continue free, with heavy shipments going forward to the East, where a good active demand rules. In our market there is an improving demand from Oregon and British Columbia. It is reported that some shipments have been sent forward to Canada by way of British Columbia. A very strong bear pressure is reported in this market, but as yet no bad effects are reported.

## Vegetables.

Notwithstanding the receipts of potatoes have been only fair, values have ruled in buyers' favor, with a weak closing owing to fewer orders on the market. Stocks are large, with the wharves overcrowded.

Onions have ruled fairly steady, although at times some shading was necessary to clean up consignments.

Sweet potatoes have ruled weak, but yet consignments were worked off fairly well for the more choice. The market closed steady.

Heavy frosts on Sunday and Monday nights last killed all the tomato, cucumber, pea, bean, squash, etc., vines, which is having its effects on the market for these vegetables. The quality of the tomatoes received was very poor, causing much trouble to place them, even at concessions. Large quantities were dumped.

Cabbages and root vegetables are unchanged.

## Wool.

Buyers claim that our market is above Eastern parity, yet they continue free buyers for crossbred and the more desirable clips. English advices report a strong market, but Eastern advices give Boston dull, with no marked activity looked for until after the turn of the year.

## Miscellaneous.

The tonnage movement compares with last year at this date as follows:

	1886.	1885.
On the way.....	229,523	213,597
In port, disengaged.....	82,284	91,969
In port, engaged.....	100,442	37,649

Totals.....412,249 343,215

The above gives a carrying capacity as follows: 1886, 658,875 short tons; 1885, 549,984 short tons; increase over last year, 108,894.

Poultry ruled weak and low throughout the week, under heavy receipts and dealers well stocked. Ducks were in light receipt and strong.

Wild game have moved off well at full figures, owing to the superior condition of the receipts.

San Francisco, Nov. 3, 1886.

## Domestic Produce.

Extra choice in good packages fetch an advance on top quotations, while very poor grades sell less than the lower quotations.

Wheat, Nov. 3, 1886.

Bayo, cts.	1 40 @	55	Silberta	13 @	14
Butter.....	1 25 @	1 75	Burbank.....	1 00 @	1 25
Pea.....	1 05 @	1 15	Early Rose.....	65 @	1 00
Red.....	1 10 @	1 15	Early Globe.....	1 30 @	1 25
Pink.....	1 15 @	1 15	Jersey Blues.....	1 00 @	1 20
Large White.....	1 20 @	1 25	Potatoes.....	1 00 @	1 25
Small White.....	1 05 @	1 15	Tonales.....	1 00 @	1 20
Lima.....	2 00 @	2 25	River reds.....	60 @	80
Old Peas, blk eye.....	1 10 @	1 20	Humboldt.....	80 @	1 15
do green.....	1 00 @	1 12	do Kidney.....	80 @	1 15
do Niles.....	1 25 @	1 30	Chile.....	80 @	1 15
BROOM CORN.					
Southern.....	50 @	70	do Oregon.....	80 @	1 15
Northern.....	50 @	70	Peoria.....	50 @	1 20
CHICORY.					
California.....	4 @	4	Salt Lake.....	1 00 @	1 25
German.....	6 @	7	do Sweet.....	75 @	1 20

DAIRY PRODUCE, ETC.

BUTTER.			
Cal. fresh roll, B.	20	@	30
do Fancy brnds	32 1/2	@	35
Pickle roll.	19	@	21
Firkin, new.	15	@	18
Eastern.	—	@	—
CHEESE			
Cheese, Cal. B.	12	@	14 1/2
Eastern style.	14	@	15
EGGS.			
Cal. ranch, doz.	40	@	45
do store.	32	@	37
Ducks.	—	@	—
Oregon.	—	@	—
Eastern.	15	@	21
POULTRY.			
Roasters.	5	@	6 1/2
Broilers.	3	@	4 1/2
Ducks, tame.	3	@	5 00
do Mallard.	3	@	4 00
do Spring.	1	1/2	@ 2 00
Geese, pair.	1	00	@ 2 00
do Goslings.	—	@	—
Wild Gray, dos	3	00	@
Turkeys, B.	12	@	15
do Dressed.	—	@	—
Tall and wing.	10	@	20
Suise, Eng. doz.	—	@	—
do Common.	—	@	—
do.	—	@	—



Fruits and Vegetables.

Extra choice in good packages fetch an advance on top quotations, while very poor grades sell less than the lower quotations.

WEDNESDAY, Nov. 3, 1886.

Apples, bx com...	30 @ 75	Nectarines.....	— @ —
do choice.....	1 00 @ 1 25	Peaches.....	6 @ 8
Bananas, bunch.	1 50 @ 3 00	do pared.....	16 @ 18
Blackberries, ch.	— @ —	Pears, sliced.....	5 @ —
Cantaloupes, cr.	— @ —	do qtd.....	— @ 2 1/2
Cherries blk.....	— @ —	do evaporated	8 @ 10
do Royal Ann.....	— @ —	Plums.....	— @ —
Cherry plums.....	— @ —	Prunes.....	— @ —
Crabapples.....	— @ —	do French.....	— @ —
Cranberries.....	7 00 @ 10 00	Zante Currants.	8 @ —
Currents chest.....	— @ —	RAISINS.	— @ —
Figs, lx.....	75 @ 1 25	Delmas Plus, fcy 2	65 @ —
Grapes.....	20 @ 50	Imperial Cabin.....	— @ —
do Rose Peru.....	35 @ 50	sk, fancy.....	1 90 @ —
do Muscat.....	30 @ 40	Crown London	— @ —
do Tokays.....	25 @ 50	Layers, fcy.....	1 70 @ —
Wine, Zinfandel 12	00 @ 18 00	do Loose Mus-	— @ —
do Mission.....	1 00 @ 15 00	catels, fancy 1	60 @ —
Limes, Mex.....	4 00 @ 4 50	do Loose Mus-	— @ —
do Cal. box.....	— @ —	catels.....	1 50 @ —
Lemons, Cal. bx	2 50 @ 4 50	Cal. Valencia.....	1 50 @ —
do Sicily, box.....	8 00 @ 10 50	do Layers.....	1 50 @ —
do Australian.....	— @ —	do Sultanas.....	1 50 @ —
Nectarines box.....	— @ —	Fractions come 25, 50 and 75	— @ —
Oranges, Cal. bx	2 00 @ 3 00	cents higher for halves, quar-	— @ —
do Tahiti, bx.....	3 35 @ 3 50	ters and eighths.	— @ —
do Mexican, M.....	— @ —	VEGETABLES.	— @ —
do Panama.....	— @ —	Artichokes, doz.	10 @ 15
Peaches, bx.....	2 00 @ —	Asparagus.....	— @ —
do bask.....	— @ —	Beets, sk.....	1 00 @ —
Crawfords, bx.....	— @ —	Cabbage, 100 lbs.	50 @ 75
do bskt.....	— @ —	Carrots, sk.....	30 @ 35
do choice.....	— @ —	Cauliflower, doz.	— @ —
Pears bx.....	60 @ 1 00	Celery, doz.....	50 @ 60
do choice.....	1 25 @ 2 00	Cucumbers box.	30 @ 50
do Bartlett, bx.....	— @ —	Eggplant, .. bx	60 @ 75
Persimmons.....	— @ —	Garlic, lb new.	5 @ 6
Jap, bx.....	— @ —	Green Corn.	— @ —
Pineapples, doz.	4 00 @ 5 00	small box.....	1 00 @ —
Pomegranates, b	— @ —	do large box.....	— @ —
Plums lb.....	2 1/2 @ 4	Green Peas, sk.	1 25 @ 2 00
Prunes bx.....	— @ —	Lettuce, doz.....	10 @ —
do Egg.....	— @ —	Lima Beans lb.....	3 @ 4
Quinces bx.....	40 @ 60	Mushrooms, bx.	— @ —
Raspberries ch.	— @ —	do cultivated.	— @ —
Strawberries ch.	6 00 @ 8 00	Okra, dry, lb.....	10 @ 12 1/2
Watermelons 100	— @ —	do green box.....	60 @ 80
DRIED FRUIT.	— @ —	Parsnips, cti.....	1 50 @ —
Apples, sliced, lb	2 1/2 @ 3	Peppers, dry lb.....	10 @ —
do evaporated.	8 @ —	do green, bx.....	30 @ 50
do quartered.....	1 1/2 @ —	Pumpkins pr 12	00 @ 15 00
Apricots.....	12 @ 13	Rhubarb box.....	— @ —
do evaporated.....	— @ —	Squash, Marrow	— @ —
Blackberries.....	9 @ 10	fat, too.....	5 00 @ 10 00
Oltron.....	28 @ 30	do Summer bx	25 @ 40
Dates.....	9 @ 10	String beans sk. 1	50 @ 3 50
Figs, pressed.....	8 @ 10	Tomatoes box.....	50 @ 75
Figs, loose.....	— @ 5	Turnips cti.....	75 @ 1 00

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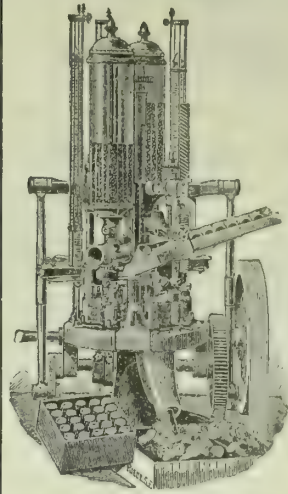
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7700 Plums.....	4 to 8c.	2050 Peaches.....	4 to 8c.
4600 Plums.....	4 to 8c.	1000 Japan Plums.	6 to 12c.

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Correspondence invited with dealers requiring Clematis, giving varieties and number of each wanted. We are making extensive preparations to supply any possible demand, with home-grown stock. Address

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DEL MONTE VINEYARD NURSERY,

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For Sale—White Adriatic Fig Cuttings of my own importation Grape Roots and Cuttings of Carignan, Mataro Grenache, Teinturier, Trousseau, Carbenet Sauvignon, Malbec and Muscat Frontignou, etc.

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PEAR SEEDLINGS.

We offer a large stock of Pear Seedlings of our own growing; also Root Grafts of Apple, Pear, Plum, etc. Price List free. Address

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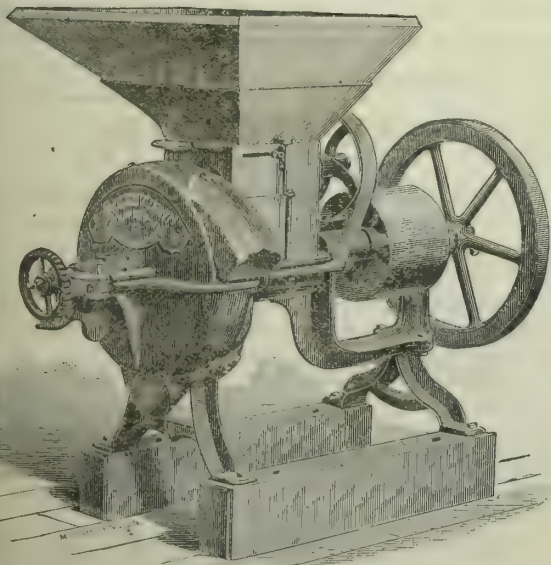
Nurserymen, Bloomington, Ill.

THE SCIENTIFIC MILL.

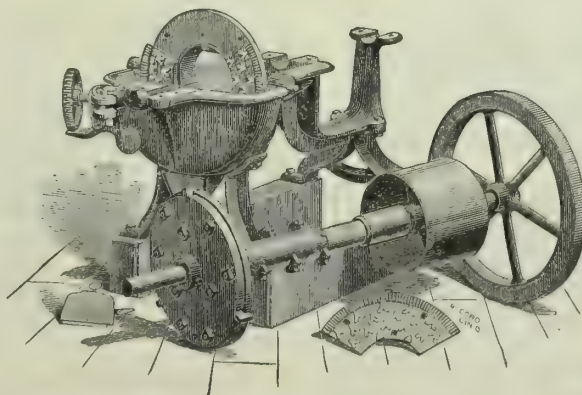
FOR GRINDING BARLEY, EAR or SHELLED CORN,

AND ALL KINDS OF

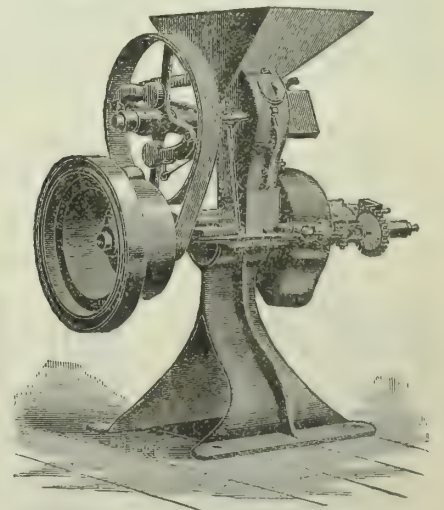
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THE BEARINGS are in one casting, consequently are always in line and cannot get out of true.  
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THE FLY-WHEEL AND PULLEY are turned, and, with the Running Plate, are put on shaft and balanced accurately, so when in mill they run perfectly true, without any shaking or undue strain on it.  
THE VIBRATOR keeps moving constantly when grinding ear corn, so that it cannot clog in the hopper.  
THE "SCIENTIFIC" IS THE ONLY MILL MADE HAVING SUCH PROVISION.  
THE HIGH DISCHARGE is most convenient for delivering the feed, and as it draws a current of air through, it prevents heating, as is frequently the case with Iron Mills.  
THE PIN BREAKER provides against damage to mill should iron, steel or any hard substance accidentally go between the plates.  
THE MOST PRACTICAL THING OF THE KIND EVER INVENTED.  
THE FEEDER provides a successful means of regulating the feed when grinding small grain and cotton seed.

NO OTHER COB MILL has any such provision. In fact the "Scientific" is superior to other mills of this class.

THE SIMPLEST. Can be taken apart and put together in a short time without the aid of a mechanic.

THE STRONGEST. All parts are heavy and well braced and especially adapted to the work.

THE LIGHTEST RUNNING. Having but one shaft, running in bearings, which are always in line, with Fly-Wheel, Pulley and Plates accurately balanced, it follows it must run with least possible friction.

THE MOST DURABLE. Can be run in either direction by simply changing the spout and crossing the belt. This gives double wearing capacity to the plates as they sharpen themselves each time they are reversed.

THE BEST MILL ON EARTH, of the best material throughout, and every part made especially for its place.

EACH MILL GUARANTEED TO DO ALL WE CLAIM FOR IT.

SEND FOR DESCRIPTIVE CIRCULAR AND PRICE-LIST.

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## H. H. BERGER &amp; CO.

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Send Direct to Nursery and Save 20 per cent on your order.

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AUTUMN OF 1886-7.

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Yellow Newtown Pippin.....	\$8 00 \$10 00 \$12 00
White Winter Pearmain.....	8 00 10 00 12 00
Red Pearmain.....	8 00 10 00 12 00
White Doctor, a large tart apple.....	8 00 10 00 12 00
Yellow Bellflower.....	8 00 10 00 12 00
Red Bellflower.....	8 00 10 00 12 00
Regular, a Red, a good keeper.....	8 00 10 00 12 00
Alexander.....	8 00 10 00 12 00
Pound Pippin.....	8 00 10 00 12 00
Rhode Island Greening.....	8 00 10 00 12 00
San Ramon King.....	8 00 10 00 12 00
Gravenstein.....	8 00 10 00 12 00
Red German.....	8 00 10 00 12 00

APRICOT ON MYROBOLAN.	PER 100.	PER 1000.
Blenheim, 1 and 2 yrs. $\frac{1}{2}$ to 1 in. diam'r.....	\$8 00	\$50 00
Large Early.....	6 00	50 00
Early Moorpark, 1 and 2 yrs. $\frac{1}{2}$ to 1 in. diam 6 00		50 00
Late Moorpark, 1 and 2 yrs. $\frac{1}{2}$ to 1 in. diam 6 00		50 00
*Hinds Seedling, 1 and 2 yrs. $\frac{1}{2}$ to 1 in. diam 6 00		50 00

CHERRIES.	PER 100.	PER 1000.
Black Tartarian, 1 yr., 5 to 6 ft.....	\$10 00	\$90 00
Royal Ann, 1 yr., 5 to 7 ft.....	10 00	90 00
Rockport Bigarreau, 1 yr., 5 to 6 ft.....	10 00	90 00
Great Bigarreau, 2 yrs., 6 to 7 ft.....	10 00	
Gov. Wood, 1 and 2 yrs., 6 to 7 ft.....	10 00	
Burr's Seedling, 1 yr., 6 to 7 ft.....	10 00	
Centennial, 1 yr., 5 to 6 ft., 50c. each.....	40 00	

PEARS.	EACH.	PER 1000.
Howell, 1 year old.....	12 $\frac{1}{2}$ cts.	\$10 00
Beurre Clairgeau, 1 year old.....	12 $\frac{1}{2}$ cts.	10 00
Kieffer Hybrid, 1 year old.....	12 $\frac{1}{2}$ cts.	10 00
Bartlett, 1 year old.....	12 $\frac{1}{2}$ cts.	10 00
Winter Seckle, 1 year old.....	12 $\frac{1}{2}$ cts.	10 00
P. Barry, 1 year old.....	20 cts.	18 00
B. S. Fox, 1 year old.....	20 cts.	18 00

PLUMS and PRUNES on MYROBOLAN.	PER 100.	PER 1000.
Kelsey's Japan Plum, 1 yr., 4 to 5 ft.....	\$10 00	\$90 00
Kelsey's Japan Plum, 1 yr., 3 to 4 ft.....	8 00	70 00
Washington, 1 and 2 yrs., 5 to 6 ft.....	6 00	
Yellow Egg, 1 and 2 yrs., 5 to 6 ft.....	6 00	
Jefferson, 1 and 2 yrs., 7 to 8 ft.....	6 00	
Early Golden, 1 and 2 yrs., 6 to 7 ft.....	6 00	
Hooing Superb, 2 yrs., 6 to 7 ft.....	6 00	
Royal Hative, 1 yr., 6 to 7 ft.....	6 00	
Hungarian Plum, freestone, 1 yr., 7 to 8 ft.....	6 00	
Hungarian Prune, a clingstone, 1 year, 7 to 10 feet.....	6 00	

PEACHES on MYROBOLAN.	PER 100.	PER 1000.
Early Crawford, 1 and 2 yrs., $\frac{1}{2}$ to 1 in. diam.....	\$6 00	\$50 00
Foster, 1 yr., $\frac{1}{2}$ to 1 in. diameter.....	6 00	50 00
Salway, 1 and 2 yrs., $\frac{1}{2}$ to 1 in. diameter.....	6 00	50 00
Seller's Cling, 1 yr., $\frac{1}{2}$ to 1 in. diameter.....	6 00	50 00
Wager, 1 yr., $\frac{1}{2}$ to 1 in. diameter.....	6 00	50 00
Orange Cling, 1 and 2 yrs., $\frac{1}{2}$ to 1 in. diam'r.....	6 00	50 00
Susquehanna, 1 yr., $\frac{1}{2}$ to 1 in. diameter.....	6 00	50 00
Hale's Early, 1 yr., $\frac{1}{2}$ to 1 in. diameter.....	6 00	50 00

ALMONDS on MYROBOLAN.	PER 100.	PER 1000.
Soft Shell, 1 yr., per 100.....	\$6 00 to \$8 00	

QUINCE.	PER 100.
Apple Quince.....	\$10 00 to \$12 00
Pear.....	10 00 to 12 00

CURRANTS.	PER 100.	PER 1000.
Red Cherry, 1 yr.....	\$1 50	
Red Cherry, Cuttings.....	\$1 00	

GOOSEBERRY.	PER 100.	PER 1000.
Dwarf (extra early).....	\$20 00	
Houghton Seedling, No. 1, 1 yr.....	1 50	
Houghton Seedling, No. 2, 1 yr.....	1 00	
Berkeley, No. 1, 1 yr.....	8 00	\$70 00
Berkeley, No. 2, 1 yr.....	6 00	
Berkeley, No. 3, 1 yr.....	5 00	
Swiss Gooseberry Cuttings (double bearer, don't mildew).....	5 00	

RASPBERRY.	PER 100.	PER 1000.
Cuthbert.....	\$1 00	\$9 00
Red Antwerp.....	50	4 00

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Holds the field against all comers as the chief book for singing classes in 1886-7. Good music, sacred and secular. Improved instructions. L. O. Emerson. 60 cents; \$6 per dozen.

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SAW TOOLS, KNIFE and TOOL GRINDERS.

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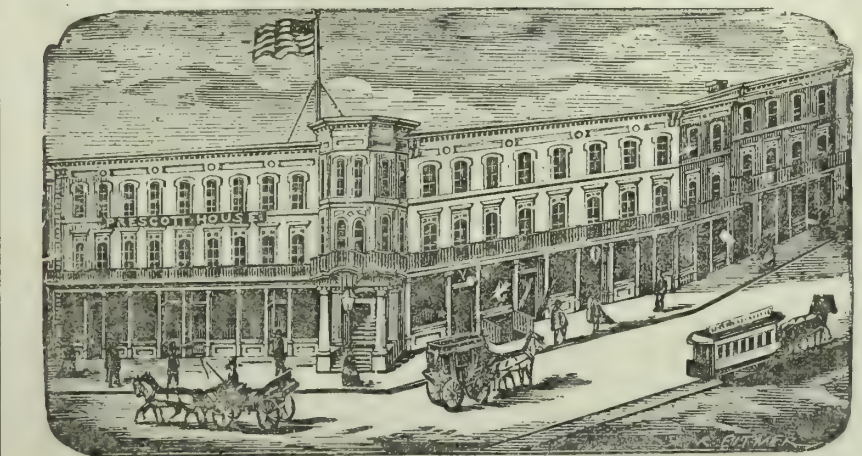
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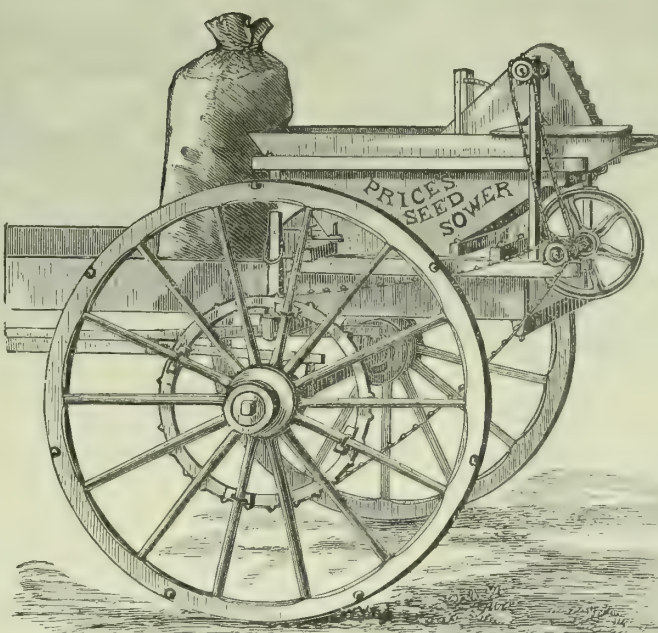
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Clean seed of this valuable pasture plant. Unequaled in dry sections. Bears heavy grazing. \$2.00 per pound, prepaid. W. STITH, COLEMANVILLE, TENNESSEE.

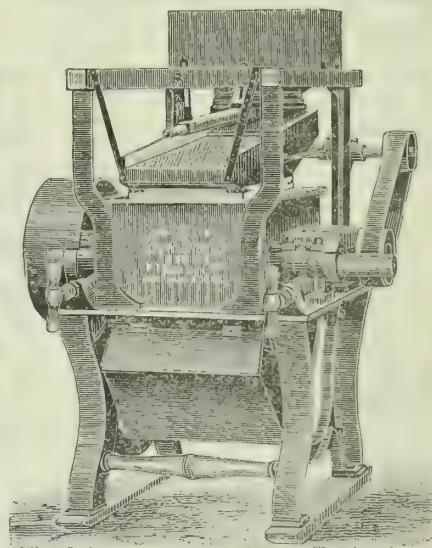
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Sows a strip 100 feet wide at each passage (working width in wheat, 80 feet). Sows as evenly as a Force-feed Drill.

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JACOB PRICE, San Leandro, Cal.



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WITH SHAKING SCREEN.

These Mills are constructed in the least complicated and most substantial manner possible, with rigid iron frame, long bearings, adjustable boxes, with coil springs to allow any chance obstruction, such as nails, screws, etc., to pass through without injury to the rolls. This feature is found on no other roll made on this Coast. Send for prices to

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"JNO. B. WHEELER, Kansas City, Mo.: They have proved themselves to the families who owned them. A. P. SHIPLEY, Doan, Nev.: Give entire satisfaction. Better handle the Washer than anything I have seen.  
"E. M. MASSEY, Lockport, Tenn.: Has proved a better Washer than I ever thought would be invented. JOHN C. EVANS, Stoughton, Mo.: If you will get up any instrument that will take a much larger off of men as this Washer takes off the women, and cost no more, I could sell one at every house.  
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"MRS. C. W. TALMANT, Northridge, Conn.: I have thoroughly tested it for five months with entire satisfaction. EDNA J. HUNT, Stratton, Mich.: I had rather give up my Jersey cow than part with my Washer.  
"I will ship a sample to those desiring an agency on a week's trial on liberal terms. A thousand per cent the best washer in the world for saving labor, clothes and soap. Payable agents: H. E. MOORE, Write for particulars. Address J. WORTH, Box 516, St. Louis, Mo.; or Box 1968, San Francisco, Cal.

**Fruit Engravings.** The finest, best and cheapest. Photographs and Engravings of Fruits, Vegetables, Houses, Farms, Landscapes, etc., made by S. F. PHOTOGRAPHING CO., 659 Clay St., S. F.

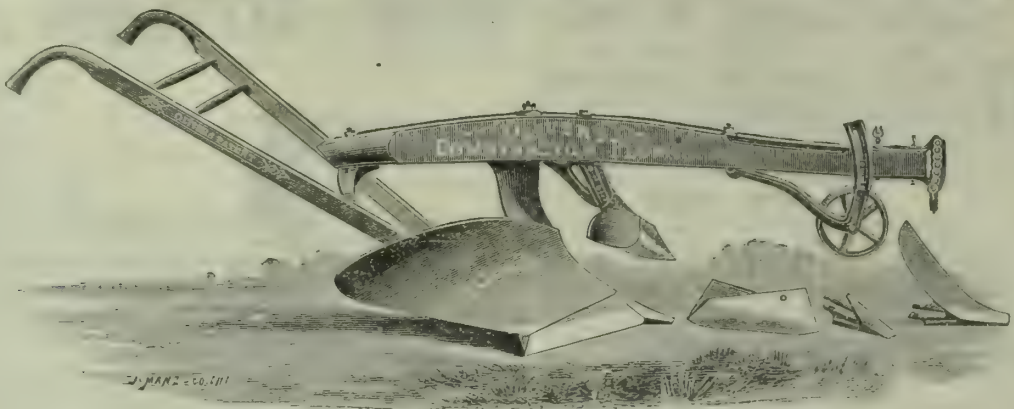
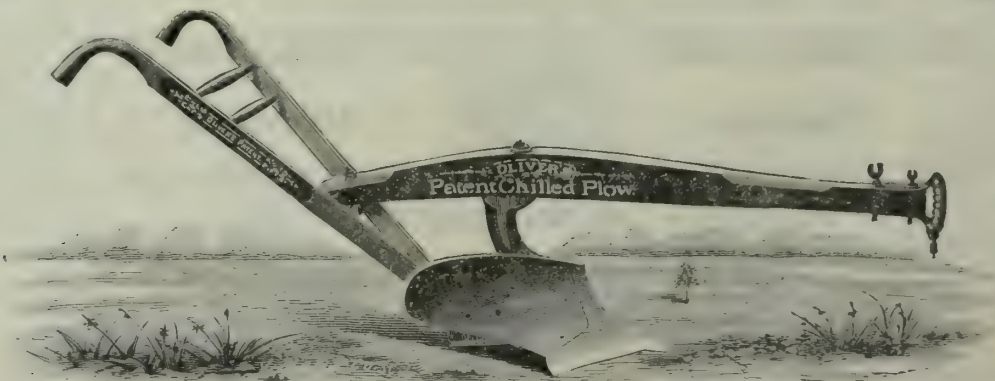


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OLIVER CHILLED, CASADAY SULKY AND GANG  
PLOWS.



CALL ON OUR NEAREST AGENT FOR PRICES, OR ADDRESS

Oliver Chilled Plow Works,

No. 37 MARKET STREET,

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# PACIFIC RURAL PRESS

TWENTY-PAGE EDITION.

Vol. XXXII.—No. 20.]

SAN FRANCISCO, SATURDAY, NOVEMBER 13, 1886.

{ \$3 a Year, in Advance  
SINGLE COPIES, 10 CTS.

## A Prize-Taking Jersey.

We give on this page an engraving of a well-bred Jersey bull which has made an excellent record at the New England fairs, in fact has taken a prize whenever exhibited from his first appearance as a calf in 1884. He possesses the somewhat unkind cognomen "Snappit" and is registered 13,395 American Jersey Cattle Club. Snappit was born January 13, 1884, bred by Davis Collamore of Orange, N. J., and is owned by John R. Brewer, of Hingham, Mass. The engraving is taken from a photograph.

Snappit is described as well grown, straight backed and handsome; his head and body are sealskin brown, back light gray, muzzle white, long black switch, skin rich orange color, fine hair and limbs, slim tail. Snappit's pedigree shows the richness of his breeding in the choicest strains of blood produced in Jersey, and wonderfully developed in America. He has one-eighth of the blood of Khedive and one-eighth of Koffee, claimed to be the best two sons of Coomassie; hence Snappit is an inbred Coomassie bull and should produce good butter cows. Snappit has from his dam also a blend of the blood of Garenne, a cow second only to Coomassie as the ancestor of many valuable animals. Maxwell says: "The combination of the blood of Garenne with that of Coomassie has been productive of great results. Young Garenne, out of Garenne by Coomassie's Son Koffee, sold with her yearling heifer and three-months-old bull calf for \$7335." Garenne, as aforesaid, gives her blood to Snappit, who tracing twice to Coomassie, thus possesses the combination of Garenne and Coomassie blood. Tormentor gives him one-quarter of his blood and Guy Fawkes contributes an equal amount. He also has the highly prized blood of Angela, Top Sawyer, Angelica, and their renowned ancestors Marius, Nonpareil, Welcome, Brown Prince, Lady Mary, Clement, Orange Peel, Noble and many others, and traces eight times to Old Noble, the founder of many illustrious families.

**THE NEW OLEOMARGARINE LAW.**—The passage of the new oleomargarine law, says a Western paper, is proving to be very much more of a victory to dairymen than was at first supposed. Manufacturers of bogus butter are in a bad way. Most of those in Chicago have been forced to shut down, as they can see no money in the business under existing conditions. As long as there were no restrictions placed upon the sale of the stuff, there was big money in its manufacture. It is not the tax that is knocking the pins from under the business, but the fact that bogus butter is now compelled to sail under its own colors. A prominent commission merchant in this city gives it as his opinion that there will be but very little butterine shipped into this market this season. Both wholesalers and retailers do not care to take the risk of paying license on its uncertain demand. A great deal, of course, will depend upon the strictness with which the law is enforced, but from all appearances the honest article will have little to fear.

**ARIZONA ALARMED.**—The *Arizona Gazette*, of Phoenix, is alarmed because citrus fruits, well endowed with scale insects, are being sent to them from this State. This distribution of pests is one of the most grievous afflictions, and one which seems to demand the most effective laws.

**SERICULTURAL.**—The Board of Silk Culture lacked a quorum last Saturday, and the regular meeting was postponed to the 20th. Members who were present, however, employed their time to advantage in examining specimens. In one instance an ounce of silk had been reeled from three ounces of cocoons. This ratio is

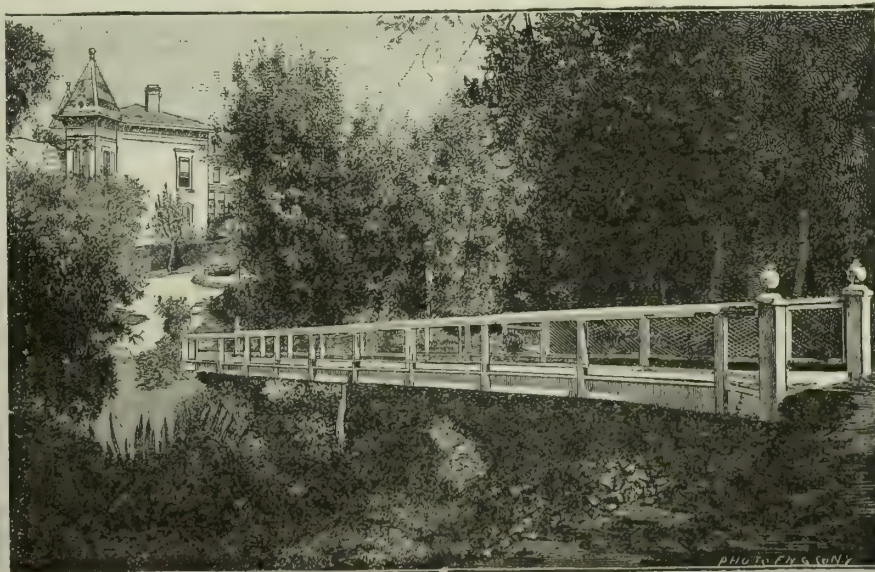
**SCALE-EATING INSECTS.**—Mr. Robert Williamson evidently believes in natural agencies in repressing pests, and has been introducing in his Penryn orchards the two-spotted black ladybird (*Chilocorus cacti*), which we have described as eating scale insects in Los Angeles, Fresno, San Jose and Berkeley, and which is no doubt



JERSEY BULL "SNAPPIT," 13,395, A. J. C. C., AT 18 MONTHS OLD.

likely to be bettered by the use of improved machinery. The Board has filed a protest against the duty imposed by the U. S. customs authorities on machines imported for the reeling school, and hope to receive the benefit of that section of the revised Tariff Act which

to be found elsewhere. Mr. Klee showed us the other day some specimens of a *Seymour* which had been given him during one of his excursions by a fruit-grower who said it was eating scales. We found the same chap a couple of months ago on scale-infested laurel



A VILLÁ RESIDENCE IN BERKELEY.

exempts all implements for use in public schools or incorporated institutions of learning from paying duty. Prof. Bandelli, of the Royal Observatory, Siena, Italy, has sent a lot of the finest cocoons, which, together with a large consignment of cultivated mulberry trees now on the way from Milan, will be distributed among promoters of the silk industry throughout the State.

It is said that there are 32,000 people booked for Southern California by the Emigration Bureau, due between now and April 1st.

trees in Berkeley. He belongs to the *Coccinellidae* or ladybird family of beetles, but he is very small; hardly larger than an alfalfa seed; black, with a dull yellow thorax and head, and black eyes. Who has seen them?

**COOPER MEDICAL COLLEGE.**—Commencement exercises took place Tuesday evening, Nov. 9, Dr. Gibbons, Dean of the Faculty, presiding, before an audience of about 500. Prof. Lane conferred the degrees upon 11 graduates, two of whom were women, and addresses were delivered by Dr. J. H. Wythe and Wm. C. Bartlett.

## A Berkeley Villa.

The beautiful village of Berkeley is best known as the seat of the State University and of the State Institution for the Deaf, Dumb and Blind. The beauty of its situation and surroundings, which led to its designation as the abode of these important institutions, has also proved attractive to those seeking to establish homes, and so for a couple of miles along the base of the Contra Costa range of hills and upon the gentle slope leading thence westward to the waters of the bay of San Francisco, there are scattered many tasteful residences, any one of which would make a pleasing study for an artist. Nearest to the base of the hills the most picturesque situations are found, the small streams bordered with California laurels and alders, and the intervening mesas well dotted with native oaks, being the leading natural contributions to the diversity of the scene. The little picture on this page gives a glimpse of one of the prettiest private residences and grounds which can be found in Berkeley. It is the beautiful spot to which Dr. M. C. O'Toole, of this city, betakes himself after his arduous days of practice in the city, and finds in the rural quiet and in his studies of nature in tree and plant and bird, to all of which he is devoted, a restful balm from professional application and anxiety. The situation is in the extreme north of the town, and near the line where Contra Costa calls a halt to the tax collector of Alameda.

**ARBOR DAY.**—Arrangements are progressing for the observance of November 27th as "arbor day" in the bay region. Mr. Sutro has distributed about 40,000 young trees among the school children of San Francisco, and they are to be put in permanent position on that day. A meeting of those interested in forestry, and especially in the successful establishment of an arbor day for California, will be held at the Palace hotel on Friday evening of this week. The State Board of Forestry has taken hold of the proposition with vigor, and has in preparation a bill which will be presented to the Legislature this winter, establishing an arbor day. Just what day will be selected does not yet appear. It is difficult to name a day which will be satisfactory to all parts of the State, and for this reason the assistance and wisdom of all interested is desired by those who are guiding the movement.

**PLEURO-PNEUMONIA.**—Eastern press dispatches bring the unwelcome announcement of the outbreak of pleuro-pneumonia in other parts of the great West than Chicago. One report says that in Jasper and Clinton counties, Indiana, the disease has developed to an alarming extent in the last few days. They say that in their vicinity more than 1000 cattle are afflicted with the malady, which is incurable and which is rapidly spreading. Dr. Navin, State Veterinarian, has already ordered a number killed. Two hundred spring calves shipped from Northern Ohio about three weeks ago were brought to Clinton county and 100 were sold there and sent to Illinois. Pleuro-pneumonia broke out among them, and two having been killed, showed the disease unmistakably. Sixty-seven of the calves have been killed and burned, and the farms upon which they were brought will be quarantined 90 days.



## CORRESPONDENCE.

Correspondents are alone responsible for their opinions.

## Notes Along the New Coast Railway Survey.

EDITORS PRESS:—During a five-weeks' survey (between Soledad and San Luis Obispo) I had a good opportunity of gaining considerable knowledge as to both the agricultural and geological aspect of this beautiful section of the State. Few people in our large cities, perhaps, trouble themselves about the advantages lying outside the municipal boundary. There they sit and toil year after year in the same monotonous fashion, their energies receiving no stimulus from change of occupation or the fairy zephyrs and waving foliage which make the rural valleys a second Eden. I wish to have it understood I am not an enthusiast, but when nature overflows the cup of enjoyment then it is time to confess her benefits.

Leaving Soledad, you find yourself winding between two low ranges of sandhills with intervening canyons, where, shut out as it were from the worry of the world, some peaceful rancher brings up in sweetness and simplicity his healthy, generous family—content and happy with what nature provides. The Salinas river runs between, now skirting one range and then the other. Along its banks grow various kinds of wild shrubs, and now and then some stately, moss-mantled oak looks down, as it were, in silent contemplation of the peaceful scene.

The new railroad which runs through this region has increased the value of real estate considerably, and we hope that in a few years those who own extensive tracts of fine, arable land will be willing to part with some of it at fair prices; so that where before the coyote and mountain lion held sway we may find smiling farmsteads with their attendant fruit gardens.

Wheat-raising is now the staple industry. Farmers all along the valley are jubilant over the rapidity with which the S. P. Co. pushed forward the work whereby inside of four months the road was completed between Soledad and Crocker City, a point on the Salinas river about seven miles south of Paso de Robles. Everything seems instinct with sudden energy; new towns are growing rapidly, and the settlers who came here only last spring bid fair to rival their elder neighbors. The latter look on with surprise at the systematic way in which the new-comers set about making their farmsteads.

Those who happen to find themselves in this section ought to pay a visit to San Miguel, with its crumbling walls and ancient church towering in tottering dignity over all—suggesting to a person of a serious turn how in centuries to come men may perchance look upon the works of the present period with the same feeling of mingled curiosity and respect.

Water is plentiful and can be had by boring at from 10 to 60 or 70 feet; but there is hardly a square mile which has not its natural surface-spring beneath the shade of some venerable willow. The hills, as well as the low-lying districts, are clothed with oaks, and the whole landscape somewhat resembles a well-kept English park. Fruit of almost every sort may be raised with very little trouble, and I have eaten grapes from two-year-old vines which would satisfy the palate of the nicest critic. A stranger would perhaps feel puzzled to tell how the immense herds of cattle and hogs which range over the valley manage to find sustenance, but such are the properties of the soil that, dry and withered as the grass appears, cattle and horses that never get anything else to eat, either summer or winter, look as if they had been fed up for sale. As for the hog, the acorns provide him with a dainty meal. He goes around indifferent to place or ownership, bearing a brand like cattle or horses, and nowhere have I seen finer specimens or in greater numbers. I asked an extensive rancher one day about how many hogs he had, and he answered, with a smile, "Their name is Legion."

Paso de Robles is too important a place of interest to be passed over, as the healing qualities of its hot sulphur springs are so widely known. Situated in a lovely valley between the river and a prominent sand range thickly covered with spreading oaks, it affords amusement and recreation to both strong and delicate. Here may be seen the consumptive, the blind and the paralytic, side by side with their attendants, enjoying the cooling breeze beneath the piazza of some vine-decked cottage, and rapid and numerous are the wonderful cures wrought at this natural health resort. The water is of a brackish-yellow color, and smacks strongly of sulphur, but with a pleasant after-taste. It virtually boils up in a huge caldron, covering itself with a volume of steam which at a distance looks like a cloud. Scattered around may be seen the crutches thrown away by thankful people rescued from the jaws of miserable and deadly afflictions.

The mineral wealth of the country is not yet developed. Silver exists to a known extent in the Coast Ranges, and coal and copper indications are abundant. The petrifying properties of the soil are remarkable. I have seen bones of both men and animals dug up in a complete state of petrification, and for speci-

mens of many kinds of pebbles and flint this district challenges the world. Mineralogists would be amply repaid for a few weeks' sojourn along the banks of the Salinas.

Alkali exists, but not in quantities highly detrimental to human or animal nature; yet parties would do well to be cautious as to the quantity of water used before paying the penalty of nausea and headache. Existence is nowhere more prolonged, or with so little consequent inconvenience. I have seen old men with the hoar of a hundred winters on their heads riding around seemingly hale and hearty. I noticed that nearly every one, young and old, was on horseback when occasion required. Now a young girl of 15 flew past, and anon a staid old rancher, with his favorite mustang, went by at a well-practiced amble. I must say the lower orders of animal nature seem well represented—the coyote howls all night long, while squirrels, gophers, toads, lizards, sand-owls and snakes burrow up the earth into seeming business-like occupancy; but on the whole, after having traveled considerably over the New World and the Old, I declare unhesitatingly that this region deserves great attention and every benefit which a State Legislature can afford. WM. MULCAHY.

S. F., Nov. 6, 1886.

## Oak Moths and Gophers.

EDITORS PRESS:—The other day, as I was walking through the woodland on our ranch, I saw countless small, light-colored moths hovering about the oak trees. I wonder if any of your readers have noticed the same, and if they can tell me whether they are the dreaded codlin moth? If so, what is to be done? Must we cut down all the grand, noble old oaks that add so much to the beauty of the place, as they stand with their massive branches crossed with garlands of gray moss? Is it possible that instinct teaches the moths they will find shelter in the never-failing foliage of the oak till our choice and luscious fruits are ready for them to spoil?

We have had bands on 27 bearing apple trees and have caught at least 1000 worms. Our apples did not suffer as much as in some places, but still many a large Bellflower was ruined for market.

We have been quite successful trapping gophers; over 500 have been trapped in 15 months. I hope some kind reader will take time from his or her busy life to tell me if it is the codlin moth that swarms about the oaks. C.

Kilfasset Ranch, Santa Cruz.

[The moth on the oaks is not the codlin moth. It is probably *Phryganidea Californica*, which is unusually abundant this year. Its larvae are caterpillars with phenomenally large red heads which live upon the foliage of the oak. How do you trap the gophers?—EDS. PRESS.]

## Santa Barbara Notes.

EDITORS PRESS:—I will attempt to give you a few words about the result of the season and some other matters.

Orchard fruits with the exception of quinces have proved nearer a failure than any other season since the trees began to bear. We have had very few apples of fair quality and no pears to speak of.

English walnuts, on the same list, were never before so near a failure.

Hay is plenty, of fair quality. Barley and flax are good. Corn is fine and a larger crop than for several years.

Beans are more than medium and the farmers have improved the last few days of dry weather in thrashing Lima beans, which are of good quality. Potatoes, squashes and other vegetables have done well.

Altogether we have fair crops and no reasonable excuse for grumbling. No rain has come yet to wet anything, but autumn is here, so we may expect rain in the near future.

The outlook for a railroad is encouraging, and our people are feeling well over the prospect of having a way opened for marketing our products without sending them all to San Francisco.

Our county fair was a success financially and otherwise. The display of fruits was better than we expected this year. Farm products made a good show and were tastefully arranged. There were lots of big squashes, from 270 pounds down to medium size. So, with the fine cattle and horses, with the smaller animals and poultry, we had a very creditable display.

Santa Barbara county can yet accommodate many with good land for homes, which can be made as comfortable and pleasant as can be made anywhere in the United States. Our little valley, the most beautiful and pleasant of all, can afford homes for many more than we have, but our lands are valuable and will be appreciated by those who wish a pleasant climate and most fertile soil.

Of the western part of our county much is yet used for pasture. There are cattle, horses and sheep on a thousand hills, with a large share of the valleys between. The time must soon come when our large land-holders must consent to sell to those wanting homes.

I made Lompoc a visit in July, so had a fair chance to see where thousands of pleasant

homes could be made. Soon after leaving Goleta for Gaviota the country becomes a narrow stretch of rolling hills between the ocean and mountains. Every little distance there are fine streams of clear, beautiful water crossing the road on their way to the ocean. The streams are beautifully wooded with magnificent sycamore and live-oak timber. The day cannot be far distant when smiling homes with fruit and flowers will take the place now given to sheep and cattle.

There is now a fine road graded through Gaviota pass over which it is a pleasure to travel. From the pass to Lompoc the country is more or less hilly, but the soil very good and fairly watered with springs and living streams.

Lompoc is a beautiful valley, fertile soil which will produce finest fruits, vegetables and grains. The people, too, are generous, temperate and industrious.

From Lompoc to Los Alamos valley the country is rather rough, but soil good, much of which can be used to better advantage than stock ranges. Los Alamos valley was a vast wheat field. The valley is beautifully timbered with white and evergreen oaks which give it a fine park-like appearance.

From Los Alamos to the Santa Inez river the country is more or less hilly, timbered with a variety of oaks. The soil is good, and can be made to produce the best grains and fruits.

At Ballard, Mr. A. M. Boyd has an orchard of several thousand olive trees which look promising indeed. Another and larger olive grove at the river belonging to Mr. Hayne shows that the olive will grow and fruit abundantly.

Carpinteria.

O. N. CADWELL.

## Percheron Horse-Breeders' Meeting.

EDITORS PRESS:—I beg to advise you that the annual meeting of the stockholders and directors of the American Percheron Horse-breeders' Association will be held at the Sherman house, Chicago, on Wednesday, November 17th, at 2 p. m.

While the important business of electing officers will not take place until next year, it is desirable that a large attendance of the members be present.

The past year has been a notable one in the history of the association; never since its organization in 1876 has there been such a happy combination of circumstances as during the past year.

All the prominent breeders in the United States and Canada have identified themselves with our interests, and are members of the association. We have received assurances of the hearty support and co-operation of the French Government. Nearly all of the various State Boards of Agriculture have extended their encouragement and support by making separate classifications for registered Percherons; the number of entries are treble what they have ever before been in one year, and the complete unanimity of action which characterizes the members of the association, as evinced by the unqualified success of the great Percheron show held at Chicago, must be a source of great gratification, not only to the officers but to each individual member of the association.

An interchange of ideas among all the members is at all times useful in promoting the interests of and preserving unanimity of action in any association, therefore all breeders are earnestly requested to be present at this meeting. S. D. THOMPSON, Sec'y.

Wayne, Ill.

## SHEEP AND WOOL.

## The Coyote Question.

A correspondent of the Ukiah Press, writing from Covelo, pictures the duty of Mendocino county on the coyote bounty question very vividly. We quote as follows:

It is urged as an argument against the scalp ordinance that it would bankrupt the county. This would be good and sufficient if it were true. They say we tried it for five months and there were 42 coyotes killed, which cost the county \$630. Now, if any one will take the trouble to figure a little on that, he will discover that those 42 coyotes cost about three-fourths of one per cent of the taxable property of the county. Does this look like bankruptcy? Had the law remained in force, it is probable that there would have been twice that number killed within the next five months. If so, so much the better, for we understood the object of the ordinance to be the extermination of these pests. A tax of five cents on the \$100 would yield a revenue of about \$4000, which would be more than enough to pay for all the coyotes that would or could be caught during any one year. Would this "bankrupt the county"?

Another argument they use is this. They say: "It is no use. The coyotes increase faster than we are killing them." This is discouraging, indeed, if true, and it is probably true during their breeding season, which, thanks to the nature of the brutes, lasts only a month or two; but we think we could gain on them during the rest of the year.

There is in Round Valley township more than 70,000 sheep, and \$9 of every \$10 that comes here comes through sheep. The owners of them live here, and whatever profit there is in the

business is invested here and becomes taxable property of the county. And here let me say, and I do not think any one who is familiar with the facts will dispute it, that sheep and sheep ranges come nearer being assessed up to their full value than any other class of property in this county. And suppose they are driven out of the business, which they certainly will be, what will or can take the place of the sheep? Nothing, sir, simply nothing. The land is of no value for agricultural purposes, and if it was there is no market. Looked at in the light of economy, it is certainly to the interest of the people of this county to get rid of anything that destroys the taxable property of the county.

## POULTRY YARD.

## The Egg Trade of San Francisco.

A reporter of the Call recently interviewed several egg merchants and obtained a number of statements which will be read with interest by many of our readers.

"People used to think that eggs were eggs, but now there are almost as many different qualities of them recognized by the trade as in clothing or any other article of merchandise." This bit of information was given a Call reporter by a Front-street produce commission merchant, who was superintending the storing away of a carload of eggs that had just arrived from the East.

"We have eggs here," continued he, "ranging in price from 10 cents to 35 cents a dozen. They come in cases from various parts of the State and from Iowa, Nebraska and other Eastern points. Most eggs are now shipped in the paste-board compartment cases, containing 30 dozen. Every egg when it reaches a commission house is subjected to the inspection of an egg-selecting expert. He grades and separates them into different qualities, from the black, rotten ones, that have to be thrown away, to the prime, sound eggs. It is curious how proficient and quick these experts become with training and experience. The most ordinary method of examining eggs is to pass them before the flame of a candle, but there are men who can tell almost infallibly by the appearance and feeling of an egg as to its condition. They explain that there is the same difference in the looks and feeling of a sound and a stale egg as there is in that of a live and dead body. In order, however, to make the finer distinctions it is necessary to inspect the egg directly before a strong light. Come into our selecting-room and I will show you the process."

The merchant then ushered the reporter into a darkened room, the walls of which were painted black. On a stool before a lighted candle was seated the selecting expert. Around him were conveniently arranged various cases for the different grades. He was engaged in running the eggs, three at a time, through his fingers in front of the flame, and then dropping them into one and another of the cases. This was done with remarkable dexterity and equaling in rapidity the feats of a juggler in a ball-tossing act. Although the eggs were rattled around with seeming carelessness, not one of them was broken.

"There is an egg," said the merchant, "that shows no light through it. It is hopelessly bad and must be thrown away. There are some eggs that show vacant places of various sizes inside the shells, indicating the different stages of decomposition that they have reached. The eggs in that box are sound and prime, perfection itself, and are worth 35 cents a dozen. They are used for the concoction of fancy drinks, and for other purposes for which only the best eggs can be used. Out of almost every case that comes in, every grade of eggs can be selected. In the 30 dozen often four and five dozen are found to be entirely worthless. It is remarkable how bad some eggs are that are nevertheless sold, and no doubt consumed in some manner. Eggs that almost smell from their shells, bring eight and ten cents a dozen. The Chinese are the most extensive consumers of stale eggs, and they seem to prefer them to good eggs. They acquire a taste for them, something like the taste that is acquired for certain kinds of cheese and other malodorous articles. I lost a sale with a Chinaman a few months ago because I had no eggs that I would sell for less than 10 cents a dozen. Much of the less questionable eggs are used for baking purposes, where their savor can almost wholly be disguised. In the hot months of the year the only choice eggs that come to the San Francisco market come from the cool, fog-covered counties along the coast. The eggs from the hot interior counties are then little better than the Eastern eggs."

"All imported eggs are called Eastern eggs, but they seldom come from any farther east than Iowa, which State sends by far the most to this market. Large quantities are also sent from Nebraska. One carload came through in good condition from Canada last winter, which was the first and only shipment over made from that point. A carload also arrived recently from Minnesota."

"Men in the egg business can see no reason why all the eggs needed for this market should not be produced in this State. The San Francisco market is the only one that uses Eastern eggs. All interior points produce enough for their own consumption, and send a limited quantity to this market besides. The cost of



bringing eggs from Nebraska is about two cents a dozen, and from Iowa two and a half cents, so that the producers here always have this saving of freight charges in their favor.

"Eggs are usually shipped from the East in carload lots, 400 cases to the carload. In hot weather refrigerator cars are used, and they are rushed through as quickly as possible, often with the fast passenger trains. Ice is put in the cars at the point of starting and again at Ogden.

"In the cool months of the early spring, from February to May, eggs are produced in enormous quantities so as to flood the market everywhere. Commission merchants then are compelled to store them away for use in the season when there is a scarcity. By being pickled in liquid lime and other processes they are preserved several months. One firm in this city has now 35,000 dozen eggs in pickle. The eggs now being imported from the East are storage eggs, and are coming through in very good condition. They do not, of course, compare with fresh eggs, and range from 10 to 15 cents per dozen lower than the best California eggs.

"Last year about 1,250,000 dozen eggs were brought to the San Francisco market from Eastern points. Adding the California eggs, we have a grand total of 25,000,000 dozen eggs consumed here. This vast quantity of eggs would weigh nearly 2000 tons, and if they were loaded on cars of the usual size, the train would be one mile and a quarter long and extend from the ferries up Market street nearly to the Odd Fellows' building. If this immense train, with engines enough to move it, could pass in review before a spectator, it would give him a startling idea of the amount of eggs consumed every year in a city the size of San Francisco."

## FLORICULTURE.

### Let Flower-growers Organize.

EDITORS PRESS:—Having just read your editorial under the above heading in the PRESS of Oct. 30th, I hasten to express the hope that your suggestions may be carried out, and that societies may be formed and correspondence carried on in the interests of this attractive industry. Let the work not be carried on by florists, altogether nor in their interest, but let the object be rather to beautify the homes, to develop the love of flowers in the households.

Let the object be to awaken in the minds of stay-at-home housekeepers and their daughters a desire to thus add to the attractions of their homes, and at the same time give themselves recreation and pleasure, by giving touches of sentiment and refinement to the homely duties of every-day toil. There are those who declare that they must have a few flowers, and to this end struggle with poor locations, poorer soil, no water, little or no help, and but little spare time, to whom a few wise suggestions from experienced cultivators would be of great advantage.

Only those who have tried the experiment can know what a delight a bunch of fragrant, bright, sweet peas, or a honeysuckle at the back door, is. What a help a graceful fern or rose-bush is under the kitchen window, or how it rests the body by cheering the mind to look out upon a gay geranium from the work-table. There should not be a window in a house that does not look out upon flowers, nor a door which does not have its fragrant, clinging vines.

Flowers when cultivated by one's own hands become friends; they are companions, always ministering to the delights of the mind and educating the heart to gentleness by their subtle influence.

It is not necessary to make the cultivation of flowers a very laborious affair, nor would it be desirable in a home. Simple methods are best, and would produce a beautiful, attractive and satisfactory result if a little care be used in arrangement of color, growth, etc.

Yes, let us have the societies by all means, although we cannot all become members; but we can all profit by interchange of ideas, results of each other's experience, successes or failures; and nowhere can this plan and its effects be better disseminated than through our RURAL PRESS, which so generously offers its columns to our use.

So, lovers of flowers, let us begin and have a meeting—a protracted meeting—continuing on and on until every home in this fair land is beautified and enlivened by the presence of flowers.

Already I have two points to discuss. Last year I freely fertilized my fuchsia-bed and the plants nearly died after it, and have never well recovered. Should fuchsias never be fertilized? And when I trim the tops off of rosebushes they die down gradually to the root, and then other branches begin to do likewise, and the bush never does well again. Some rosebushes grow so tall. What is to be done? And so I might go on asking for information *ad infinitum* which could be given by one and another, and thus helping hands be reached out to anxious workers in this beautiful line of labor and recreation.

HELEN M. CONANT.

Santa Cruz, Nov. 1st.

## HORTICULTURE.

### The Apple in Southern California.

At the last meeting of the Los Angeles County Pomological Society a paper was read by Milton Thomas, of Los Angeles, of which we publish the greater part, as follows:

The apple is grown by the nurseryman, either by budding or grafting, planted in the nursery six inches apart, in rows three feet apart, and when one year old is from four to six feet high, and at that age should be planted in the orchard. After planting in the orchard the trees should be all cut back to a uniform height of three and a half feet. Then keep all the buds and sprouts rubbed off below two feet, leaving branches growing on every side, and when two years old cut back two-thirds of the last season's growth, and at such distance from the trunk that the ends of them will form a pyramid, and all pruning done afterward from year to year will become easy to any one who has attended to these rules.

The orchardist must keep the tree so thinned out or cut back as to admit light and air to preserve the vigor and symmetry of the tree. The central and upright branches will require to be cut back most. This general plan should be followed from year to year, pruning superfluous branches out or cutting back, as your judgment may deem best, remembering there is very little danger of pruning too much. If you want your fruit better and larger, prune your trees more than the above indicates. The apple will grow on the most of soils, but in California a strong, rich soil is the best. It will grow on a sandy soil and produce good fruit, but a deep, rich soil is preferable. Cold, wet soil, where the water is near the surface, is not suitable for the apple. As to the distance apple trees should be planted, 25 to 30 feet apart is as near as they can be planted and do well. In this country apple trees are usually planted too near together. The orchardist will get more apples to the acre 25 to 30 feet apart than he will 12 feet apart. In this connection I would impress upon those who think of planting apple trees to plow deep, 8 to 12 inches, and under no circumstances to sow barley or any small grain or alfalfa among your trees. It will always pay to manure your apple trees, as well as any other tree. Now, as to cultivation, cultivate thoroughly and keep your soil well pulverized and all weeds destroyed; in other words, keep the orchard entirely free from weeds, and never irrigate your apple or any other deciduous fruit tree in ordinary soils. There is no question in my mind but that all deciduous fruits and also grapes can be successfully grown by planting in fair to good soil, plowed deep and kept thoroughly cultivated, in almost any locality in California without irrigation. Hoed crops or small fruits can be planted between the trees in the orchard six feet away from the trees, for the first six or eight years.

Now, I would call the attention of orchardists to

#### Thinning Out the Fruit

From their apple trees. In the most of orchards many varieties bear too heavily, and especially the White Winter pearmain. At least one-fourth should be taken off. But if this must be done, take off all the small and defective apples, and when there are too many on the branches remove them, so that the tree will not be overtaxed. Nothing contributes more to the quality of an apple, and also to size, than thinning out the fruit. When the orchardist gathers his fruit in the fall he will not have to sort them out, as he otherwise would, and he will have as much fruit and his fruit will be worth 50 per cent more than if he neglects thinning. As to gathering, there are but few that are careful enough in this respect. Every apple should be gathered by hand, placed in a basket and taken out in the same way. Ladders and step-ladders should be used in gathering apples.

No apple that falls to the ground should be put into the basket among the hand-picked ones. Apples should not be removed to the apple-house in a common wagon, but in a spring wagon or a sled. Then they should be put in as cool a place as is possible to provide, for storage. Now as to keeping them: The best apple-house should be built with double walls, 12 inches apart, and this space should be filled and packed well with straw. Then there should be a double roof, 12 inches apart, on the same general plan as the sides. Then double doors, and use every precaution to keep the house cool as possible. Then place the apples on shelves or in apple boxes. Have ventilators to use at night. There is another important thing relative to keeping apples which ought to be known—that winter apples should be gathered as soon as they are done growing, not ripe, at least a month before they are gathered, in ordinary years, in this country.

Apples gathered from the 20th of September to the 10th of October are firm and hard and will keep well if put in a cool place. In marketing apples let fruit of a uniform size be put in tasty packages or boxes, and made as attractive as possible. It is necessary that apples should be assorted, the large from the small, the defective from the smooth, and the hard, firm ones from those which are too ripe. Skillful marketers will discover that apples of two sizes will bring better prices when separated than when left together. A few small apples in a box may prevent the sale of the

whole box. Now I will name a list of apples which have been tested most thoroughly, and are good to best, and are good bearers and regular, except such years as this is, which is certainly an off year. At least I have not known such a year for apples in the last 16. In fact, I have not known such a year in California in the last 25 years, as the apple crop, I am informed, is short all over the State. Well, now, as to the

#### Varieties.

I will commence at summer apples, naming the best of summer, then fall and winter apples. Red Astrachan and Early Harvest; these two varieties will last from four to six weeks. Then early fall and fall apples are Gravenstein, Skinner's pippin, Fall pippin, R. I. Greening, Yellow Bellflower, Smith's Cider, Jonathan and Ben Davis. For winter apples, White Winter pearmain, Yellow Newtown pippin, and in some localities, the Baldwin. For market, Red Astrachan, Gravenstein, R. I. Greening, Bellflower, Jonathan, Ben Davis, W. W. pearmain and Yellow Newtown pippin. It would be worse than folly to have any more varieties. This list gives a succession of fruit from July until March. Now I was requested to give the names of the best 25 varieties of apples. I could give 25 or 50 best varieties, but I will not do any such thing, for it is not to the interest of any one to spoil or waste his land in planting out so many varieties of apples.

I have tested some 150 varieties, hoping to find some one which would supplant some of our old, well-known varieties. Have sent East to various States, and especially to the Southern States, hoping I could find an apple that would keep until April or May. After waiting for years for all to bear, I must admit that I have not succeeded in finding any apple that is superior to the varieties we have. The fact is that many varieties that are winter varieties East are fall apples here. I am well persuaded that no one wants to plant 25 or 50 varieties of apples after they know that it is useless.

One word more as to the profit or pay in an apple orchard. Apples can be produced a greater distance from market than many other fruits. An apple orchard planted 25 feet apart contains to the acre 69 trees. Now these trees, well taken care of at the age of six years, should produce 50 pounds to each tree, and when eight years old 100 pounds per tree, and at ten years 150 pounds. Now every year after that for a long time to come the tree will yield more apples each year. I have gathered 300 pounds from trees ten years old. A tree ten years old should pay at least \$1 to the tree. Prices of apples being low, I am purposely making the profits smaller than I think they should be. I do not approve of exaggerated reports going out to the public in regard to the profits of fruit-raising. I think it is better to underestimate. The facts are good enough. Producing fruit will pay at least double what ordinary farming will, providing the orchardist will plant very few varieties and plant enough of each to make it an object for the buyer to look after the fruit. In closing this essay on the apple, I would suggest to any one who intends to plant an orchard not to plant any one kind of fruit, but to find out just what kind of fruit his land is adapted to, that is, which will do the best, and bring the best returns. If he concludes that his land will pay best in apples, pears, apricots and peaches, then plant only those kinds, and plant only Bartlett pears, as there is always a market for them, and four or five varieties of peaches are enough, and the same with all kinds of fruits. Plant only a very few of the best varieties and take the very best care of them, and you will be well repaid. And aside from profit in fruit he is helping to develop the country, to enhance the value of his land and his neighbor's, and make his home more attractive, and have spread on his table the best that the land affords—good enough for a king.

#### Information Wanted.

EDITORS PRESS:—Will some of your readers please tell me what is the matter with my peach trees? They are of the Early Crawford variety, six years old, and have never borne a crop of fruit. The trees seem to be healthy and produce each year a very few fine peaches. They make but a few fruit buds, and in the spring a majority of those buds and fall off. Other varieties—the Foster and Salway—do well on the same soil and location.

I have some Moorpark apricot trees. Can they be successfully grafted to any other variety of fruit?

J. A. McCUNE.

Watsonville.

THE ADVANTAGES OF CYPRESS FOR LUMBER.—The cypress is soft, more closely resembling the better qualities of the white pine. It is easily worked and commands a high price in the market, merely because of its value and superiority. It grows in clusters on low, swampy grounds subject to overflows. On account of its aquatic life it seems to endure exposure to the weather. Cypress roofs and sidewalks in New Orleans are a century old. Cypress is usually cut in low water, and floated out in high water. The Northern lumber companies are rapidly erecting mills and putting them in order in certain sections of Louisiana and Mississippi. From present appearances the lumber interests in these States will soon exceed the cotton interest.

## FORESTRY.

### Forestry Plank in a Political Platform.

There is seldom sounder timber put into a political platform than the forestry plank in a platform recently adopted in Los Angeles county. We should not be surprised if it were stated that the "plank" was prepared by Abbot Kinney, of that county, whose interest in forestry is well known to our readers. However that may be, the subject has attracted attention at the East, as may be seen by the following excellent paragraph from the Philadelphia Weekly Press:

#### To Save the Streams.

The average political platform does not contain a great amount of edifying doctrine on topics relating to rural economy. But it was a sensible member of the Committee on Resolutions who drafted the following deliverance at a recent Democratic Convention in Los Angeles county, California, and the best work done by the delegates that day was its unanimous adoption:

The life of Southern California lies in its climate and streams. These depend on the snows and rainfall in the mountains which percolate into the soil and rocks to appear again as springs or wells in the valley. The fires and destruction in the brush and forests of our mountains we believe are endangering our water rights. If this waste and destruction go on our springs will dry up and destructive torrents similar to those on the desert which wash away 50 miles of railroad track at a time will take their place. We therefore ask the Legislature to strengthen the State Board of Forestry so that these dangers may be averted.

In a State where the mountains are unusually lofty, rising sharply to the line of a great snowfall, the danger from torrents is more threatening than in lands of more uniform surface, and in places where agriculture is directly dependent on irrigation the need of an equable flow of water in the streams throughout the dry season is greater than in such need elsewhere. But in a broad way agriculture everywhere suffers where fire and floods and reckless logging strip bare the highlands where the streams head.

It is the business of the Government, State and National, to conserve these forest areas. Private owners cannot be expected to administer their property in the interest of the public. But the State can provide for, or at least encourage, the establishment of adequate woodland reservations, and private owners in many cases would find it to their personal advantage to hold their lands in permanent forest for successive crops, as forest products grow more valuable.

## THE GARDEN.

### Mole Drains.

EDITORS PRESS:—Mr. E. Leedham, of Arroyo Grande, has invented a new mode of irrigation and drainage of his garden. The idea was suggested by gopher holes. He noticed that wherever water gets into gopher holes, plants growing in the immediate vicinity do better.

He takes a plow-beam with handles; runs down through the beam a bar of iron  $3\frac{1}{2}$  inches in width by five-eighths of an inch in thickness. This extends down from 12 to 18 inches, to be raised or lowered at pleasure by bolts running through both beam and bar. To the lower end of the bar is fastened, by a link, a mole made of cast iron, well polished, about 15 inches in length and tapering from  $3\frac{1}{2}$  inches at the large and rear end to a point at the fore end where fastened to the link.

He prepares the ground as follows: He digs down with a spade to proper depth, inserts bar and mole, hitches two horses and runs the mole in any direction desired; say up and down garden 6 to 8 feet apart. The mole dragging after the bar, opening the earth, presses the loose soil upward into the track of the bar above the mole, leaving a good open hole for irrigation or drainage purposes.

This is found to be of great practical advantage in the growing of such crops as strawberries, onions and the like. The ground thus treated does not sun-dry and crack, as when in irrigation the water is allowed to run on the surface. It renders unnecessary the cultivation usually resorted to after irrigation, as the drain is well covered and not subject to the ordinary influences of the sun at the surface.

Mr. Leedham has no patent on this invention and freely gives it to the world. We think it of importance and well worthy of trial. A cheap mole for trial may be made of wood and polished; but of course for long use the cast-iron will work much better.

San Luis Obispo Co.

[Mole drains have been used for years beyond memory and serve a good purpose. The trouble is that they are not durable, but serve a very good temporary purpose. They do not work equally well in all soils.—EDS. PRESS.]



## PATRONS OF HUSBANDRY.

Correspondence on Grange principles and work and reports of transactions of subordinate Granges are respectfully solicited for this department.

## Rural Life and Rural Scenes.

[Read at Literary Meeting of Sacramento Grange by Charles E. Mack, Jr., and sent by instruction of the Grange for publication in the RURAL PRESS.]

Connected with whatever can improve the mind or charm the fancy, rural scenes and rural occupations possess an almost endless source of rational amusement. From the volume of unsullied nature the poet draws his sweetest harmony and from her palette the painter extracts his richest tints. Nothing seems to harmonize more with the first principles of our being than a love for rural retirement. That within the barred and massive gate of our hearts' sacred precinct there is still inherent a lingering love for unsophisticated nature, is proved continually. I ask is there one person who does not love the country? Were my voice pitched in accents like the thunder's peal on high, still I am sure no mortal man within its scope would send back on the faltering breeze a responsive "yes." Who confined in the cities' narrow streets does not long for its cheering scenes, its cooling breeze and its boundless prospect? Many a weary pilgrim whose sands of life are fast ebbing away cannot erase from his memory sweet reminiscences of it in connection with his childhood's days, when he bounded with lithe limbs over its green fields and found health in its pure air. A phantasmal vision slowly rises like living mist before him, and in it he can see the dear old home with its walls of unshorn mountain fir, with its mossy pine-slatted roof, and he can recall vividly to his mind (not yet withered by relentless age) all the happy associations connected with it. He sees the very spot beneath an oak tree's interlacing where he sported with his playmates nearly three-score years ago; the ferny, ever-flowing brook whose ceaseless lullaby fell upon his youthful ears as sweetly as the mimic din of old ocean's roar in every pink-lipped shell; and the rustic schoolhouse, where the buzzing fly and strumming bee at torrid noon-time used to hold high carnival. I say, Mr. President, there is no avocation on earth more calculated to improve and elevate the condition of man to a higher altitude in the scale of excellence than a rural life and rural scenes. He sees above his head a leafy giant heaving its saffron crown in haughty mien, and bowing to and fro in scorn at him by the fitful breeze that whistles through its branches; the little flower, with its sweet face nestled in its soft bed of emerald green, and making the ozoniferous air sweeter with its kiss; and the almost boundless, floor-like valley, dotted here and there by the rude habitation of a young man just entering the arena of business life, or, farther on, the palatial farmhouse of his senior, whose harvests have been many and bountiful; while, in the misty distance, he sees a somber pile, surrounded apparently with a halo of a livelier light. Upon closer inspection, he finds this undefined something an undecorated yet substantial hall. This is the farmer's shrine. There he goes at least twice a month, with his loving wife and chicks, all dressed in their best bib and tucker, to meet his neighbors in friendly communion and to exchange those trivial yet sweet little courtesies of life which go so far toward lightening the burdens with which we are so heavily laden on our journey through the valley of life. And, be it said, these little courtesies always flow as spontaneously from the open depths of every true Granger's heart, as many a pretty purling stream in yonder eastern snow-capped mountains gently ebbs its sparkling water from its home in the heart of the hillside. This is the lighthouse which guides the young away from the rugged rocks of danger, and if they will but heed its beaming light, it will bring them safely home at last. This is the haven, deep and long, where the older Granger can anchor his beaten craft, and though it may tremble at times from the tiny waves that dash its side, yet neither whistling wind nor roaring tempest can ever reeve its little sails. The contemplation of the thousand specimens of God's handiwork to be seen in the country has the salutary effect of exercising his thoughts, purifying his heart and leading him eventually to feel keenly his own insignificance and express his gratitude to Him who so beautifully fashioned and richly ornamented this earth to feast the eye and to lead to the greater moral elevation of man. How many do we see possessing every opportunity to avail themselves of a quiet home amid such scenes, still breathing the city's stifling air amid the dusty piles of brick and mortar. They scorn rural life on account of its reported drudgery. The rustic path of life is freer of rocks and windfalls than it used to be. Poets have tuned their harps and sung unto today of "ye good olden time," yet I say, Mr. President, there never bloomed in the boasted garden of bygone years a flower as sweet and pure as the lily that broke, this very morning, its prison bars of green. The farmer's life is not what it used to be. That dreadful chasm of isolation has been bridged in part by the invention of several ingenious agents of communication. That ceaseless humdrum of yonder old farmer's life is best expressed in Gray's "Elegy in a Country Churchyard."

The plowman homeward plods his weary way, And leaves the world to darkness and to me. This darkness is not now great, for the modern farmer's fancy flows free and fair through a thousand new and pleasant channels. Wonder ye, why this wondrous change? I will tell you all. It can be attributed to a star. One morning in August, 1867, the illustrious Wm. Saunders, around whose name fame has twined a wreath of immortality, was abroad long before old sun had dipped his brush in vermilion and touched his canvas, stretched on a gigantic easel in the Eastern sky, and gazing into the canopy of heaven he saw a star of unusual brightness trying to insinuate its light into a nimbus cloud which hovered persistently around it. On December 4, 1867, he named this gem of the firmament the Grange. He placed his star in the galaxy of cardinal virtues. This grand constellation will shine no dimmer in a thousand years than now. I love the country with its grand expanse of verdant fields; with its freshness and its beauty; and with the conviction in my own heart of the greater freedom, the more exalted pleasure, and the happier state of health there to be enjoyed. There, crime stalks not, neither by night nor by day. There, the grim monster, Vice, walketh not, at all times ready to clutch his unsuspecting victim, and hold him to his heart until his ruin has been accomplished, and then with a devilish grin on his beastly face, with one mighty hurl, cast him over a precipice upon the jagged rocks of an unforgiving world below. Mr. President, that contentment, that happiness, that independence for which so many are seeking, and seeking in vain, through other sources, may be indeed realized in the blessed country. Within this enchanted hall there are two friends of mine whom I wish to thank in public for their kindness in pointing out to me, some time ago, a less rugged path for me to pursue, and by their united efforts I turned my wayward footsteps from their cheerless haunts, and journeyed along hand in hand with the Assistant Steward up-hill and down dale, over table lands and along the tortuous course of one dark ravine until at last we arrived at this grand Elysian field bounded by these four walls of spotless white. Upon reaching here my faithful guide gently said: "I unclasp thy hand. Brother, this endeth thy pilgrimage. Thou art at last within the blessed realms of fraternal life. May peace be thine. I must leave thee, for the soft wind gently bringeth to mine ears a distant rap from yonder mountain's terraced side. It meaneth that in that cheerless waste beyond the cold and repulsive Alps there is still one more poor wanderer who seeketh this calm and sunny Italy."

I am a new member of this Grange. As yet I have touched hands with not a dozen of my comrades, yet I know full well there burns brightly in every breast where the love for the Grange is not a feeble flame almost snuffed out a fire of fraternal friendship for every new acquisition. To-day the realization is more apparent to me than ever before that I am truly a link in this magic chain of union—a morsel of sympathizing clay in this the grandest federation of "nature's noblemen" beneath God's sun. We should be bound together still closer and try just a little more to smooth the paths of those less fortunate than ourselves. A Granger's life is like a flower in spring—born to die by the chilling wind of autumn.

Death's icy breath will bring a cloud of sorrow to this Grange in time to come. Who knows but that he who is brightest and gayest to-day may before our next literary day be reduced to a handful of everlasting and dreamless dust? When time brings this awful change I shall follow with bated breath and measured tread the inanimate clay of my fallen comrade to God's acre. I will go and stand on the yielding sand at the open grave, let my tear-drops trickle down my sunburned cheeks on the coffin's lid, throw in my garland of roses—my last tribute of love—and feel a certain consciousness within the recondite precincts of my own heart that when the dusty grave shall twine its spectral arms around this poor mortal dust my Granger friends will pause for a moment in their mirth and drop a silent tear for me. In conclusion, I love my country home, I glory in my country's independence, I rejoice in the prosperity of the Sacramento Grange, I take exquisite pleasure in going abroad in early spring when the white alabaster-like clouds roll past my head in serried columns in the heavens above, to dash themselves ultimately into milky hills and vales and dales before they leave my gaze, as many an incoming wave from deep old ocean's secret hold resolves itself into prismatic mist upon the fretted lace-work of every rock-bound coast. I enjoy sitting in the gloaming and watch stately evening bow her willowy form in the crescent, in the golden West, and kiss with her cold gray lips the last few crimson tresses of departing day. I love to go afield when the air laden with an incense ten thousand times sweeter than Lubin's sweetest balm fans my fevered cheek; when mother earth is sunshined with a texture wondrously woven out of sunshine and flowers. When on such pilgrimages I always let my thoughts wander back in retrospect to the springtimes of one, two, three years ago, when these self-same scenes were no less enjoyable than now; and when I find a modest buttercup with upturned face gazing at me I always feel like going down in reverence on bended knee and whispering in its willing ear: "Can you tell me, little flower, will there ever be a time when rural scenes, sylvan joys, and the Grange with its hallowed memories, will be less consonant with my sensibilities than now?"

## The Display at Philadelphia.

In referring to Worthy Master Johnston taking with him specimen-products of California soil, to exhibit at National Grange in the City of Brotherly Love, the *Record-Union* says:

No man in California is more fully conversant with the products of this State than Mr. Johnston, and in his position of Master of the State Grange, California will not suffer in comparison with her sisters. Among the exhibits were noted the following:

Wm. Johnston, Richland—Persimmons, pampas grass, English walnuts, pomegranates and two varieties of large, ripe oranges plucked Nov. 2d, from trees upon his place, now laden with golden fruit.

Dwight Hollister, Courtland—Large variety of persimmons, three varieties of lemons, two varieties of oranges—all large, ripe, and beautifully colored.

Dr. N. Williams, Richland—Oranges in variety and English walnuts.

Isaac Freeman, Elk Grove—A number of monster quinces—specimens that will give the Eastern Granger some idea of the size of California fruits.

J. Bibby, Franklin—A large variety of pomegranates.

Booth & Co., of Sacramento—Dried figs in variety.

W. R. Strong & Co., Sacramento—Boxes of raisins, finer than anything of the kind ever imported from Malaga.

The Grangers' Co-operative Business Association, of Sacramento—Raisins and dried prunes in variety.

Jackson Bros., Woodland—Raisins in variety.

J. Rutter, Florin—Several boxes of raisins.

W. L. Overheiser, Stockton—Large and elegant clusters of Tokay grapes.

N. Mertes, Roseville, Placer county—Two boxes dried figs.

Weinstock & Lubin, Mayhew Farm—Green and dried fruits in variety.

The dried fruit was put up in fancy boxes covered with glass, the inner edges trimmed with colored fringed paper, making as handsome sample packages as were ever on exhibition. The citrus fruits are fine specimens, and will be particularly attractive from the fact that they ripen in no other part of the Union at this season of the year. Los Angeles will have no oranges to market until next spring.

## Sacramento Notes.

EDITORS PRESS:—The fourth Saturday was set apart by the Sacramento Grange for holding their literary exercises. Bro. Wm. Sims acted as chairman of the day, and Sister Frankie Stevens as secretary. The program was as follows: Song, Grange, "Onward Marching;" reading, Joseph Holmes, "Then and Now;" declamation, Carrie Rich, "On the Shores of Tennessee;" instrumental solo, Gussie Wilcox; reading, Alice Greenlaw, "Sarah Jane Silvester;" essay, C. E. Mack, Jr., "Rural Life, Rural Scenes and the Grange;" song, Gussie Wilcox, "White Wings;" remarks, O. S. Flint, "Emigration;" recitation, Katie Aiken, "Brown They Say;" Matron's offering, Frankie Stevens. The program was well rendered. There was a good attendance. The Grange requested the secretary to forward the essay of C. E. Mack, Jr., to the RURAL PRESS and Patron for publication.

The Pomona Grange, No. 2, met at Grangers' hall, October 31st. The day being rainy and few out, the election of officers for the ensuing year was postponed to Thursday, Nov. 18th.

Farmers are busy sowing their summer-fallow. Wine grapes are nearly all picked. A few shipping grapes still sent out. Fall work is being pushed. Orange and lemon trees are bending with their weight—have to be propped—and the fruit is coloring fast.

Citrus fair is being worked up in the county by committees, with the expectation of showing Eastern friends our Central California fruit. G. T. E.

## The National Grange.

The National Grange, P. of H., was to convene at Philadelphia, in 20th annual session, on Wednesday of this week.

A public reception to the National Grange was to be given by State, City and Grange officials on Thursday; and the sixth degree of the Order conferred by the National Grange on Friday, at 2 o'clock, and again at 7.30 o'clock in the evening, in Musical Fund hall. All fifth degree members of the Order in good standing are entitled to this degree upon the payment of the fee of \$1; and all fourth degree members in good standing who brought with them a certificate of good standing in their subordinate Granges became eligible to and could receive the sixth degree at this meeting. They would first be obligated in the fifth degree at the National Grange, and then receive the sixth degree in full form.

Extensive arrangements for the benefit of visiting Patrons had been made as to excursion tickets over the main line and branches of the Penn. R. R., and respecting hotel accommodations; and we trust all is going on pleasantly and to good purpose.

THE "PATRON'S" MATRON'S DEPARTMENT.—The home department quill of the *Patron*, recently laid down by Sister Flora M. Kimball, the talented lady who has so long wielded it, has been taken up by Misses Becca, Adelaide and Reis Samson, who have written many very delightful sketches for the *Young Folks' Column* of the RURAL PRESS. The new group of editresses are able and energetic, and we expect they will attain very gratifying success.

## Personal.

Bro. C. J. Cressey, of San Jose, was kind enough to give us a call the other day. He has just returned from his 10,000-acre stock ranch in San Luis Obispo Co., where he has spent three months in fence-building and otherwise improving his property. He seems very enthusiastic over the future of that part of the State, says real estate is rising rapidly in value, and gave some instances where parties who had recently made purchases had refused an advance of nearly one-half of the purchase money. He had himself recently given \$15 per acre for a large piece of land that (with others) he had sold for \$7. Mr. Cressey is one of the real solid farmers of the State, and his large property has been steadily accumulated by patient and careful attention to business.

Mr. Cressey is preparing soon to visit Brownfield, Maine, his native place, and making a tour of the Southern States, visiting Georgia, where he lived five years before the war. His young son, Willie, accompanies him, for the benefit of his health; and his daughter, Cora, who has long been at the East, is expected to return with them about two months hence.

## National Grange Telegram.

PHILADELPHIA, Nov. 10.—The National Grange of the Patrons of Husbandry met here to-day. A committee of business men of the city welcomed the delegates, tendering them an excursion and other courtesies. Governor-elect Luce, of Michigan, replied on behalf of the Grange. A rollcall showed 24 States represented. Among the delegates present are: Governor Robie, of Maine; Governor-elect Luce, of Michigan; Secretary of State Lipscomb, of South Carolina; Hon. J. J. Woodman, of Michigan; Hon. Wm. Johnston, of California; and Hon. John D. Brigham, of Ohio.

At the afternoon session Hon. Putnam Darden delivered the report of the master of the National Grange. He said: "In nearly every annual address of my predecessors, attention has been called to the existence of monopolies, and the necessity for legislation to prevent their discriminations and injustice. We have been trying resolutions and petitions long enough. Let us try a remedy which has been suggested at nearly every meeting of the National Grange. Let us with our ballots send men to the Legislatures, State and National, who will equalize and reduce taxation, restrain corporations from oppressing the people, have the finances managed in the interest of the people, keep our public domain for actual settlers, prevent gamblers from pricing our productions, and extend the same protection to farmer and manufacturer. For this great work the Grange was organized and it was not born to die, nor will it fail in the accomplishment of its purposes."

SONOMA COUNTY POMONA GRANGE, at a regular meeting held Oct. 20th,

Resolved, That the thanks of Sonoma County Pomona Grange are hereby extended to the members of the Order, and to all persons who aided in making up the county exhibit, displayed at the various fairs.

Resolved, That the thanks of this Pomona Grange are hereby tendered James M. Donahue, president of the S. F. & N. P. R. Co., and his employees, for many courtesies extended our committee on Pomona Grange exhibit.

EDEN GRANGE will have a good social celebration of Thanksgiving, in which Patrons and their families are to unite in their hall at Haywards. Members of this same Grange are in hopes of soon reviving the lapsed work of the Order at Centerville.

TEMESCAL GRANGE considered the election of Government officials, at its last meeting, with a good deal of interest, the discussion taking a wide range. "The Legislative Needs of California" will be debated on Saturday P. M., Nov. 20th.

GRANGE ANNIVERSARY DAY occurs Saturday, Dec. 4th. We recommend that each Grange, as far as possible, arrange in advance for specially appropriate services on that date.

SACRAMENTO GRANGE, at the close of the third quarter, numbered 142 members, 69 being males and 73 females.

## The Coming Orange and Lemon Crop in Italy.

A firm in Messina, Italy, write to Griffin & Skelly, of Riverside, that the orange and lemon crop of last year was much reduced by frost, but that this season's crop promises well, and if nothing unforeseen happens, shipments to the United States the coming season will again be on a heavier scale.

The firm gives these figures of shipments for Messina and Palermo, which are worth preserving for reference:

ORANGES.			
	1885-6.	1884-5.	1883-4.
Messina, bxs. ....	261,600	573,200	651,500
Palermo, " .....	237,300	404,900	685,600
Totals .....	518,900	978,100	1,237,100
LEMONS.			
	1885-6.	1884-5.	1883-4.
Messina, bxs. ....	338,800	370,800	424,200
Palermo, " .....	824,100	1,203,100	1,505,800
Totals .....	1,162,900	1,573,900	1,928,000



## AGRICULTURAL NOTES.

## CALIFORNIA.

## El Dorado.

**APPLES AND CHESTNUTS.**—Georgetown *Gazette*: Italian chestnuts are grown as high up on the Georgetown divide as John Flora's ranch near Volcanville, more than 3000 feet above the sea level. Seven years ago Mr. Flora received a quantity of Italian chestnuts from the S. F. *Bulletin* office which he planted in a box, seven of them growing. These prospered and were transplanted to larger boxes and cared for as house plants, believing that they were semi-tropical tree and not adapted to this region. The trees kept on growing until Mr. Flora decided to transplant them to his garden. There they did well, considering the two transplantings which they had undergone, and some of them bore nuts two years ago, and this fall some of the trees bore very well. The nuts are as large and perfect as those produced in their native clime, which samples brought down this week by Mr. Flora will attest. Mr. A. J. Wilton's apple orchard in the mountains north-east of Georgetown, at an altitude of about 3700 feet, has yielded a good crop of first-class apples this season, which find a ready sale in the Georgetown market. Mr. Wilton has already shipped 300 boxes to that market and has 600 more to ship.

## Mendocino.

**WILLOTS ITEMS.**—Ukiah *Press*, Nov. 5: The early rains started the grass to a fine growth, but now hard frosts bid fair to keep it down. Plowing and seeding have begun in earnest. The potato crop is gathered. It is fair, but not near so good as that of last year. The apple crop is both abundant and of fine quality.

## Merced.

**WALNUTS.**—*Argus*, Nov. 6: We have a walnut tree six years old, which gave us this year nearly 400 large, well-developed nuts. In some parts of the U. S., these nuts are known as the Madeira nuts, but we believe here in California they are generally known as the English walnuts. They are white, very large, with quite a thin shell. The tree is perfect in symmetry, and ornamental as well as productive. The soil is well adapted to its growth and productiveness.

## Napa.

**THE GRAPE CROP** of the county this season, says the *Register*, has far exceeded the expectations of growers. H. W. Crabb has already expressed 500,000 gallons of juice and has about 500 tons of grapes yet to work up. Just now the vineyardists are harvesting the second crop, which in many cases, where the vines are young, is larger than the first.

## Placer.

**ORANGES AND VEGETABLES.**—W. J. Wilson, of Newcastle, writes the *Bee*, Nov. 2: I claim to have had the first oranges this season. Ten days ago I picked oranges and notified Dr. Latham at the time. Any person passing by my place at this time can see the trees loaded with the golden fruit. They are large and fine, but we must have one year more to get our Navel trees bearing. Then look out for fine fruit. Sept. 1st I planted potatoes, string beans, peas and onions, and am now enjoying the fruits of my labors.

## Sacramento.

**NURSERY OUTLOOK.**—*Record-Union*, Nov. 8: Indications point to a more extensive planting on the part of growers, both for home gardens and orchards, than for the past 10 years. The large call for citrus trees last year has caused the nurserymen to have a large stock of oranges, lemons, etc., on hand. Oranges are now ripening in this valley and in the foothills of Placer, El Dorado and Butte counties.

**RIPE ORANGES AND OLIVES.**—*Bee*, Nov. 6: Isaac Lea, of Florin, left at the Immigration office to-day some handsome specimens of oranges and olives, grown in his orchard this season. The fruit is much earlier upon the red soil of the plains than in this city. He says his family have been eating oranges from his trees for two weeks past. The fruit he brought to town was of fine size and color.

## San Bernardino.

**CRACKED ORANGES.**—*Valley Echo*, Nov. 4: The splitting of oranges this year is not peculiar to our Navel orchards. The same trouble appears with the fruit in other sections, even to a greater degree. In Riverside and Lugonia it is not specially noticed except upon the Navel trees, but a friend from the Highlands tells us that there seedling trees will, in some instances, lose two-thirds of their crop from this cause. It must therefore be due to some peculiarity of the weather.

**MONSTER MELON.**—The *Press and Horticulturist* has been presented with a watermelon weighing 93½ pounds. It was brought in by A. W. Eames, having been raised by him on his place in Arlington. It measures 63½ inches in circumference and looks as though it would feed a large family for a week.

## Tehama.

**RED-PINE LANDS FOR LATE FRUITS.**—Henry Myers, who owns a ranch near Belle mill, about 30 miles east of Red Bluff, in the pine woods—a beautiful little valley in the mountains—brought to the *Sentinel* office six very large red apples—a sample of many bushels grown in his orchard this year. The largest measured 14½ inches the longest way around. A. J. Gooch, of San Leandro, one of the largest fruit-grow-

ers in that place, who is here visiting, called Thursday to look at these mammoth apples. He says Alameda can't produce any such, either in size or flavor. He made this further statement, that the red-pine lands in the foothills and low ranges of mountains east and west of this valley are the best lands in the State for growing apples, Bartlett pears and other kinds of late hardy fruits. Mr. Gooch lived in Tehama county many years, and knows what he is talking about.

**JACK-RABBITS.**—It is telegraphed from Red Bluff that the supervisors have decided to give 15 cents per scalp on jack-rabbits, which are terribly destructive to gardens and vineyards in that neighborhood.

## Santa Barbara.

**PROSPECTS AND PRICES.**—In anticipation of early railroad connection with the rest of the world, Santa Barbara is enjoying a rise both in real estate and farm products. The *Independent* says Lima beans have gone up from 2 cents to 2½ cents, which means \$100 more a carload for the growers; while walnuts command 10 cents as against 8 cents given before the boom—a gain to the producers of \$400 per carload.

## Santa Clara.

**PRUNES.**—San Jose *Times*, Nov. 8: From all parts of our county we receive flattering reports in regard to the prune crop. It is by far the largest ever harvested, and the quality of the fruit is equal to that of former years. The drying seems this year to have been even more satisfactory than last, and the dried fruit will be placed upon the market in a more attractive condition.

## San Mateo.

**PEANUTS.**—*Times and Gazette*, Nov. 6: Jacob Fox, gardener for Mr. Squires, near Searsville, has just taken off (or rather out) a small crop of excellent peanuts, some of which, attached to the parent plant, may be seen in this office. Mr. Squires thinks his soil adapted to peanutting, and will try on a larger scale next year.

## Tulare.

**THE ASH IN ARIZONA.**—The *Phoenix Herald* thinks it strange that more ash is not planted as a substitute for the cottonwood as a shade tree. The ash thrives well in Phoenix, is graceful in form, besides giving a perfect shade, and every effort to introduce it in the valley has been crowned with success. Those which John Shriver planted four years ago have thriven wonderfully, and are now over eight inches thick, and a tree opposite the schoolhouse corner, planted ten years ago, is now larger and gives a denser shade than the cottonwoods near by, planted at the same time. Aside from its value as an ornament to the landscape, this variety of ash furnishes timber for wagon-makers' use fully equal in quality and value to the imported variety.

**EGYPTIAN CORN.**—*Register*, Nov. 5: Off of less than 16 acres, S. D. Ayers has harvested 610 sacks, having an average weight of 125 lbs., or 4765 pounds to the acre, or about 79½ bushels per acre. This corn was planted in a young orchard; the ground was in fine condition and was cultivated once. This goes to show that good farming pays in raising Egyptian corn, as well as anything else. At the usual price in this market, \$1.25 per cwt., Mr. Ayers' crop will bring about \$60 per acre, nearly twice what he paid for his land two years ago.

## Ventura.

**STEAM PLOWING.**—*Free Press*: Persons who went out to the Dixey Thompson ranch to see the trial of L. Barnard's traction engine in plowing, were unanimous in declaring it a success. The engine draws eight 10-inch plows and travels at a speed of two or three miles an hour, but the speed can be increased to six miles an hour, and the plows to 10-inch, plowing a space 100 inches wide. Horses seldom become frightened at the engine.

**DISASTROUS HILL-FIRE.**—A fire started by headers among the foot-hills near San Buenaventura, has destroyed thousands of acres of feed. Mr. Loyd has lost probably 100 head of cattle, and other stock has been overtaken and burned. Mr. Miller lost 15 or 20 tons of barley hay. The flames came so near town as to call out the fire department. It is certainly very risky, to say the least, to set a fire when the country is dry as a tinder box.

## Yolo.

**GRAPES.**—The *Democrat* says that grape-growers at and about Woodland have been unusually successful this season. The earlier showers were so light that no damage to speak of resulted; and nearly the entire grape and raisin crop is now gathered, and under shelter.

**HOG CHOLERA.**—Health Officer Strong, on visiting the Merritt ranch lately, found over 80 dead hogs, yet unburied, and complains bitterly of the neglect of people in disposing of these dead animals. From this we infer the hog cholera is still prevalent.

**FIG ORCHARD.**—*Democrat*, Oct. 23: Wm. Russell, four miles north of Winters, has an orchard of both black and white figs, covering an area of about 30 acres, which is very profitable. The figs, when grown, are unusually large and of a most delicious flavor. The culture of figs is becoming a leading industry in Yolo county, the soil being favorable to their growth and the climate to their preparation for market. The tree is remarkably prolific, yielding the third crop before the early rains, and our long dry summer facilitates the work of curing them, as in many cases they are allowed to fall from the tree and partially dry before being gathered

and sorted for market. Many persons in the vicinity of Winters are following the example of Mr. Russell and planting large fig orchards, this industry being one particularly remunerative.

## Yuba.

**ORANGES.—Appeal:** The orange crop of Marysville is going to fall short of the estimate made before the fruits appeared, and careful observers now say that not more than one-half the yield of last year will be made this year. Why, is hard to decide, as all trees are less affected with the scale-bug, and show a healthful state generally.

## NEVADA.

**FEED AT A PREMIUM.**—*Carson Index*: Two months ago hay was a drug and a nuisance in Mason valley. Now every old stack is worth money; every straw will have a value. Besides, the farmers will be able to work off their large stock of pumpkins, squashes and vegetables. The prospect of short feed on cattle ranges this winter is the cause of this appreciation of provender.

## WASHINGTON TERRITORY.

**HOP FIELDS.**—N. Y. telegram to S. F. *Call*, Oct. 18: Governor Squire, of Washington Territory, in talking with a reporter, said: "Washington Territory is the finest hop-raising country in the world. We will raise this year about 30,000 tons. The growth per acre is simply enormous. We have buyers out there from every part of the country. Men from Utica, Richmond Springs, Oswego and other hop-raising counties in New York State, are buying their hops from us this year, as the New York crop has proved a failure. Transportation is cheap to New York, and under such circumstances it would be useless to compete with us, as we produce more than double the quantity per acre that you do here. One hop farm in Washington Territory is the largest in the world, being over 300 acres in extent."

**HOPS.**—*W. Washington Farmer*: While on our trip to the eastern part of the county our attention was called to some fine hops. Upon examination we found them to be the finest hops we ever saw, and we have seen many fields in the East. At one farm we saw a cluster of vines from one root, planted three years ago; from this bunch one bushel of hops had been picked the day before we saw it, and yet it held a fair yield. There is a belt of land lying along the Cowlitz river about Mill creek and above, that seems to be naturally adapted to hops, for wild hops grow to the height of over 20 feet, while cultivated (English cluster) grow much higher and very large. We were talking with a party who intends putting in seven or eight acres on Klickitat prairie, and another who thinks he will put out 40 acres next season near Klickitat. These parties have grown a few vines for the past few years and are confident that the soil up there will produce equally as good yields and as good hops as the Puyallup valley. The idea that hops will not grow as well in other localities as in the Puyallup valley we think is all a humbug, and if the price should remain high for a few years, we expect to see many bales of No. 1 hops grown in Lewis county. There are many gardens in this county that grow fine hops every year without manure or other fertilizers; then why can they not be grown in quantities as well?

## Vacaville Notes.

**EDITORS PRESS:**—The nights have been very cold for a week past. There has been frost enough to kill tomato and melon vines, and grapevines in many places. The fruit season is about at an end for this year. Some few grapes and peaches are still being picked. Messrs. Thurber and McKevitt have some peaches that seldom get ripe but freeze on the trees.

Farmers in Suisun valley and on the plains adjacent to Vacaville have got their summer-fallow in generally. We have had about half an inch of rain, but not enough to start the grass much, although it shows green in many places. I saw some grain last week that was quite green.

The fruit crop has been very good here this season and prices have been fair, but money is scarce and times are hard, so business men in town say. I can see but one cause for this state of affairs, and that is the Chinamen do the most of the work in the orchard and carry the most of the money paid for labor out of the country. There are two sides to the labor question, as there are to every other. The fruit-growers say that they could not get white help enough. This may be true in some cases, but I know that there were many good, industrious men and boys in this neighborhood that could not get work a large part of the fruit season, and while some prefer white help, there are many that will not hire a white person if they can get Chinamen.

There are many ranches around here for sale, but not many sales are made, although those that are sold bring good prices.

The election passed off very quietly. The Prohibition ticket was talked up very earnestly by quite a number, but seems to have been pretty near a failure, judging by the number of votes it received.

Vacaville.

## The Fruit-Growers' Convention.

The official program for the fruit-growers, who are to meet in the Assembly Chamber at Sacramento next Monday, had not been made public on the 10th. It appears probable, however, that the first day will be consumed in opening the convention and perfecting the order of exercises for the rest of the week. Tuesday is likely to be devoted to insect pests and the care of trees, and Wednesday to questions of picking, packing and marketing. By Thursday morning it may be time to ask what kinds of stock newcomers should be most encouraged in planting; while Congressional care for horticultural interests would be a fitting subject for Friday's deliberation.

This forecast, though not authorized officially, will, we believe, prove a tolerably safe pointer for those who cannot attend the meetings throughout, but are obliged to exercise some choice as to the days on which they will be present. As to Saturday's probabilities we are still in the dark.

The Board of Horticulture has obtained a reduction of fare on all railroad lines in this State to Sacramento during the convention. The following instructions have been issued by A. H. Webb, Secretary of the State Board of Horticulture:

The Southern Pacific Company on their lines will sell tickets directly to Sacramento—all other lines to connecting points on the lines of the Southern Pacific.

On purchasing ticket, take receipt from ticket agent, showing that you have paid full fare to Sacramento. In addition to this, during convention, obtain from the undersigned a certificate to the effect that you have attended the convention, and on presenting this to the ticket agent at Sacramento, together with the ticket agent's receipt at place of starting, return tickets may be had for one-third rates. These return tickets will be good until the 1st day of December.

Persons neglecting to obtain receipts from ticket agents at starting points will not be entitled to reduced rates.

## Ventura Fair.

The Ventura County Agricultural Association held its first annual fair, Oct. 21st to 23d. Union hall received the vegetables, fruits and flowers, with the usual accompaniments in the line of mechanical, domestic and artistic production. The room being well lighted, the evening display was exceeding brilliant, and W. E. Shepherd's address was highly commended.

The horticultural output—apples, pears and quinces, peaches, Japanese persimmons, strawberries and citrus fruits—was excellent. Cyrus Kenney's exhibit of grapes won special praise. Black and English walnuts and chestnuts were shown; also very fine raisins from Nordhoff. The list of awards for best corn, white and yellow; for squashes and melons, cabbages, beans, onions, potatoes, etc., is quite lengthy. L. E. Mercer showed portions of swarms of bees, and received premiums for comb and extracted honey.

Mrs. J. Y. Saviers was adjudged to have the best flowering plants in pots—among them African marigolds—and Mrs. Theo. Shepherd's exhibit of palms and cut flowers was trebly honored.

A trio each of Langshans, Houdans, Buff Cochins, B. B. R. game fowl and Pekin ducks made up the poultry show.

H. P. Flint showed half a dozen fleeces ranging from 16 to 20 pounds; Leach & Hunt, agricultural implements. Dr. C. L. Bard's Humane safety check-rein, Western whip-socket and safety coupler for whiffletrees, invented and patented by himself, and L. C. Gridley's railroad gate, were favorably noticed by the judges.

The equine stock on exhibition included thoroughbreds, roadsters in goodly number, draft horses and horses of all work, J. G. Hill, Chrisman & Willoughby and Hill & Gries, H. W. Conner, Rob't Ayers, H. L. Bush and H. Holzhausen being the most successful exhibitors. Among the prize cattle were J. R. Willoughby's roan Durham bull, Thos. Barrows' herd of Jerseys, and W. L. Hardison's Holsteins.

The attendance at the grounds on Friday was reckoned at from 1000 to 1500. Besides the races there was a ladies' tournament, where in seven young horsewomen competed, Miss Addie Holden, of Santa Paula, winning the highest honors.

MRS. TRESCOTT and her sons, George and Edward, have recently removed from Oakland, and purchased the homestead on the Camron place, one mile from Tulare City. They have fine stock on the place and will increase the alfalfa pastures the coming season. Their barn and dairy apartments are among the best-built improvements in the county. They have a seven or eight-inch artesian well bored over 600 feet in depth. Their neighbors, or the town's people, we think ought to co-operate with them in boring further for a flowing well, and not stop short of 1500 or 2000 feet if a good flow should not be reached sooner.

It is stated that the shipments from Shelter Cove this year of the spring wool clip aggregated nearly 300,000 pounds.





### A Birthday Tribute.

[Written for the RURAL PRESS by ORPHEA DE STRANG.]

A garland I fain would weave for thy brow,  
O tutor and friend of mine,  
Of the fairest flowers that are blooming now  
In this vale of transcendent sunshine.

But the blossoms would fade ere the day declined,  
And their perfume be blown away  
To mingle its breath with the passing wind,  
As it sighs at the close of day.

What, then, can I bring from memory's store  
To gladden the morn of thy mortal birth?  
A gift, perchance, that thou mayst ignore,  
As it holds no wealth save friendship's worth.

A home thou hast in a glorious land  
Where God's best gifts blend with each bud and tree;  
Where hills of rich verdure rise stately and grand  
By the picturesque shore of the sounding sea.

Thy years are crowned with affection's bond—  
Each tie claims its own hallowed trust,  
From a husband's fund of affection fond,  
With a child in thy glad arms hushed.

What more can be gleaned from the flight of time?  
What more can the round earth bring  
Than a peaceful home in a sunny clime,  
Refreshed by love's perennial spring?

Take the wings of the lark at morning,  
And go with him in his flight,  
Till the silvery stars are adorning  
The sable curtain of night.

Stop not in thy restless meandering  
Until thou hast reached each high  
To which mortals aspire in their rambling  
For that delusion called human delight.

At last, when thy hopes are all banished,  
When dreams bring but bitter unrest,  
When each alluring picture has vanished  
Which fancy with loveliness dressed,

Then thy home in the heart of the mountains,  
O'ershadowed by exquisite skies,  
Will be—as to me—rich in fountains  
Of peace, where true happiness lies.

The treasure thy friend would be bringing  
Thou hast already received,  
In the contentment that sits ever singing  
On thy threshold from shadows relieved.

May the light on thy fireside continue to shine!  
May the love of thy heart remain loyal and true!  
May all thy days be serene and benign,  
And may each coming year thy blessings renew!

At length, when thy work is here finished,  
When the tale of this life is all told,  
In those regions where joy is undiminished,  
May we meet in the "Good Shepherd's" fold.

Duncan's Mills, Cal., Oct., 1886.

### The Arrival of Aunt Miriam.

[Written for the RURAL PRESS by MALLIE STAFFORD.]

"Aunt Miriam's coming!"

It was the voice of a young girl which rang out in clear soprano tones, as she stepped inside the garden gate from her mile and a half walk from the postoffice. Her face was flushed and there was an unusual brilliancy in her eyes and an unusual haste in her steps as she tripped lightly up the garden walk to where I stood on the porch, surprised and almost afraid to believe the intelligence correct.

"Yes, it's true," she continued, "She's coming and will be here day after to-morrow. See! here is the postal—in fact two postals."

Before she could say more I had eagerly seized the postals, one of which informed me she would leave her home in the East on the 6th of October by the Denver & Rio Grande Railroad. The other was dated October 9th, and was in substance as follows:

DEAR SISTER:—I am now on my way to San Francisco, and will doubtless be with you by the 14th. In great haste, lovingly,  
MIRIAM S.  
Kansas City, October 9th.

"And, mamma," continued Ora, as I ceased reading, "to-day is the 12th, and we haven't been to the office for a week, or we would have received those postals sooner. There's only one day between now and then, and I'm afraid we won't have things done up in 'apple-pie order.'"

The sudden news had set my own brain in a whirl, and I was thinking of the long years since this sister and I had parted—of the bright October morning, just 16 years ago, when, after a pleasant visit to me, I kissed her lips and clasped her in a close embrace for the last time before she took passage on one of those "floating palaces" of the western rivers, bound for her home in a distant State. It was the time of year when in that northwestern clime the old year seems to throw out its grandest glories in its dying agonies. The hills and woods were fluttering their gay ensigns of crimson and scarlet and gold. The sumac, the maple, the

wild grape and many other lovely trees and vines were glorified by the varied touches of early autumn. The picture all came back to me, the central object being a diminutive figure draped in gray standing on the hurricane deck of the steamer and waving a last farewell.

Long years ago when autumn winds  
Blew low and soft through woodland ways,  
I parted from one, well beloved,  
I seem to see her fair young face,  
As, standing on the steamer's deck,  
Her gentle figure draped in mist,  
She echoed back my sad "good-by"  
From those sweet lips I late had kissed.

But my reverie could not long continue, for I heard Ora speaking to her brother as he came in the room.

"O Ed! who do you think is coming?" and before he had time to answer—"Aunt Miriam; it's a fact. She'll be here day after to-morrow."

"How—did you get a letter?"

"Yes, I went to the postoffice and received two postals from her, and one says she expects to be here by the 14th."

"The 14th! why, little one, it's the 12th now."

"Yes, and she might come to-morrow."

Aunt Miriam was my next oldest sister and consequently the playmate of my childhood, besides which there was between us a strong kinship of sentiment and taste, which made the relationship doubly dear. She had resided for more than half her life-time in an Eastern city, and though widowed several years before and childless, she could not be induced to leave her home and reside near any of her relatives, there being too many ties, too many tender associations, besides hosts of old friends, that strongly bound her to the spot that had witnessed at once her happiest as well as her most desolate years. It had now been 16 long and eventful years since we had parted—parted in the glow of youth and the prime of womanhood, before the silver threads had crept "among the gold," and at last

"We were to meet  
After long years,  
Once more to greet  
With kisses and tears."

With both, time had wrought rude changes which had cast their shadows on the brow, and sorrows that had left their scars on the heart. One may be sure that I went about my evening tasks with my thoughts far away, and hours passed after retiring before I could close my eyes in sleep. The next day was one of stir and preparation for the expected guest; there were so many little things to be thought of and so many things to be done, and withal the day seemed long; but when the evening shadows slowly vanished over the rim of mountains that sentinelled our western landscape, and the little family gathered at the tea-table, the subject was more fully discussed, and it was decided that Ed should walk down to the station that evening, for it might be possible she would arrive one day earlier than she anticipated.

"Do you think you would recognize your auntie, Ed?" said I. "Remember it has been 16 years since you saw her, and you were only a small boy then."

"Oh, yes!" were the confident tones. "Recognize Aunt Miriam Stanley! Certainly—small woman, dressed in black, round face, fair complexion, blue eyes, curly brown hair, nose slightly re—what is that French word?"

"Retrousee," supplemented Ora.  
"Nose slightly retrousee, dimpled cheeks, valise in hand, shawls on arm, big trunks, baskets, parasol, inquiring air, looking for somebody. I'll know her and take her in tow right away."

"Now, Ed," said the deprecating and kindly tones of Ora, "don't be funny; that is a genuine picture of an emigrant."

"Well, isn't she an emigrant, and ours at that? Good-by, I'm off for my emigrant," and with a few rapid steps his figure disappeared down the mountain road.

I knew it would not take long for this young and sturdy mountaineer to accomplish the distance of three miles, and as there was little to do but wait till his return, we prepared to wait with what grace we could, but even the minutes seemed long. A half hour passed, then an hour, and soon after we heard the dogs bark; then Ed's cheery whistle echoing up the mountain road. The moon was up and flooding with its electric-like light the vineyard, the garden walk and the open spaces in the forest. He soon appeared at the gate, and anticipating the question he knew we were ready to ask, remarked: "Yes, she's at the station sure enough."

"Is it possible?" "Well, I declare!" "She's come, has she?" "Really, then!" chorused three or four voices in a breath, in fact, all the voices there were in the house.

"You knew her, did you, Ed?" said I.

"Why, yes, I told you I should. Some little woman, same curly hair, same independent nose, valises, big trunks, basket, emigrant air, looking for somebody."

"Then," said I, "did she know you?"

"Well—no—scarcely, till I walked up to her and said, 'Are you Mrs. Stanley?'"

"Yes," she said, quickly; "you are not Ed, are you?"

"That's just who I am, at your service, Aunt Miriam," and I doffed my hat and we shook hands. She looked much relieved and said she had "been wondering how she would get to us from there, for she knew we would not

be expecting her till to-morrow evening," but I could see she was greatly disappointed when I told her I had not brought any conveyance, and she could not walk so far, but she really wanted to walk up with me, saying she would prefer to, rather than stay at the hotel till morning, but I wouldn't hear to it, so got her a room and made her comfortable and told her I'd be down for her early in the morning.

"Not till morning?" said I, dolefully.

"She shall not wait till morning," said papa.

"It would be too bad, after her long journey, and she so near to us, too; and your mother wouldn't sleep a wink to-night. Get the wagon ready, Ed, and we'll drive down for her. It is a beautiful moonlight night—warm and pleasant."

I drew on my wraps and we were soon carefully going down the winding mountain road. Picturesque and charming it always was, and the October moonlight only heightened its beauty. There were perfect arches of the lovely madrona, which stretched their lovely boughs above the road, interlacing and forming a canopy so thick the moonbeams scarcely penetrated; and by the road were groups of the rare and grand sequoia—the wonderful redwood, whose black shadows danced among the moonbeams and cast long, spiral shapes adown the mountain-side; and mingled with them were the graceful maple, the wide-spreading black oak with its luxuriant foliage, the moaning pine, which brought to memory "Sierra's sighing pines" that breathed their "sad, sweet music of the winds," the hazel, the manzanita; but before I have time to recognize and note the variety of forest growth that cast their thick shadows over our downward road, we have reached the foot of the grade, and the valley stretches away before us aglow in moonlight splendor.

A smooth road, and a drive of over a mile, with the now and then halt to open a gate, and a few moments bring us to the rural village and hotel. There are lights still gleaming from windows and door, for 'tis early evening as yet. I alight, and on inquiring ascertain the number of my sister's room. As I stepped into the hall I had time to think of the wavering mutations of fortune, and that we who had been severed for so many long years, who were bred in the same home nest and sheltered under the same roof-tree, were to meet at last, in a different clime and under far different circumstances.

Country hotels, as a rule, are not many storied nor remarkably commodious, and I had no difficulty in finding her room. I knocked at the door and a voice, whose intonation I well know, but which is at the same time strangely unfamiliar, bids me enter. One second and we are clasped in a close embrace. We both were changed. "Time, the truest builder," had left his trace on brow and cheek and hair. I found there was a changed look about her features—some shadow that the years had wrought—and the once golden curls now rippled in soft silver waves over a brow that had too early been crowned with sorrow.

It must have given her as much pleasure as it did us that we had come for her that night, for on learning this there was the same sparkle of the eye and the same brisk activity of old as she made her hasty preparations to accompany us. We assigned her the middle position on the seat and started for home, and, well, those who have had a like experience (and we pity those who have not) will agree with us that it would confuse a San Francisco lawyer to keep abreast of such a running fusillade of questions, such random answers, such spontaneous remarks. "Did you have a pleasant trip?" "Is your baggage all safe?" "How did you happen to take such a sudden determination to come?" "O! is that your place?" indicating a farm near. "Are you much crowded?" "What a lovely night!" "What magnificent trees!" "What do you think of California?" "O, it's delightful; there was a man on the stage that told me." "The dogs are barking; we'll soon be home now!" and to my surprise, for I had not noted time or distance, there we were at the big gate, which Ed had opened for us, while Ora and the wee one were standing in the moonlight waiting to welcome Aunt Miriam.

There was a repetition of kisses and laughter through tears, more questions with and without answers. A broad line of light streamed through windows and doors, and there was the warm and comforting fragrance of hot supper from the dining-room. Despite my sister's evident weariness, she as well as ourselves was loth to retire that night, there were so many, many memories struggling for speech. Since last I saw her she had visited two sisters, whom I had not met for many years, and it was next to meeting them face to face to hear her speak of them, describe their homes, etc. There was so much to be said, so much to be talked over; so the next day I locked and covered up the sewing machine, put out of sight writing materials, ignored darning and mending, and we made a holiday of Aunt Miriam's visit. We left off talking late at night, when we retired, and commenced early in the morning. We chatted over our morning work. We went to the spring together and lingered under the fig tree and chatted. We chatted over the preparation of our noonday meal. What if we put sugar into the chicken stew instead of salt, and pepper into the pudding sauce instead of spice? No matter. We chatted. Our chatting lasted like a steady downpour for three weeks; after that it "let up" slightly, and continued at intervals, like intermittent showers, but continued. In due time the baskets and valises

were opened, and the big trunks were unpacked. They contained many interesting family relics, which she had lovingly preserved, and which were dear to both of us from the association and memories with which they were invested. There were also old pictures of dear friends.

Ah, there were faces whose glance was cast  
Far from my longing gaze,  
Whose bright eyes shone with language their own,  
With love in their tender rays.

There, too, were old volumes, familiar in childhood—pictures, music, keepsakes.

There were snatches of songs that coral lips sung,  
Attuned in life's morning-lit air;  
Sweet notes that so rudely by fate were unstrung,  
And dreams from a land we remembered as young.  
"There were ringlets and tresses of hair,"  
Old volumes that wakened an echo of years  
Entombed 'neath the shadows of time;  
And memories recalled by the lovelight of tears,  
Replete with the sorrows, the hopes and the fears,  
That were launched on youth's ocean sublime.

And from the depths of those capacious trunks she brought forth rare volumes of romance and delightful poetry—for she loved true poetry, this sister of mine—and at times her soul touched a harp of sweet and tender melody. When the long winter evenings came, the hours were whiled away listening to her read in her clear, distinct voice from Longfellow, Jean Ingelow, Mrs. Hemans, Browning, Whittier, etc. It was not long before the weariness of travel wore away, and after I became accustomed to the changes time had made, I often have almost fancied as we strolled gaily through the deep woods surrounding "The Heights" that she is the same dimpled, curly-haired maiden with whom I trotted to school—the same fearless, venturesome little spirit that led me into many a mischievous prank.

One day, while overhauling a large trunk, she handed to me a much-worn, thick and faded volume, with the remark:

"That is my old red scrap-book! Don't you remember it? I have had it ever since I first commenced keeping house."

I thought there was something about it that had ever so little the ghost of familiarity—just as sometimes in viewing a scene for the first time we vaguely have the impression we have seen it or dreamed of seeing that same scene before, like as though we had had a pre-existence, ages before, and in our wanderings had beheld it with mortal eyes; knowing all the time we have not, but puzzled at the vague remembrance, and striving to catch the invisible link that ought to connect us with this mysterious previous life. Well, I couldn't for the life of me remember whether I had ever seen the old red scrap-book or not, but there was certainly a familiar look about it. As I opened it, she said:

"I have some of the first articles you ever wrote in that book—some that you haven't yourself, perhaps—for I suppose they were all destroyed by fire when you were burned out in '73. I have carefully preserved all you ever sent me."

As I turned the leaves of the quaint old volume, I recognized many of my girlish fancies in prose and poetry, not a few of which I had forgotten entirely, but the name and the date were there, and quick as a flash it all came back to me—when they were written—what prompted them, etc. It was like confronting my dead and forgotten self. Here was one written in time of the civil war. I was then a resident on the remote frontier, among the Rockies, at a time, too, when the Indian war on the plains was raging at its stormiest; in the darkest history of the civil war, when every available company of soldiers was called from the plains and sent East. All travel for a time was stopped, and, in consequence, there was soon felt a deplorable scarcity of supplies. Paper for the issue of the *Central City Journal* ran short, and for weeks that paper presented a many-colored appearance, sometimes pink, sometimes brown, stone-color, etc. This poem was printed on tan-colored paper, and it at once recalled a very interesting stage of our country's history.

Another newspaper article neatly folded and not fastened to the book attracted my attention from its evident age. It was worn and thin and yellow. On opening it, to my surprise I recognized my first story effort. It was published something like 32 years ago in the *Nevada Transcript*, I think, though I have nearly forgotten. The writer was then a raw recruit, fresh from "Ameriky," to use a current expression of the time, and having a "penchant" for scribbling, and just out of school, I set afloat my first venture on the sea of literature in a California newspaper. I need scarcely add it was a "love story." Remembering myself, "which the same," to use a Bret Harteism, was a different being from now, and looking at that youthful effort after all these years critically and "through these specs," I am amused. However, it possesses one attraction for me—age—but is not like wine in that respect.

Between the lids of the old volume were countless gems from obscure as well as famous authors, selected by one of fine poetical appreciation and interspersed with these were numerous poetical gems from her own pen—the creation of her imaginative and romantic fancy.

The weeks that followed seemed shod with muffled sandals, for they glided heedlessly. Winter deepened—spring with its world of flowers was renewed; summer came with its crown of roses, which has imperceptibly merged into autumn with roses still, and again gay October



flaunts her crimson colors among the purple hills. A year has passed and Aunt Miriam is still with us. She has taken kindly to our genial clime, and sometimes when I look at her fair, bright face, I think she has found the fabled stream that Ponce de Leon sought in vain. A blessing as she is to all, I know her Christian heart has found at least the fountain of immortal youth.

*Arcadian Hights, Napa Co.*

### The Woman Question.

The eighteenth annual meeting of the American Woman Suffrage Association was held in the hall of the House of Representatives, at the capitol in Topeka, Kansas, commencing on Tuesday, October 26th, and lasting three days. Distinguished delegates were present from nearly every State and Territory of the Union. The fact that the greedy news-gatherers of the Associated Press scarcely deigned to notice it shows that there is still a lingering prejudice against such discussions. And this is not strange. The world over defects are always more noticed than excellences, and we are apt to be swayed more easily toward carping and fault-finding than praise and justice. It is difficult to listen patiently to a dozen wise men talk if there is one fool present. His insipid chatter will so worry the mind and divert the attention of the hearer that he will fancy for the moment that the whole universe is overflowing with nonsense. A crying child or a barking dog may break up a play or spoil a sermon. How often a session of Congress is brought into bad repute because two or three babbling fellows were always haranguing the house. A score or two of women who worship the toilet and the tinsel of shallow accomplishments, who pore over cheap novels and fashion-plates and toy with poodles and general folly, may make the idea current in a club of bald-pated bachelors that woman is a silly creature, unable to become an associate and helpmeet in that development of life that requires energy, endurance, a level brain and self-reliance.

In like manner, it is undoubtedly true that much prejudice has been engendered against these suffrage meetings. Because a few women who have sored on the men in consequence of their neglect or have been unhappily married and persist in judging all men by the one faulty husband put themselves forward as leaders, and thrust their stale budget of grievances upon the public every chance they got, the public came to look askance at the movement. One Mary Walker, in breeches, with a rowdy hat, rattan cane, and aping mannish airs, will do more to bring reproach upon the cause than Mrs. Cady Stanton or Livermore could remove in a year. It is a matter of congratulation and argues well for the future that this class of bores and shrews are quietly being put on a back seat, and women who are ornaments to home and society are coming to the front at these annual meetings.

The progress of our century has involved all the interests of woman. She has been borne along upon the great stream; she has reached a personal worth and power never reached by her before. There have been times when there were great stirrings and throbs of new life and only a few persons were benefited. The poor were left to glean in the corners of the field and the prayer of the slave was not answered. Times that invented the printing press but had no ideas to feed it; that invented the telescope and went into raptures over the rings of Saturn and the belts of Jupiter, but failed to see the want, ignorance and misery near by. At last an era has come that seems to overlook nothing, when science, politics, arts, literature, education and religion all seem to share in the common thrill. Woman has the good fortune to find her condition greatly changed for the better. To her the world has been almost completely transformed. The question whether woman should vote, or in other ways take part in making the laws, time will soon answer, and from present appearances seems likely to answer in the affirmative. But when she comes to her crown let her not forget her kingdom. Twenty years ago one of our greatest statesmen said: "We want the excellence of man and woman united, we want intellectual power, knowledge, great ideas in literature, philosophy, theology and ethics; but we also want something better—the moral, affectional, religious intuition of woman to put justice into ethics, love into theology, piety into science and letters."

**SUBTERRANEAN ART.**—Art is subterranean in some parts of Europe. Of the enormous brazen and marble population of Rome, only three statues or groups, the two horses of the Quirinal Hill and the Marcus Aurelius of the Capitol, have always been above ground. Nearly all that now exists in Italy of ancient sculpture has been the produce of excavation, and the process still goes on.

**"INVISIBLE SEAM UMBRELLAS"** are advertised. A great many of the old-style umbrellas invisible seem, when you come to look for them.

**CHINA** and Japan buy our dried apples freely. Thus does American industry help to swell the population of the Orient.

## YOUNG FOLKS' COLUMN.

### In Fairyland.

[Written for the RURAL PRESS by M. B. D.]

Mabel sits in the window ledge  
Of the summer-house, happy and quiet—  
A most rare mood for this sprightly girl,  
And none of us can deny it.

Her thick, long hair, that is brown and gold,  
In a raveled braid is falling;  
While her dark eyes bend o'er a lettered page  
That seems her mind entrancing.

For she visits a wonderful fairyland,  
Peopled with fays and graces;  
And she dimples with mirth as she follows them there,  
Playing their parts in their places.

The roses bloom and the wild birds sing,  
And around her the sunshine lingers;  
While the fairy tale makes her pulses leap  
Till she thrills to the tips of her fingers.

Is there any joy which the world can give  
More pure, more sweet and tender,  
Than these simple wonder realms of thought  
In her young mind's dawning splendor?

Though wealth and fame and wisdom's might  
To noble heights allure us,  
Our memories hold no sweeter joys  
Than childhood's days secure us.

### Cigarettes.

[Written for the RURAL PRESS by MORE ANON.]

Will the editor of the PRESS please retire to his editorial sanctum while I arise and take up his text upon "Boys and Cigarettes."

When an able agricultural journalist essays to speak in behalf of weak, silly and erring youth, it is time that more fall into line to do what they can toward arresting the growth of this evil.

How, do you ask, shall we begin this reform? By a united effort to show the youth the evil or danger of this pernicious habit. Don't laugh and say "how cunning!" when the little tots roll and puff their first rank, deadly cigarette. No doubt this poison is the cause of violent and dreaded diseases, and when the system is contaminated with this nicotine poison it defies medical treatment, and thus brings reproach upon the science of *materia medica*.

As an illustration of my claim, I will refer you to a bright and handsome youth of 16, who suffers from the evil practice of early and stealthy cigarette smoking. Poor Willie is a cripple, and what's the cause? When he was first attacked his parents consulted an able physician, told his symptoms, of his inability to help himself, and the location of his pain. His disease was spinal paralysis, and now, after 11 months of suffering, he is enabled, by the aid of a rolling chair and crutches, to get about the house and yard. He cannot get to school, although he resides within sight of the school-house; but by this lesson he has bought his freedom from this vile smoking habit and the use of this rank compound of villainous weeds forever.

I write this for the benefit of the young boys who read and write for the RURAL PRESS, and who, I hope, will be found some day with all of their ability to formulate such laws as the City Council of Oakland have been doing, and let all other cities, villages, towns and hamlets emulate this example and make far more stringent laws, until the evils of all kinds of intemperance have been consigned to the dark ages from whence they originated. They are relics of barbarism.

*Temperance, Fresno Co.*

### A Singing Mouse.

An animal such as is described in the two words of the above caption belongs to the family of rodents, but unlike them is endowed with the power of song. There are very few of these little animals, in fact they are so scarce that they are regarded in the light of curious phenomena. One of these little natural curiosities, says the Santa Rosa Democrat, has taken up its abode in Dr. Caldwell's dentistry. Some five months ago the doctor's attention was attracted by what seemed to be the singing of a canary in the near neighborhood, and at the same time he noticed a little mouse that was in the habit of scampering across and around the office at all times of the day. The mouse did not annoy him in the least, but for the sake of ladies who came to the office, he thought he would trap the inoffensive little thing. Accordingly he set a trap for it—one of those kind that is easy enough to get in, but hard to get out of. On coming to the office one morning, he forgot to look at the mouse trap, as usual, but soon his attention was called to it by the peculiar sounds that were issuing therefrom. At first he thought it was the canary bird he had been attracted by for some months past, but on going to the mouse trap he saw therein the author of the music. The trap contained a singing mouse, the only one known of on this coast. It took the doctor some time to make sure that the little creature was the vocal artist, but he soon became convinced by the actions of the little animal while sending forth its notes. It would

stand upon its hind legs and act otherwise like a canary. The little fellow was kept in the trap for over a month, during which time he entertained his captor with his songs. At the end of this time the care of him became too much for the doctor, so one morning he turned him loose. But great indeed was his surprise when on entering the office the next morning to find the trap occupied by the singer. He was turned loose again, but the next morning was back again, and so it continued. The little fellow goes to his trap every night and is let out in the morning. The song of the mouse differs somewhat from that of the feathery songsters, but in its difference is its beauty.

## GOOD HEALTH.

### Mileage of the Blood Circulation.

In preparing lectures on vital or animal mechanics for a Cantor course at the Society of Arts, several practical points of new or renewed study have come before me, some of which are, I think, deserving of brief notice. One of these is the question of the mileage of the blood current of a healthy adult man, in whom the circulation under the direction of 69 strokes of the heart per minute, at the assumed propulsion of nine feet at each left ventricular pressure.

The distance traversed would, I estimate, be at the rate of 207 yards per minute, or seven miles per hour, or 168 miles per day, or 61,320 miles per year. Supposing, therefore, that a man who has lived 84 years could have one blood corpuscle floating all that time round his circulating channels—as a planet circulates round a sun—that corpuscle would have performed at the close of the time named the grand tour of 5,150,808 miles. The heat generated by friction in this motion of the blood we may take as included in the normal constant of 98.45° Fah. What the excess would be when, as in fever, the rate of passage may extend to over double the normal, or 14 miles an hour, at full tension, can only at present be estimated on data which have to be formulated, and are, therefore, inexact. But here a most important field is open for inquiry, and includes the questions: 1. Is the excess of febrile heat in pyrexia due to increased pulsation at full tension? 2. Is the increased motion due to the high temperature? 3. Are both dependent on one common cause? We really know nothing about pyrexia until these questions are determined. A pigeon lives always at what in the human subject would be the highest pyrexia. Its temperature is 108° Fah.; its arterial pulsations are 140 beats per minute; and it has a surface of body presenting the fullest resistance to conduction. Does this truly pyrexial animal owe its normal high temperature to its rapid circulation? Does its high temperature give rise to its rapid circulation? Or, are the heat and motion dependent on one common undiscovered cause?—*The Asclepiad*.

**THE STATE BOARD OF HEALTH.**—We acknowledge the reception of the ninth biennial report of the State Board of Health for the fiscal years from June 30, 1884, to June 30, 1886. It has been printed at the State printing office in Sacramento, and comprises a volume of 282 pages. California was one of the first States in the Union to recognize the need of organizing a State Board of Health, and the work which that Board has done has fully proved its value, although its opportunities for usefulness have been largely curtailed by reason of insufficient appropriations for such work. The table of contents of this report, which occupies 10 full pages of small type, shows that the work of the board has comprised a wide range of subjects, all of which are valuable for the information and instruction of the people at large. It deals sparingly in statistics, and none but those absolutely essential to a publication of this kind have been admitted. The report deals largely in general sanitary information and instruction, and will, no doubt, do much to encourage more general attention in regard to public sanitary needs and to domestic hygiene among the more intelligent portion of our people. It is gratifying to observe that in many ways the public is gradually becoming better informed in regard to these important matters. The publications of the board, through its monthly and annual reports, and the encouragement which it gives to the newspaper press to take a more active interest in health matters, if properly seconded by needed legislation, will soon place California in an advanced position, not only in the conservation of life but in the repelling of disease as well, by means of all the knowledge and appliances which modern sanitary science has devised for the benefit of the human family. We shall take an opportunity from time to time to transfer to our Health Column some of the many valuable hints which a more careful examination of the report will doubtless bring to our notice.

**TROUBLE IN THE HEAD.**—Roaring sounds and whistling in the ears and deafness. I had been much troubled by roaring and singing in my ears and at times a whistling sound, especially when lying down, writes a correspondent of the Boston Transcript. An old and experienced

physician whom I consulted told me to gargle my throat night and morning with hot and cold water. Have one tumbler of hot water, taking the water hot enough to scald the mouth, and one tumbler of cold water. Gargle first three times with the hot, then three times with the cold water. Do this three times, making nine times with each. In a short time I was cured by this very simple remedy. Many times I have wished it were better understood how often deafness is caused by the hardening wax in the ear. A great number of people doubtless suffer from what they believe is incurable deafness, old persons in particular supposing it to be caused by old age, when if they would consult any good aurist they would find it was merely hardening of the secretion of wax in the ears. This can generally be removed by a very simple and painless operation and hearing restored.

**WHAT IS HUNGER?**—The cause of the intense pangs experienced by a starving man is little understood, but it may be safely said that the pain is not produced, as has been popularly explained, by the grinding together of the walls of the empty stomach. Dr. Robert Wilson remarks that the theory of hunger may be thus formulated: Fasting produces a general change in the organism as a whole. This again brings about a specific change in a particular part of the organism—the stomach—of which the pain of hunger is the local symptom. Direct applications, such as a bolus of food, or even of clay, temporarily relieve the local feeling of a pain, by neutralizing the specific local changes to which that feeling owes its origin. Indirect applications, again, such as the injection of milk into the blood, correct the general alteration of the system produced by want of food. By doing so, they correct those local gastric changes produced by the general effect of fasting in the system—changes which render the local manifestations of hunger possible.

## DOMESTIC ECONOMY.

**PEACH MERINGUE.**—Put a quart of milk, reserving half a teacupful, in a saucepan, and when it boils add the reserve milk, in which two tablespoonfuls of corn starch are dissolved, stirring constantly. When it thickens, remove from the fire and add one tablespoonful of butter and let the mixture cool. When cold, beat in the yolks of three eggs until the custard is light and add half a cupful of granulated sugar. Cover the bottom of a buttered earthenware baking-pan with three layers of ripe peaches, peeled, stoned and quartered, sprinkling two tablespoonfuls of sugar over them. Pour the custard gently over the fruit and bake in a quick oven for 20 minutes. When done, cover the top with the whites of the eggs beaten to a stiff froth, sprinkling a little sugar over the whites. Brown delicately in the oven and serve cold with cream.

**ROULADES OF VEAL.**—Strips of veal are cut from the leg and nicely trimmed, so that each measures seven inches in length, five inches in width and half an inch thick. Each strip is larded on the outside with fat salt pork, and the inside is covered with beaten egg and a layer of forcemeat one-quarter of an inch in thickness. Each strip is rolled together, bound with string and baked in butter in a covered pan for one hour. Before serving, mix a little sour cream with the gravy and serve hot. For the forcemeat the trimmings of the veal may be used. Mince half a pound of veal and one ounce of suet very fine. Mix well with two ounces of melted butter, two ounces of bread crumbs that have been soaked in water and then pressed dry, the yolks of two eggs and the whites of two, beaten to a stiff froth.

**PARSNIP BALLS.**—Parsnip balls are excellent for an entree. Parboil six large parsnips and let them get quite cold, then peel them and grate them; beat two eggs till very light and mix with the grated parsnip, adding enough flour to give coherence to the mixture; flour your hands and make small flat balls. Have hot lard in a shallow kettle and drop the balls gently into it; fry them until they are well browned on both sides. Send to the table very hot.

**RICE OR HOMINY CROQUETS.**—Boil the rice or hominy till well done, then allow to become perfectly cold. To 1½ pints add a good pinch of salt, three well-beaten eggs, one spoonful of milk, flour enough to roll out in the hands into forms and one teaspoonful Royal baking powder. Have ready a deep frying-pan half full of boiling-hot fat, drop the croquets carefully in, fry till a rich brown, serve hot.

**THICKENED MILK.**—Two quarts of milk, three eggs, one and a half cupfuls of flour, one cupful of sugar, a little salt and flavoring to taste. Mix the flour smooth in a little cold milk. Beat the eggs and mix them with the sugar and flour, beating all well. Set the milk on the range in a saucepan, and as soon as it boils pour in the mixture, stirring until it thickens.

**OKRA SOUP.**—Make the stock for the soup from a skin of beef the day before it is to be used. While boiling, put in an onion, half a green pepper, and a small piece of boiled ham. Strain the soup and set it in a cool place. The next day set the stock on the fire and add 36 okra pods in thin slices and six tomatoes. Let all simmer for three hours, and serve.





A. T. DEWEY.

W. B. EWER.

Published by DEWEY &amp; CO.

Office, 252 Market St., N. E. cor. Front St., S. F.

Take the Elevator, No. 12 Front St.

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A. T. DEWEY.

W. B. EWER.

G. H. STRONG.

SAN FRANCISCO:

Saturday, November 13, 1886.

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## The Week.

As we anticipated last week, the public mind has been chiefly occupied since then in the effort to ascertain who was chosen to serve the State at the election of Nov. 21. Returns are not yet in from many counties. The election of Washington Bartlett seems decided, and as we write his apparent plurality is about 700. The results for the other State officers is more uncertain because many counties have reported their vote on the Governorship but not on the minor offices. For this reason the future occupants cannot be decided upon. Twenty-five counties which have reported up to this Wednesday afternoon give an apparent plurality to the Republican ticket, but this is only half the counties and the San Francisco vote is not fully canvassed yet. Therefore the expectant must possess their souls in patience for the present.

The days are drifting fast into the region of

short light and long darkness, though the November moon is doing bravely to help out the drooping sun. The daylight hours are so delightful that one longs for more of them. The hills are becoming verdant in the regions which have had most rain. The air is cool and clear. The new blooms on autumn-blooming plants are richly colored, fragrant and dustless. Chrysanthemums are in their glory. The garden has a wintry aspect, it is true, but it is only a little resting season from which it will soon awake with freshened beauty.

## Gone to the Bad.

Scarcely had the alarm among the merchants caused by the defalcation of Cashier Bates subsided, than comes the report that a long trusted employe of Wells, Fargo & Co. was on his way to the haven of defaulters. What does it all mean? When we hear of the fall of such men as Mr. W. E. Gould, of Portland, Me., and Mr. Bartholomew, of Hartford, Conn., and Charles W. Banks, of San Francisco, it gives one an impression akin to that of the people of Charleston during the earthquake when their houses were tumbling down all around them. That is, it causes one to feel as if the foundation of all public confidence was shaky and liable at any moment to give way. Such disasters overwhelm the individual with unspeakable shame and mortification, and the agony of grief and disgrace that tortures the family cannot be told in words. But the evil does not stop there, it tends to destroy confidence of one man in another, the center of power and driving wheel of all business enterprises. Few men enjoyed more thoroughly the confidence of his employers than C. W. Banks. He had been long in their service, had a good salary, and was otherwise above all financial contingency. He was a member of the Union club and took a lively interest in the Microscopical Society. When such a man falls he casts a gloom and suspicion over all trust and fiducial relations.

We allude to this case, as it is fresh in the public mind, but they are happening every day in some part of the country. Were all the scamps and scoundrels to get their just deserts, the jail accommodations would have to be increased, and were they all to start for Canada, standing room might be at a premium. But the most of them are not inclined to emigrate. Some are suspected, but their faces are hardened against suspicion; others try to hide the perilous secret of dishonesty in some lonely corner of their hearts and go on masquerading as honorable and trustworthy men. They only scamper when the shadow of the Nemesis is upon their track.

But why is it that men will do such things? We can understand how a man in want will steal before starving or a frail nature go down before the dazzle and lure of a great temptation, but how is it that men who are independently situated, so far as temporalities are concerned, and occupy high social positions, can peril it all on a rascally venture? Is it true, as the old preachers used to say, that human nature is as prone to evil as the sparks to fly upward? Is there a pestilence of dishonesty in the air? Do the gaudy splendors and luxury of the newly rich goad men to destruction by blinding them to all moral distinctions? Whatever may be the cause, these lapses of character that often startle a community by their suddenness are not always as sudden as they seem. Men do not, as a rule, go down to hell at one jump; they go down steadily, step by step. Such terrible collapses of character as that of Bates and Banks may be of some value to the community as red signal lights warning others that the way of the transgressor is hard and the only safety is in shunning the very appearance of evil.

RECIPROCITY NEEDED.—Now that cash returns from the crops are coming in, we hope our readers, who have found the RURAL PRESS a valued teacher and helper, during the year, will make our Thanksgiving and their own more glad some by sending in renewed subscriptions.

IMMIGRANTS are now pouring into the State at the rate of 700 or 800 a week; nor does it seem likely that the stream will slacken much during the current month. A goodly and growing proportion of the newcomers are turning northward from San Francisco bay.

## Tulare Lake.

This is by far the largest lake in California, measuring about 35 miles in width by 50 miles in length. Within a few years since its length was over 60 miles. Its western border is said to be a comparatively trackless desert, a few isolated ranches comprising all the settlements. The traveler who passes along that way must provide himself with water and food for himself and animals over long stretches of hot, dry and dusty country. And yet, when water is provided for irrigation, no doubt the land can be made a garden spot. It is not far from the northern border of this immense lake that we find the rich agricultural lands of Mussel slough, embracing Hanford and other enterprising settlements. The name Mussel slough is derived from a stream that empties into Tulare lake containing great quantities of fresh-water mussels.

The north, east and south shores of the lake recede very gradually to the lake, and for miles out a boat can be propelled by pushing with poles touching the bottom. On the west side the shore is more abrupt.

Abundant flowing artesian wells are obtained at a depth of about 400 feet on the eastern and northeastern and southeastern borders.

At the mouth of Tulare river, 13 miles west from Tipton (on the S. P. R. R.), is kept a small steamer capable of conveying about a dozen individuals. It is used by hunters who have a camp at that point. Trips are made once a week or so across the lake. At some seasons of the year large quantities of game are secured for the S. F. market—principally ducks, geese and terrapin. A handsome species of large white swan inhabit the lake winters, going north summers. Big pelicans are often seen. Grebe, a smart and quaint-looking diving bird, larger than ordinary ducks, are increasing in numbers. The fine, soft and pure-white down of their breasts and bodies, except the upper portions, makes their skins highly prized by many ladies for warm capes and ornamental dress trimmings. Snipe, as well as some other varieties of game, are found in greater or less quantities.

One of the most perfect of alfalfa fields is to be seen at Mr. McFadden's ranch, near the lake-shore, just south of the mouth of Tulare river. The surface of the ground is very smooth, and the alfalfa fairly and evenly covers the surface. Natural moisture pervades the rich and easily-worked soil to within about six inches of the top, rendering irrigation entirely unnecessary. The surface well water at this point is palatable, although at some other points it is unfit for domestic use.

Probably no other one place in the United States affords as many rare and easily-obtained luxuries for four-footed swine as the borders of Tulare lake.

In the spring of the year good-sized fish—locally called mullet—force their way in among the tule reeds in immense quantities. Like catfish, they have large heads. This makes locomotion difficult in the tules, and they fall in legions an easy prey to the swine.

The aboriginal tule hog is pictured in the minds of the oldest inhabitants as being from 6 to 10 feet long and 4 feet or more in height, with legs slim and fleet enough to create a desire on the part of ordinary two-legged animals to give them plenty of distance. By cross-breeding with modern breeds of swine, the wild hogs have become improved and less ferocious. They have also imparted their fishing proclivities to the domestic animal, and he can now swim for fish, and dive and dig for mussels along the shores of Tulare lake, as expertly as his ancient porcine predecessors. Thus, with fishing, fresh clam excavating and digging a very nutritious species of nuts which grow on the roots of a peculiar species of reedy-like grass, which grows abundantly in places along the shore, the Tulare lake porker easily gathers unto himself a daily feast unequalled by his swinely brethren of any other hunting ground.

It is said to be in contemplation to put on a steam ferry-boat next summer to make regular trips across the lake.

Notwithstanding its alkaline qualities, this is a beautiful and grand body of water. From the fact that a few hunters and cattlemen are the only human beings who have occasion to sail upon its immense bosom, or even look upon its great and usually placid face (except from long distances), but little is said about it

in public print or otherwise. At this season of the year, at least, the water is not so unpalatable as the writer had supposed it to be from hearsay.

During the past 20 years the borders of the lake have greatly receded, leaving a large amount of the richest tillage land to be found in our State. Yet there was a time, since 1849, when Tulare lake contained much less water than at present. This is evidenced by old barns and corrals now standing in shallow water a long distance from the water's edge.

The slope on the east side to the lake is not much, if any, greater than one foot per mile, so that its tule border prevents those living near from viewing its surface without rising to an elevation or visiting its very shore. Probably not one citizen in twenty, of Tulare county, has ever visited or enjoyed a near view of this remarkable inland body of American waters.

It seems to us that Tulare lake merits more attention than it receives. It lies quite near Tulare City, which promises to be a metropolis of the upper San Joaquin, and in a county which this year is the banner grain county of the State. It should receive the attention of the scientific explorer, for it must contain a wealth of animal and vegetable life which is new to science, and perchance minerals of great interest and importance. Navigation of the waters of the lake may add much to the information we have about the west shore, and it is not unlikely that there may be found many places worthy of settlement in this comparatively unknown land, which includes both the immediate borders of the lake and the foothills of the Coast Range beyond. We predict that an exploration of this region may disclose such resources in soil and mineral that the wonder will be that they could have remained unknown so long.

## Falsifying Pedigrees a Crime.

There have been trouble and loss through unscrupulous falsifiers of pedigrees ever since improved cattle have gained prominence. False pedigrees have crept into the herdbooks and have been with much trouble weeded out. Besides this there is the much coarser fraud of making up pedigrees out of whole cloth for the sake of selling some animal which is placed in the hands of some unscrupulous cattle jobber. Breeders of pure-bred animals have always had to contend with this sort of rascality, and innocent purchasers have been heartlessly victimized, times without number. The Jersey breeders who are members of the American Jersey Cattle Club are trying to place this kind of a fraud where it belongs and are invoking the aid of breeders' associations and individual breeders of all kinds of pure-bred animals to secure the enactment of the following law in every State in the Union:

## AN ACT

TO PUNISH FALSE PRETENSES IN OBTAINING CERTIFICATES OF REGISTRATION OF CATTLE AND OTHER ANIMALS.

The People of the State of \_\_\_\_\_, represented in Senate and Assembly, do enact as follows:

SECTION 1. Every person who by any false pretense shall obtain from any club, association, society, or company for improving the breed of cattle, horses, sheep, swine, or other domestic animals, a certificate of registration of any animal in the herd register or other register of any such club, association, society, or company, or a transfer of any such registration, upon conviction thereof shall be punished by imprisonment in a State prison for a term not exceeding three years, or in a county jail for a term not exceeding one year, or by a fine not exceeding one thousand dollars, or by both such fine and imprisonment.

SEC. 2. This act shall take effect immediately.

SECTION 3. This matter should receive the attention of California and this or some similar act brought before our Legislature this winter.

RAISIN PRICES.—There has been much said about low raisin prices, and that it would not be possible to get so much for California fruit this year, because the cholera scare would not affect the Spanish raisins. Under these claims and low bids, the early sales were made as low as 3½¢@4¢ in the sweat boxes; but now, according to the Riverside Press, some buyers are bidding 5½¢@6¢, and seem disposed to push the price up. Other dealers say such rates cannot be afforded for the naked fruit. It looks very much as though there was something more than straight trade in the situation. It has the appearance of a gamble in which certain ones have filled their hands and are now booming prices. This is the usual course with produce speculators. Buy low and sell high—out the producer on the draw and the consumer on the thrust.



### Humane Societies.

The American Humane Association will hold its tenth annual convention at the Grand hotel, Cincinnati, Ohio, convening November 17th and continuing in session the rest of the week. Through the courtesy of the secretary, Thos. E. Hill, we have received a program of the subjects that will be considered. The feeling that dumb brutes have rights which should be respected and protected by law seems to be on the increase, and there can be little doubt that our humanity will be better, sweeter and more lovely as the result.

The first society for the protection of animals was founded in London about 60 years ago, and is now the most powerful organization of the kind in the world. The Queen is its patron. The Earl of Harrowby has been its president, and on its board of officers are princes, dukes, earls, bishops, and many of the most eminent men of England. The Baroness Burdett-Coutts was for some time at the head of one of its committees. In one year nearly 600 English clergymen preached in its behalf. At one annual meeting the Princess Louise, in the presence of an immense audience, distributed 190 prizes for the best composition on kindness to animals among successful competitors in 190 London schools. It is 21 years since the organization of the first humane society in New York. Boston followed soon after, and Philadelphia, Buffalo and Chicago, and now there are societies in nearly every considerable town and city in the Union.

Would not these people be more wisely engaged in forming societies for the protection of men than animals, is a question that may occur to some. Ever since the dawn of civilization the chief study of mankind has been how to protect men. To this end the whole machinery of the church and State has converged. Around the mass of humanity for ages has been thrown laws, courts, police, magistrates and a dazzling zodiac of public and private charities, while for the millions of animal population there has not been, till within a few years, a single effective law enacted. And then it is part of the work of the humane societies to prevent cruelty to children by drunken, indigent, vicious or insane parents.

It has been often intimated that men employed like Mr. Henry Bergh, in New York, are officious nuisances; that the enforcement of the laws protecting animals should be left to the ordinary police. To this it may be replied that when a man strikes his fellow-man he expects to be arrested, and regards the officer as doing his duty, but when he strikes his own property he considers it impertinent for any one to interfere and would gladly do the meddler an injury. Hence it has been found that such laws without societies are a dead letter. The policemen turn their blind eye upon them. Then, were it not for these societies there would be no effective laws to enforce, for it is only in States and municipalities where such societies exist that such laws are enacted. Again, while laws for the protection of men have been so well defined that policemen know where their duties begin and end, the laws for the protection of animals are so poorly defined that the average policeman may, and often does, hesitate how much a man may whip, starve or overload an animal before the cruelty will justify an arrest. It is to be expected, however, that with the general advance of the humane idea, needed changes in this respect will be secured.

But all other matters aside, we should cultivate sympathy toward dumb animals as a duty to ourselves. The adept in occult science knows there is a high and holy meaning enshrined in every shape of life, and many, for that reason, will not eat flesh; but this idea may be too deep and abstruse for practical use. Still we are all aware that the sentiment of kindness is developed just so far as we show mercy and gentleness toward these poor, dumb friends of our race. If we would have a home odorous with love, tenderness and all the humane virtues, let the children be early taught the sensibility that avoids giving unnecessary pain and torture. We shall never

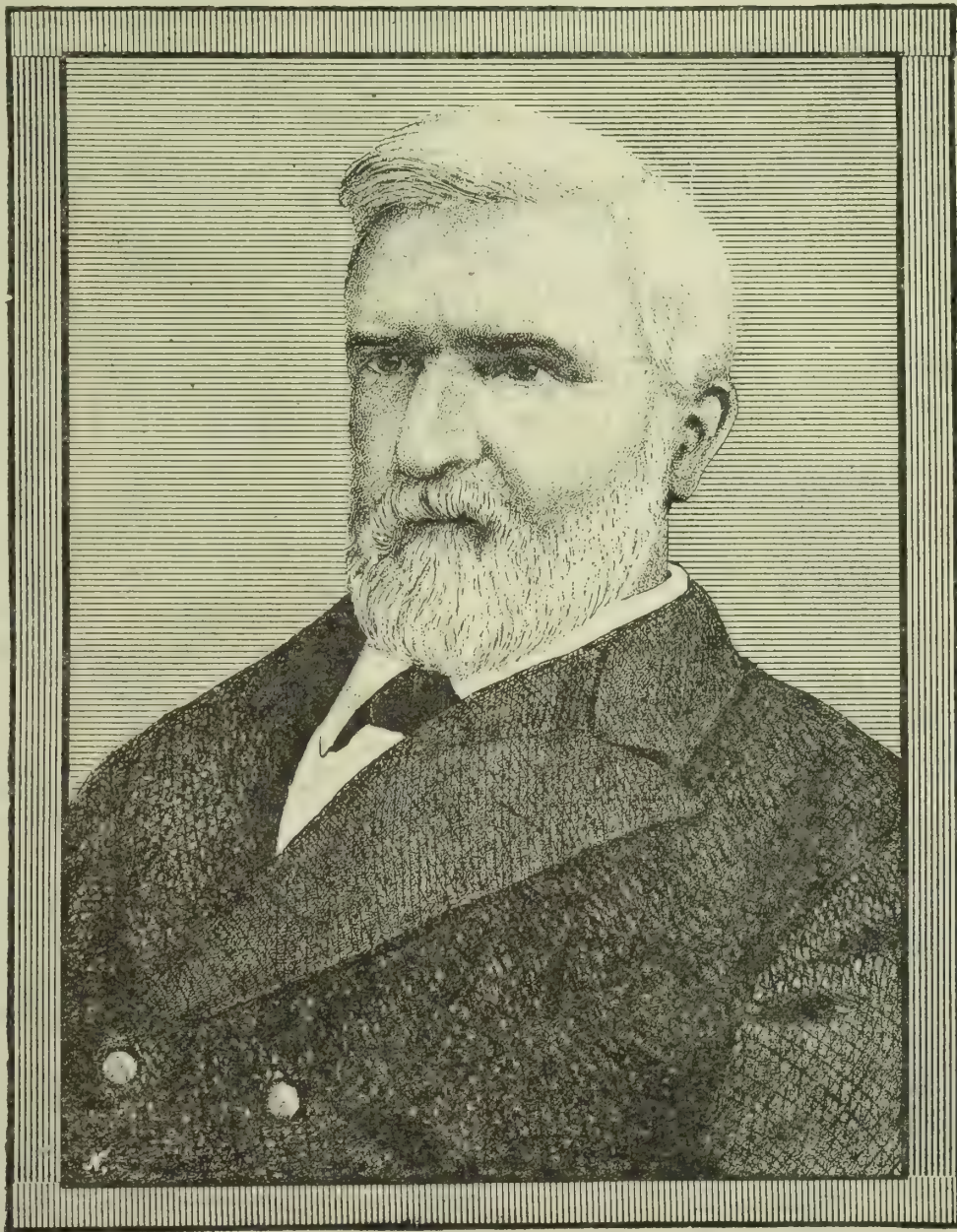
have a redeemed world till the whole animal kingdom will join with man in one anthem of praise to the Infinite Life-giver.

"He prayeth well who loveth well—  
Both man and bird and beast;  
He prayeth best who loveth best  
All things both great and small;  
For the dear God who loveth us,  
He made and loveth all."

### Our Next Governor.

A likeness of the man who now seems destined to succeed Gen. Stoneman as Governor of California will be of interest to our readers throughout the State. Washington Bartlett, whose portrait we herewith present, was born at Savannah, in 1824. Having been well educated in Georgia, he early removed to Florida, and engaged in journalism at Tallahassee.

In '49 he caught the gold fever, and the following year found him in California. He did



HON. WASHINGTON BARTLETT, GOVERNOR-ELECT.

not, however, betake himself to the mining regions, but went to work in his profession with promptness and energy, and published the first daily paper in San Francisco. After winning success in business and recognition as one who can safely be depended on, he was in 1859 elected clerk of the city and county, and so acquitted himself in office that he was twice re-elected.

In 1870 Gov. Irwin appointed him one of the Harbor Commissioners. Next he was chosen State Senator. In 1882 the Democratic party, needing a candidate of integrity unquestioned to run against honest Maurice Blake, selected Mr. Bartlett and made him Mayor of San Francisco by a majority of 2326 votes, which was increased to 2834 at his re-election two years ago.

In his long public service, Washington Bartlett has proved himself a man, upright and capable, and has gained credit as a sturdy guardian of the people's trust, and the stern foe of jobbery and corruption. His well-established character leads those who know him best to speak confidently that as Chief Executive of this State his administration will be wise, honest and efficient.

### The Postal Telegraph.

The Knights of Labor, in the General Assembly recently in session at Richmond, Va., passed the following resolution:

*Resolved*, That the organized power of the Order of Knights of Labor be directed in demanding at the hands of Congress the passage of a measure recommending the purchase, under the right of eminent domain, of the telegraph system of the country; that it is the duty of all to assist in nominating and supporting with their votes only such candidates as will pledge their support to such measure, and that special instructions be issued to the Legislative Committee at Washington to agitate there for such ownership, and make governmental telegraphy one of the burning questions of the day.

The Farmers' Convention in this State a few weeks ago gave its adhesion to this measure as follows:

We view with alarm the fact that railroad, telegraph and other monopolies are corrupting and controlling our Government. We, therefore, are in favor of our Government owning

tion in America; but the silu.

with their opposition. The schem.

long fight, prevailed, and postage went from 25 cents to 5 cents, then to 3 cents, and finally to 2, and instead of destroying the revenues, as predicted, the transmission of letters was increased more than 20-fold the first year. The plan succeeded beyond the most sanguine expectations.

The marvelous discoveries of science have wrought out new means of transmitting intelligence, and placed another responsibility upon law-makers to secure the advantages for the people. Here again Great Britain took the lead, and by an Act of Parliament purchased the telegraph lines throughout the whole Kingdom and made them an adjunct of the postal system. The benefit of telegraphic communication was thus placed within reach of the poorest. But this blessing was not attained without a

struggle. The corporation lawyers and the keepers of the legal sepulchers talked long and loud about the stability of contracts, the sacredness of vested rights, paternalism in government, and all that sort of thing. The example of England has been followed by France, Prussia, Switzerland, Sweden, Belgium and Canada, and everywhere the Government control of telegraph has proved cheap, efficient, practicable and a blessing to everybody.

Though the inventor of the electric telegraph was an American, though the people of the United States were the first to adopt this method of conveying intelligence, it seems that we are destined to be the last enlightened country to enjoy its full fruition. This matter has been brought before Congress, at intervals, for the past 18 years, and yet nothing has been done. Bill after bill has been smothered in the committee-room. Perhaps others are destined to experience a like fate. A monopoly that yields more than \$50,000,000, that has an army of employees scattered all over the country with which it can communicate in a moment; a monopoly that owns most of the great metropolitan journals and subsidizes or intimidates the press; a monopoly whose frown from the lobbies of Congress frightens most of the members out of their wits, and, like some huge octopus, has fastened upon a continent by millions of tentacles—is not likely to release its grasp without a tremendous effort.

We hope the Knights of Labor, the farmers and other labor interests, will succeed in making "governmental telegraphy one of the burning questions of the day." Time, persistence and unity of action will ultimately succeed. There is no excuse on the part of Congress in delaying this measure. It is no experiment. The plan has been tried by other countries and proved a success. If a postal telegraph is a good thing in Europe, is found to save time and expense where railroads can carry the mail in a few hours from one border to another, how much more beneficent it

must prove in a country so vast as ours, where the best locomotives in the world could not pass from one extreme to the other in less than a week.

**CITRUS TREES FROM CUTTINGS.**—Mrs. S. S. Pence, of Butte county, writes to the Oroville Register about growing the orange and lemon from cuttings. She has in her orchard 11-year-old trees from cuttings that have borne fruit for two seasons. They are very thrifty and bid fair to become as large as the seedling trees from which they were taken. Cuttings should be taken from good seedling trees, the wood to be of about two years' growth; place them in a nursery by themselves where water is plenty; in two years they can be set out where they are to remain.

**A CONCRETE DAIRY-HOUSE.**—We read that J. R. Garner, of Long Valley, Mendocino county, is building one of the nicest, coolest and best-arranged dairy-houses in the county. It is of cement, gravel and sand, with a 12-inch wall.

**A FINANCIAL SUCCESS.**—The receipts at the late Mechanics' Institute Fair, in San Francisco, exceeded the expenditures by \$21,500.

and operating all railway, telegraph and telephone lines in the United States.

The importance and practicability of this movement is so apparent that one can hardly debate it with patience. But every great reform has had a hard road to travel. As Sydney Smith once said, there is always a kind of men into whose heads it seems impossible to introduce a new idea without a surgical operation. When Sir Rowland Hill proposed to reform the postal system of England, by the establishment of a uniform postage rate of one penny, a noble lord, who was then Postmaster-General of Great Britain, exclaimed: "Of all the wild and visionary schemes I ever heard of, this is the most extravagant." All the silurians came to his aid, and said: "Let well enough alone. Let us have no such cranky tinkering with our postal system. Where will the Government revenues come from?" The projector and his friends were pelted with jeers and ridicule, and it was not till several years had passed that Parliament was forced to give the matter a patient and impartial investigation. The measure was adopted and immediately proved a triumphant success. The happy results in Great Britain awakened public atten-



## THE VINEYARD.

## Sunstroke of the Vine.

C. A. Wetmore, of the Viticultural Commission, has been visiting Anaheim and other places for the purpose of examining vines which have been suddenly dying, and has presented to the Anaheim people the following paper. He says:

During the last few months numerous complaints have been received at the office of the State Viticultural Commission of serious damages to certain vines or varieties of the same, the trouble being mainly a sudden cessation in the growth of the same, loss of foliage and apparent dying condition, without previous indication of such weakening. This affection has been chiefly noticed in Mission vines, in the vicinity of Anaheim, but it is a mistake to assume that it is confined to that district, although it is there most prominently noticed. I have had an opportunity during the last two months to inspect vines similarly affected in other places, and in some parts of the northern counties I have observed indications of the same trouble, but only partially affecting portions of the vines affected.

I have hesitated to give an opinion on the subject, because from the first I have assumed that this affection is the same as that which is called in France the "coup de soleil," which means in English "sunstroke," also known as apoplexy or folletage (craziness). This in France is nothing new or modern. It was first noticed in the Rustican by Pierre Crescenzi, in the year 1300. For many generations the peasants in the south of France have called those vines which have been attacked by it "foulletadas," or "brazed." In studying the characteristics of different varieties of vines known to Europe, we frequently find reference to this or that one which is said to be subject, under certain conditions, to this coup de soleil, among such vines being mentioned the Mataro, by Pellicot, in his work entitled "The Vigneron Provençal." The cause of my hesitation has arisen from the fact that all authorities on this subject refer to this affection as incurable, and I have not desired to be hasty in declaring that the same would prove true in California. It is not, however, properly speaking, a disease, nor is it contagious.

## The Symptoms of Sunstroke.

Prof. Foex, Director of Viticulture at the National Agricultural School of Montpellier, France, in his work on viticulture, published during the present year, refers to this affection of the vine as follows:

They call *apoplexie* or *folletage* of the vine, an accident which happens generally in July or August to vines which have been up to that time in good health and vigorous. Without any previous symptoms that should cause it to be foreseen, there is observed all at once, on certain vines isolated one from the other, a sudden loss of brilliancy of foliage; vigor which they habitually possess disappears, they become wilted and perish; the canes become dried from the top toward the bottom, and very soon the entire plant dies. At other times these phenomena are not produced with sufficient intensity to bring about this result; a portion only of the plant is affected, and the remainder continues to live, but the whole receives a severe shock, the effects of which are generally irremediable.

It is especially in rich and deep soils, and those which are moist, with little depth to permanent water; in those which, by their nature, are very little permeable, and after a very rainy year this apoplexie is particularly to be feared, according to M. Mares; it is manifested also in Algiers under the action of the sirocco.

Among the varieties of Languedoc, the Aramon and the Terret, the Furmint of Tokai, the Grollet of Fournaine, and the Catawba of America, are those which are most subject to it; but no vine escapes it altogether.

The foregoing description is in my opinion sufficient to identify the trouble which has affected vines in this State, and which is now under consideration. Before concluding this notice, further mention will be made of the circumstances that have been especially observed as accompanying the phenomena here.

In all discussions relating to diseases affecting vegetation, great care should be exercised not to be misled by theory. The salient facts are the important ones to be first considered. Here is an affection of the vine, which appears to be the same as is known in Europe, the effects of which are generally considered irremediable, although in a slight degree the causes of the same might be prevented. Various European authors have undertaken to explain the phenomena, and for our present purpose it is sufficient to quote a brief summary of what they have had to say on the subject.

## Some European Observations.

M. Leclerc, after the almost instantaneous death, in 1868, of a great number of very vigorous vines in France, undertook at the Agricultural Station, of Metray, some researches concerning the facts which were observed. The explanation which he gives of them is as follows:

A great quantity of rain has fallen this year, which, to a certain extent, prevents the rapid warming of the soil, and also tends to saturate the atmosphere with moisture; also, the sky of Touraine has been almost constantly clouded. The vegetation of the vines has taken place, so to speak, in the shade, and under these conditions the tissues of the plant have not acquired the resistance which they would

have had if the sun had shone often. The tissues are gorged with water. The atmosphere having been also relatively humid, the evaporation of the plant—that is to say, the water which escapes from its leaves and stems—has of necessity been feeble, since the plant evaporates less in humid than in dry air. The experiments of the celebrated physiologist, M. Sachs, have proved also that the transpiration increases as the temperature of the soil is elevated. Consequently, the circulation of water through the roots and the wood has necessarily been very slow, just as the evaporation has been the same. A relation in accordance with the activity of the transpiration and the circulation of water in the roots has been therefore established and regulated. Let us suppose, now, at a given time, that the sun strikes with its burning rays the rapidly-developed foliage of the vine. The atmosphere becomes hot, becomes less humid, becomes dry, in a word, and from this fact causes an increase in the transpiration as much more energetic as the temperature is more elevated, as the atmosphere is less saturated with moisture. And as the quantity of water lost by the leaves cannot be immediately replaced in whole by that which the roots absorb (by reason of the regularity of the circulation established), the leaves and the young stems give up the liquids of their tissues, fade and perish, if the loss of water attains a certain limit. It must be then an excess of evaporation, caused by a sunstroke and the sudden variation of the hygrometric condition of the atmosphere, which is the consequence of it which causes the destruction observed; and it is for this reason that I consider this phenomenon as a physiological accident and not a disease.

M. Saint Andre, formerly Chief of Chemical Studies at the Agricultural School of Montpellier, who undertook at about the same time researches on this subject, comes to about the same conclusion as M. Leclerc. According to him, "the folletage of the vine is produced by the transpiration of the plant, which evaporates more water through its leaves than comes up from the root." He has recognized that the

Slow and progressive elevation of the temperature of the atmosphere and of the soil activates both the transpiration of the leaves and the absorption of the water by the roots. When the wood does not conduct sufficient water to replace that which is evaporated in consequence of the warmth of the surrounding atmosphere, the first-mentioned phenomenon is more intense than the second, the evaporation increases more rapidly than the absorption, and the features of the folletage are not slow in manifesting themselves on the plant. And if, as happens sometimes in southern districts, the elevation of the temperature of the air is rapid, it provokes the evaporation of a much greater quantity of water through the foliage and a diminution of the growth of the roots—that is to say, the evaporation and absorption proceed in inverse ratio, and if the temperature continues to augment, there comes a time when the roots cease to maintain at the surface of the organs of transpiration the water indispensable to their functions. At this moment the quantity of water evaporated by the vine is notably less than that which it is capable of giving off under other conditions. If the temperature does not remain stationary, the tissue of the leaves loses its water and the plant presents the indications of the folletage.

Professor Foex, as a resume on this subject, says: "As has been seen by what precedes, the apoplexy appears to be the result of the rupture of equilibrium which should exist between the absorption of water by the roots and that of the transpiration of the leaves. This accident should be determined by exceptional changes in the temperature of the atmosphere, and in its hygrometric condition, or indeed by the effect of a very intense luminous action, which develops to an extraordinary degree the transpiration."

Up to this time there is no known remedy for this apoplexy; the vines which are attacked by it should be torn up and replaced, even when they are only partially dried, because they become restored very rarely afterward, even with great care. Drainage only can diminish under certain circumstances the chances of folletage by regulating the conditions of the humidity of the soil.

## Another Disease of the Vine.

There is another disease or affection of the vine caused, in some respects, similarly as is the preceding. This is known in France by the name of *Rougeot*. This latter affection, according to Professor Foex, attacks the vine when it is in full vegetation as soon as the first severe heat is experienced, and it is noticed more particularly on deep and moist soils. Thiebaut de Berneaud says that it is produced during the summer, after a cold rain—a storm—which causes the temperature to be suddenly lower, or even fog, and to which succeed warm winds from the south. [N. B.—The warm wind of the south of France, coming from the south, is similar in character to the north wind of Central California and the desert winds of the southern counties; the foregoing are in effect the circumstances under which, as we have seen, apoplexy is caused.] M. Mares describes as follows this affection called *rougeot*:

The leaves commence to wither, they become burned and lose their suppleness; the parenchyma becomes red, while the veins remain still green, which gives them a peculiar appearance; the berries shrink, the cane becomes yellow. If the malady becomes more aggravated, the leaves dry entirely and the cane partially dies from the extremity toward the base. It is sometimes attacked only on one side, which becomes brown, while the rest is still green. Frequently at the latter part of the season, the vines so attacked by *rougeot* push out new shoots from the cane. The vines attacked by *rougeot* do not die, as in the case of apoplexy, but they suffer badly and their natural fertility is considerably diminished. They do not recover except after several years.

Drainage appears to be, as in the case of apoplexy, the best means of diminishing the

chances of this accident. When it has attacked the vines, if the canes have not perished, we should limit ourselves to short pruning; if the plant has suffered much, it would be better to cut the vine down close to the roots and graft it; in such manner a fertile and vigorous plant may be reconstituted. It is useful in all cases to repeat frequently summer cultivation and to sulphur energetically in order to give all possible activity to the vegetation.

## Similar Affections in this State.

The foregoing discussion of two well-known affections of the vine applies, in my opinion, to the similar affections noticed in this State, viz.: to perishing of certain vines in the vicinity of Anaheim and elsewhere, and to the so-called red leaf and more or less burnt conditions observed, from time to time, on certain varieties of vines, in certain places in Northern counties. The conditions favorable to the development of the disease known by the French as *apoplexie*, prevailed most notably in the southern counties during the spring season of this and of the last two years. It is said that the Mission variety has been most affected, yet, within a few miles from Anaheim, even on the bottom lands near Los Angeles, where the surface soil is similar to that of Anaheim, the result is different. Possibly in the vicinity of Los Angeles the intensity of dry summer heat was modified. In northern counties I have observed the *rougeot*, more particularly on vines in small patches in vineyards where the undulations of the surface have prevented thorough drainage; also with respect to certain varieties such as the Charbone and Crab's Black Burgundy, on rolling land, where the surface soil is shallow, overlying cold, damp clay. Dr. Stillman, of Lugonia, has forwarded to our office samples of leaves and fruit affected as described above, in the case of *rougeot*. At first it was suspected that the affection of the vines referred to by Dr. Stillman was of a fungoid character, the specimens sent for examination being in poor condition for study after a long journey by express. I am now of the opinion that the trouble with the vines affected in his district was this *rougeot*, more or less of the same nature as the affection complained of at Anaheim, caused by similar conditions.

Where the sunstroke vines are not very seriously damaged, it would be well to prune very early—even before the leaves fall, so as to prevent the communication of morbid conditions from the dying parts toward the roots. Possibly a benefit might have been realized by pruning promptly in summer as soon as the injury was noticed; but this is conjectured.

Fruit and nut trees were in many cases affected in like manner, after the heavy wet season two years ago.

I should not forget to remark that those vines which showed feeble growth early in the spring were probably those affected by *apoplexie* or *rougeot* the year before, when the conditions were similar, and indicate what will be the fate of those first attacked severely this year.

## The Vine Trouble at Anaheim.

Mr. F. W. Morse, assistant in the Agricultural Department of the University, visited Anaheim last August under instructions from Prof. Hilgard, at the request of the Anaheim vine-growers, to investigate the nature and causes of the vine trouble in that locality. The following is an abstract of Mr. Morse's report, which will appear in full in the forthcoming viticultural report of the Department:

In the neighborhood of Anaheim considerable alarm has been occasioned by the general appearance of many of the vines during the early spring and summer, and by the sudden drying of the foliage up to the time of the ripening of the fruit.

No particular date can be given as the time of its first appearance; for, although the failure of the vines to start had caused some uneasiness, yet it was not until the foliage began to show weakness that special attention was given to the subject. The chief center of trouble is in the immediate neighborhood of Anaheim, where the old Mission vines were first planted, and from this point the damage gradually diminished toward the vineyards of later planting. The same trouble is found more or less in other localities of the State.

It has been stated that a single day will at times suffice to change an apparently healthy vine to one of a wilted, sickly growth, which cannot mature its fruit; but personal observation has not shown me any instances of rapid change—more than that of other years.

The leaves in general have the appearance of sunburn, and the foliage, as a whole, looks withered, dried and wrinkled; portions of the leaves sometimes become red. Upright canes are most affected, and those less exposed are less troubled. In the later stages of disease the leaves fall off. Three different stages of burning may be found upon a single leaf where true sun-scald is quite decided, and similar examples are found in the open vineyard where the trouble is greatest.

The trunk and old spurs show that the trouble dates further back than this summer's growth. The south and southeast sides of old vines, which are most troubled, showed dead spurs and a streak of dead wood running from the head, and in decreasing extent, toward the roots. Usually no shoots have started from these sides,

while suckering has often occurred from the north side. Scattering dead vines, which made good growth last year, still have roots in good condition.

A decided backwardness of starting was noticed this season with many varieties, often six weeks later than their usual time. In many cases small shoots appeared in the early part of the year, but soon became dry and the fruit which set afterward blasted; the shoots and fruit still remain hanging to the vine. Bushy growths have formed about some of the affected spurs.

The old Mission vines are the worst affected and are the oldest stocks. Ago, however, is not the only cause, as the same varieties only three years old are similarly troubled. The Borbaro, although found in small numbers only, showed marked signs of trouble, and in every case the foliage was badly burned upon the south side. Other varieties, such as the Golden Chasselas, Sultan, Semillon and Sauvignon are affected to a greater or less extent and in about the order named.

The soil in the district is very variable and light, and in many places its appearance shows it to be a sandy wash from some river course. As an example of this irregularity may be cited some specimens which were taken successively from the same hole at varying depths. To a depth of 24 inches a fine sandy soil prevailed, then a stratum of six inches in thickness of pure yellow to white sand, underlain by a soil similar to that of the first 24 inches, except that it is a little heavier. On the whole the soil is one that would be easily drained, and there could be no fears of stagnant water to interfere with the root growth. If any trouble of this kind existed it would be only in small spots, or in places where excessive irrigation was practiced.

In order to show the presence or absence of a fungus, specimens of all parts of the vines were collected and examined under the microscope, but in no case was there any fungus or insects to be found.

In casting about for a probable cause for the trouble we were led to believe, from the general evidence given in answer to questions, that the season has been an extraordinary one, and the supposition was confirmed by meteorological data obtained later from different sources. The temperatures given in the following record were taken at 7 A. M., 2 P. M. and 9 P. M., and therefore do not represent the minimum temperature reached during the night, the time when the damage from cold is probably done; but the maximum high temperature is doubtless correct.

Beginning the record late last fall, for the late warm weather, with other causes, kept the wood green until far into the winter, there is recorded in September a maximum temperature of 106° (F.) with a minimum on the same day of 64°. Moderate to hot weather prevailed during the remainder of the month, and into October. November, on the whole, was a cool month, but the first week in December shows a high temperature; for four successive days above 80° and from 60° to 70° early in the morning. During November 2.93 inches of rain fell, and later in December, 1.16 inches. In the middle of winter there are two conditions, moisture and temperature, favorable to the starting of the sap afresh in the vines. That such a starting of sap at this time of the year does take place in fruit trees as well as vines, is instanced in several cases.

The temperature for the remainder of December ranges at about 70° at 2 P. M. The temperature for January was not remarkable, for the first seven days ranging at 7 A. M. from 30° to 40°, several times approaching near the frost point and undoubtedly passing below it earlier in the morning. From the 22d to the end of the month 70° to 74° is the range for day temperature and 50° to 60° for morning temperatures—a season again when vine-rest might be disturbed. February is not remarkable for variations in temperatures; near the first of the month for four consecutive mornings the thermometer stood at 42° and 44°. March and April are marked as having uncommonly low temperatures, accompanied by cold rains, the first part of the former month being colder than the last week of January. The warm weather did not begin until June, when it reached 89° and remained high during the last part of the month. The minimum temperature reached was 60°.

From a table (arranged so as to show the monthly record of the maximum, minimum and mean temperature for five years) we see that an uncommonly high temperature prevailed during last fall and far into the winter, being higher than the record of any previous year; the minimum also remained high. This period was marked by a heavy warm rain. This warm period was followed by a remarkably low temperature for the months of February, March and April, accompanied by heavy cold rains. May and June also fell below the average, while July alone exceeds all others in high maximum temperatures, and likewise had the lowest minimum. These high temperatures, affecting the roots through the unusual rains, started the sap, which has undoubtedly been injured during the winter before its flow ceased for the previous season.

Accompanying the table above mentioned is one of the rainfall for the same period. A great deficiency was noted for 1885, with only a moderate amount for this year, but distributed in an unusual manner, and not so as injuriously affect the roots of the vines. There has been a very considerable irregularity in



supply of water in the soil, as shown by varying depth in wells and other sources, which may seriously affect the supply for the vines, especially in a soil so porous as the one in which these vineyards are located.

There are indications in the general appearance of the affected vines which point clearly to some disturbance in the sap circulation. The line of dead wood and bark upon one side of the vine, with the healthy condition of the opposite side, has been noticed, together with the gradual diminishing of the injury in the parts which are more protected from weather changes. A further instance, in the summer-pruning of the vines, bears out the probability that sap obstruction is concerned in the trouble. Canes upon a Semillon graft, three years old, had received two summer-prunings at widely different times, and were then tied close to a stake. Many of the canes which were late pruned were covered with dead leaves, while the early-pruned canes, which had recovered from the shock, passed the season without trouble. The most vigorous of the later-pruned canes have dry, red and dead leaves throughout their entire length, and the canes themselves were burned and had the appearance of ripened wood, especially upon the parts most exposed. Near the variety of vine just referred to are Golden Chasselas vines upon which summer-pruning has also been practiced, and with similar results. The smaller vines are usually the most troubled, and from the appearance of the fruit upon them would indicate a very early disturbance. Some of the smallest of the Semillon grafts have also suffered most, and had scarcely put out shoots before they became dwarfed and dried.

Near these varieties is a block of old Mission vines, many of which are apparently dead, but the older wood and roots still appear green, although quite dry. Some are producing large canes, but near the head will be found dead wood and spurs.

There are peculiar coincidences which argue in favor of some climatic condition as the cause of the trouble. For instance, in a certain vineyard are large Lenoir vines with small Sauvignon vines alternating. Extending through the plot is an avenue bordered by two rows of peach trees. Upon one end of the avenue the whole head of the trees have suffered a loss of from one to three feet of their projecting limbs. The trouble diminishes as we approach the other end of the row, where the trees are in good condition. The Sauvignon vines, weakened somewhat on account of being among large, vigorous vines, are affected in exactly the same proportion as the trees, showing a similar cause for both troubles. Similar disturbances among the fruit trees throughout the section are common, and a condition of irregular growth during the winter was noticeable in many of the cases, and even a fresh growth of new twigs in the middle of summer has been observed.

From the above observations, it would appear that there is no cause for alarm for the future prosperity of the vineyards. There was nothing found to indicate a true disease which might increase and spread to other vineyards. But, on the contrary, all the peculiar appearance and trouble could be traced to natural causes due to more or less accidental peculiarities of weather, soil and moisture, conditions which may not recur for many years.

An examination of some of the old vines which have been failing for some time, reveals the cause of their extraordinary mortality this year. Some have been decaying for so long a time that they could easily be pushed over.

There can then be little doubt that the younger vines, in time, will return to their usual condition when the effect of the causes above described shall have passed; and the old vines which have been failing, previous to this year, from old age, and exhaustion, will doubtless continue to decay, although under more favorable circumstances some may revive for a short time.

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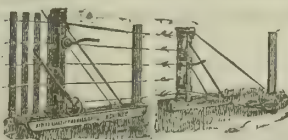
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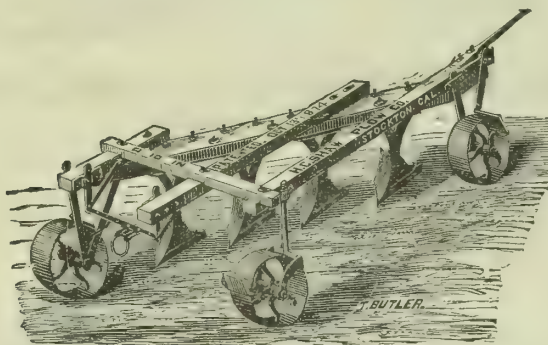
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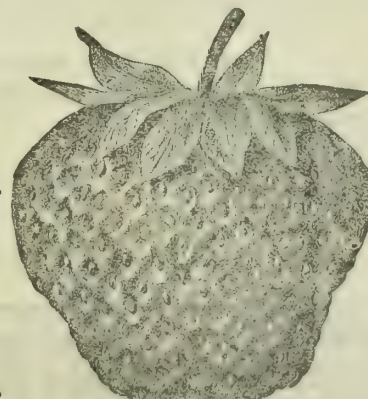
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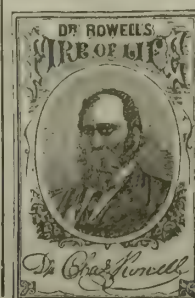
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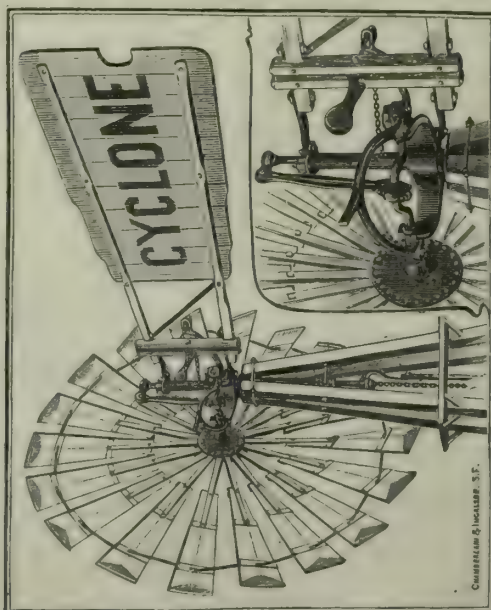
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The Rural's Salmagundi.

THE eighteenth volume of the last census containing social statistics of cities has just been issued.

EGGS deserve attention. According to the Bureau of Statistics there were imported in 1876, 4,903,771 dozen, and in 1885 the number had increased to 16,098,450 dozen.

PROF. BEAL, of the Michigan Agricultural College, has exploded the old theory that posts set little end down outlast those set the way the tree grew. After a long experiment he says it makes no difference which end is placed in the ground.

AN Illinois farmer sent a quantity of honey to a Chicago commission merchant, and in order to test the latter's honesty visited the city and bought his own honey, paying 14 cents a pound for it. When the returns from the consignment came back it was represented that the honey had been sold for 12 cents a pound.

A GENTLEMAN, when asked the other day what he thought of the campaign in this State, replied that it reminded him of Artemus Ward's answer to the question how he stood during the war. Everybody was expected to define his position and declare his principles. "Principles!" said Artemus, "principles! Why, I haven't any. I am in the show business."

THE Florida Agriculturist says that Com. A. Hart Norris, of that State, offers to give to any good, sober, industrious family that will engage in silk culture, a lot to build a house on, two and one-half acres for planting trees, 50 mulberry trees and 500 silk-worm eggs, with the privilege of gathering leaves from his orchard to feed them on. All this is given free, with titles perfect, to those who wish to start in the business.

THE Germantown Telegraph says: It is a fact well worthy of note that no matter how poor may be the season for some one fruit or other, in Pennsylvania, at least, if not other States, the pear tree always has fruit. There are, of course, some years when there are more than others, but it is the rarest of all events in this part of the world for a pear tree, after it gets to a fair, mature bearing age, not to have on all the pears it is fit for to bear.

A LONDON journal places the probable wheat crop of the United Kingdom at 57,000,000 bushels, or 25,000,000 bushels less than in 1885. Although prospects have improved in Russia, they are behind the yield of a year ago. Serious damage has been done to wheat in South Russia by heavy rains. French stocks of wheat are small. India has a smaller crop than last year, all of which looks favorable for American wheat-growers.

THE secretary of the Relief Committee, Hulltown, Texas, S. L. Barker, in an appeal for help, gives a very gloomy picture of the cloud that now hangs over the farming horizon in northern and western Texas. The famine-stricken district is not less than 400 miles wide and over 600 miles long, and more than 100,000 people are inside the limits. "For more than 15 months the earth has not been wet to a depth sufficient to plow without turning up dry dirt, and, as a consequence, there has not been a bushel of corn, oats, wheat or potatoes per capita raised this year."

Fruit-Growing at Oroville.

G. W. Harney, secretary of the Oroville Citrus Association, informs us that they now have some 3400 trees growing on 29 acres. The trees have been placed about 20 feet apart, and number 120 to the acre. They include 246 seedlings, 2080 Washington Navel, 25 Malta Blood, 25 St. Michael and 25 Mediterranean Sweets, all Riverside stock. Forty of their Washington Navel trees were budded from the original tree that was sent out by the Government. The association also has 2300 seedlings about two years old, which will be ready to set in the grove season after next, and expects shortly to be able to supply the neighborhood with good stock.

MR. Wilcox, agent of the Cal. Northern R. R. at the same point, has fruited apples, pears, quinces, peaches, plums, apricots, nectarines, cherries, grapes, gooseberries, currants, blackberries, strawberries, raspberries, figs, pomegranates, persimmons, loquats, guavas, oranges, lemons, limes, almonds, chestnuts and walnuts, and has growing young plants of the banana, cherimoya, Alligator pear, sapodilla and paw-paw.

SNELL SEMINARY.—Readers will find in our advertising columns the announcement of the opening of the next half year at Snell's Seminary, Oakland, on January 3. This institution occupies an honorable place in the front line of institutions for the education of young ladies. It has grown as its merit has become more widely recognized, both in its corps of instructors and in its accommodations for pupils, until its position among our private schools is a commanding one. The situation in Oakland has many advantages. Readers who contemplate placing their daughters or wards in school during the winter should write to the principals for their catalogue, which gives full information about the institution.

The Fair at Santa Maria.

THE Agricultural and Stock Association, lately organized in the Santa Maria valley, held their first fair from the 27th to the 30th ult. The address of the president, G. W. Lewis, opened a conference in which a number of Santa Barbara county horticulturists told somewhat of their experiences and conclusions.

The live-stock included about 30 horses and a single entry of "three-fourths blooded heifers." There was racing every day, but the rules of the association forbade all gambling or games of chance upon the fair grounds, and likewise the sale of intoxicating liquors. Five ladies took part in an equestrian contest, and all proved themselves graceful riders; but Misses Julia Merritt and Ada Stephens won the prizes.

At the pavilion, the displays of grain, vegetables and fruits were many and various. Lompoc apples were presented in wonderful variety. Flowers and plants, dairy products and poultry, all were represented; nor were the products of the useful and fine arts lacking.

The baby-show on Friday drew a tremendous crowd. Fourteen babies were exhibited, and divers cups or napkin-rings were awarded to the prettiest and biggest, within the age-limit decided upon.

We are obliged to make our notice brief, and

PACIFIC COAST WEATHER FOR THE WEEK.

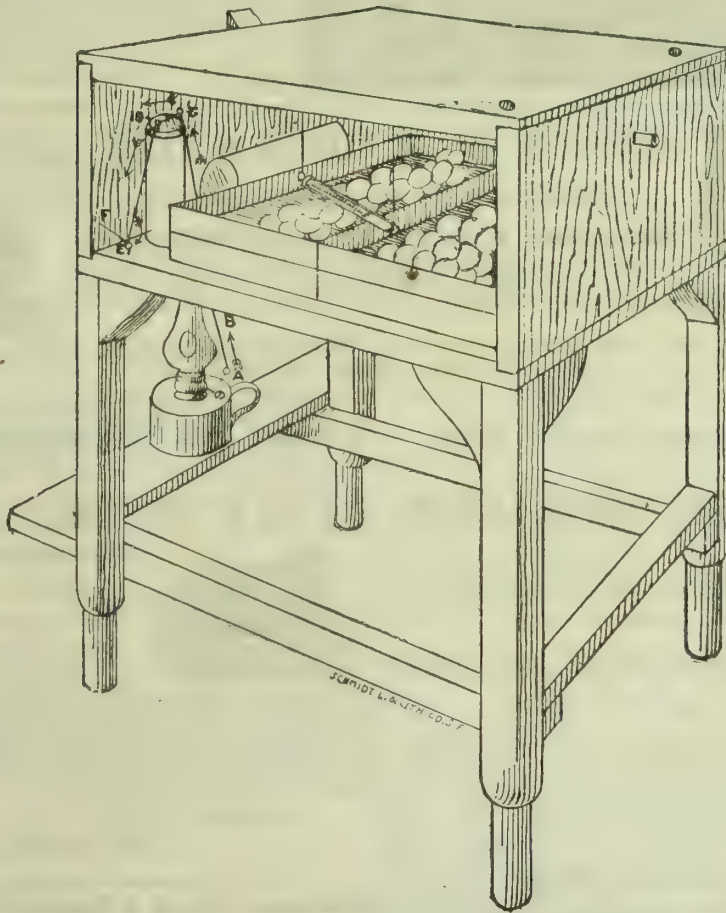
[Furnished for publication in this paper by NELSON GOROM, Sergeant Signal Service Corps, U. S. A.]

DATE.	Portland.				Red Bluff.				Sacramento.				S. Francisco.				Los Angeles.				San Diego.			
	Rain.	Temp.	Wind.	Weather.	Rain.	Temp.	Wind.	Weather.	Rain.	Temp.	Wind.	Weather.	Rain.	Temp.	Wind.	Weather.	Rain.	Temp.	Wind.	Weather.	Rain.	Temp.	Wind.	Weather.
Nov. 3-10.																								
Thursday.....	.00	51	NW	Cl.	.00	59	NW	Fr.	.00	62	N	Cl.	.00	62	NE	Cl.	.00	82	SE	Cl.	.00	70	W	Cl.
Friday.....	.00	54	NE	Cl.	.00	76	N	Cl.	.00	63	N	Cl.	.00	70	SE	Cl.	.00	66	SE	Cy.	.00	64	SW	Cy.
Saturday.....	.00	57	NE	Cl.	.00	69	E	Cl.	.00	62	S	Cl.	.00	61	SE	Cl.	.00	68	SW	Cl.	.15	62	SW	Fr.
Sunday.....	.00	49	S	Cy.	.00	60	NE	Sy.	.00	62	S	Cl.	.00	62	SE	Cl.	.00	65	SW	Cl.	.00	63	NW	Cl.
Monday.....	.04	43	SW	Cy.	.00	56	S	Cy.	.00	59	S	Cy.	.00	58	SE	Cy.	.00	64	S	Cl.	.00	61	NW	Cl.
Tuesday.....	.09	36	NW	Cy.	.00	58	NE	Cl.	.00	59	S	Cl.	.00	60	SW	Cy.	.00	62	SW	Cy.	.00	61	NW	Cy.
Wednesday.....	.00	48	E	Cl.	.00	56	S	Cy.	.00	54	N	Cy.	.00	56	NE	Cy.	.00	63	W	Fr.	.00	—	—	—
Total.....	.13				.00				.00												.15			

EXPLANATION.—Cl. for clear; Cy., cloudy; Fr., fair; Fy., foggy; — indicates too small to measure. Temperature Wind and weather at 12:00 M. (Pacific Standard time), with amount of rainfall in the preceding 24 hours.

The Peerless Incubator.

A number of readers of the RURAL have written for more information about the Peerless Incubator, which has been favorably mentioned in our reports of the Stockton Fair. As the machine includes novel features of considerable promise, we give on this page an outline en-



THE PEERLESS SELF-REGULATING INCUBATOR.

omit premium-lists, but are pleased to take the Times' word that there was a magnificent display, large attendance and financial success.

Mr. Gallatin's Herefords.

The fact that California is rapidly increasing her supply of thoroughbred horn stock and is securing excellent blood of all the popular breeds has often been commented upon in our columns. One of the latest acquisitions is mentioned by the Red Bluff Sentinel as follows: B. A. Bell, superintendent of the Gallatin ranch in this county, brought to this place August 20, 1886, five bulls of the Hereford stock, bred by T. L. Miller, of Beecher, Ill., the pioneer Hereford cattle breeder of America, and also editor of the Breeders' Journal and president of the Hereford Association of the United States. These bulls are respectively one 2 years old, one 18 months and three 8 months old. They are thoroughbreds from the premium bulls Success, Winter, De Cote and Fortune. In addition to the above there are on the Gallatin ranch three imported Herefords, bred by the New Zealand Stock Company, and sold to Mr. Gallatin Sept. 23, 1884. They are four years old this fall. Mr. Gallatin has also another bull, Senal Glenn, 18 months old, sired by Bollingbroke, now owned by Pete French. He has also 35 head of half-breed yearlings from Durham cows, by the Earl of March. Also 136 head of half breeds from Durham cows sired by Horace 9th and Horace 22d, full-blood Herefords. Mr. Gallatin is now negotiating for a carload of thoroughbred cows from Indiana, Illinois and Missouri, for the purpose of breeding thoroughbred bulls for the market. Mr. Gallatin has one four-year-old cow, Nell the Third, sired by the English show bull, Horace the Third, also a yearling heifer sired by the Earl of March.

graving of it, and such information as we have at hand. The device was patented through Dewey & Co.'s Agency by Frederick Biven, who now resides near Stockton. The incubator is being manufactured by the Peerless Incubator Company, of Stockton, of which Chas. C. Moore, son of the well-known H. H. Moore, is manager.

The engraving shows the general appearance of the incubator. The point of special importance in it is the regulator, which those who have seen its operation assure us is a wonder in its reliability and accuracy, and increases or diminishes the heat as needed. The arrangement is simple and effective, consisting of an air-tight box connected with a vessel inverted in glycerine. As the heat increases, the air in the box expands and causes the inverted vessel to rise, thereby lifting a string attached to it and to the heating-lamp, and reducing the flame. When the air grows cooler the vessel falls and the flame is turned up. The engraving shows the regulator with its attachment to the apparatus for raising or lowering the flame of the lamp.

Another important feature of the machine is the arrangement for furnishing moist, heated air. The supply of pure warm is drawn over a "moisture pan" suitably arranged, and is then admitted to contact with the eggs. The arrangement for ventilation is also said to be very satisfactory. We understand that a number of the machines have been sold, and it bids fair to become speedily and widely known in the poultry world.

Don't Fail to Write.

Should this paper be received by any subscriber who does not want it, or beyond the time he intends to pay for it, let him not fail to write us direct to stop it. A postal card (costing one cent only) will suffice. We will not knowingly send the paper to anyone who does not wish it, but if it is continued, through the failure of the subscriber to notify us to discontinue it, or some irresponsible party requested to stop it, we shall positively demand payment for the time it is sent. LOOK CAREFULLY AT THE LABEL ON YOUR PAPER.

LARGE GALLOWAY SALE.—We learn from the Denver News that Messrs. Bush, Morse & Co., of the Windsor hotel and Windsor Farm (Denver, Colorado), purchased a few days since the entire herd of Galloway cattle of the Leonard Brothers, of Mount Leonard, Missouri, numbering 98 head, and costing the round sum of \$25,000. During the last four years the Leonard Brothers have imported from Scotland some 1600 head of this breed, reserving for breeding on their own farm a few of the finest of each importation. It is these cattle that the Windsor farm proprietors have bought, and the purchase therefore gives them the largest imported thoroughbred herd of Galloways in the United States. The herd will arrive at the farm about December 1, and it will doubtless receive the attention from stockmen which its high standing and high breeding will deserve. Bush, Morse & Co. are the owners of the fine Galloway bull "Borderer of Drumlanrig," which appeared on the first page of the RURAL Press of Sept. 18, 1886.

THE RAYMOND.—Readers probably noticed in Mrs. Carr's excellent article about Pasadena an allusion to the Raymond—the great hotel which will attract guests from all parts of the world. We have received a handsomely engraved invitation to attend the Grand Dedication Ball which will be held on Wednesday evening, Nov. 17. The "opening of the Raymond" will be the event of the year at the South. A large number of Eastern people will be present, and the management are desirous of showing something of the floral productions of Southern California. It is intended to make the hotel literally a bower of flowers, so that Eastern visitors may have a realizing sense of what this favored region can bring forth in a season when their own gardens are mantled in ice and snow. An invitation has been issued to all to send flowers for the garlanding of the spacious rooms and hallways.

SEÑOR MAXIMO JERIA, of Santiago, who has been in Europe some four years, collecting information for the Chilean Government as to the methods of farming, fruit growing, etc., in different countries, favored us with a call last week. He is a very intelligent and courteous gentleman, speaking quite good English, and showed his appreciation of the RURAL by subscribing for it—to be sent to him in South America, whither he is about to return.

THE CANADIAN PACIFIC.—One of the promises made by Mr. Gladstone was that the Canadian Pacific Railway was soon to pay the Government \$20,000,000. It is to do this by a loan from Baring Brothers, the proposals for which have just been published. This mortgaging of the future may help the ministry out of one of its most serious difficulties. It is one of those moves in finance for which Mr. Gladstone has always been famous.

Inducements to Subscribers.

To favor subscribers to this paper, and to induce new patrons to try our publication, we will furnish, to those who pay fully one year in advance of date, if requested, the following articles (while this notice continues), at the very greatly reduced figures named at the right:

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- 3.—Dewey's Patent Elastic Binder (cloth cover), name of this paper stamped in gilt.....50
- 4.—Niles' Stock and Poultry Book for Pacific Coast, pamphlet, 120 pages, illustrated.....25
- 5.—Kendall's Treatise on the Horse and Diseases, 89 pages, instructive illustrations.....05
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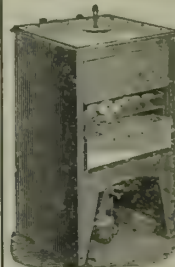


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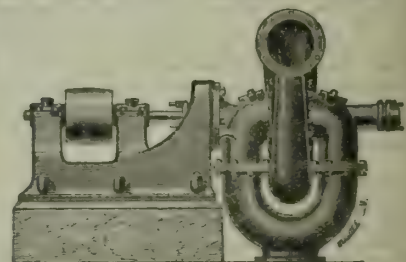


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## S. H. MARKET REPORT

NOTE. Our quotations are for Wednesday, not Saturday, the date the paper bears.

## Weekly Market Review.

## DOMESTIC PRODUCE, ETC.

SAN FRANCISCO, Nov. 10, 1886.

The past week has shown more general business, which increased as the election news grew older. Farmers, in several sections, are reported to be busily engaged in out-door work, which keeps them from out of the market as sellers of their surplus. The English wheat market has, for the past few days, been gaining strength, closing firm at to-day's market. The following is to-day's cable:

LONDON, Nov. 10.—Cargoes off coast, firmer. Cargoes on passage and for shipment, firmer; held higher. California wheat, off coast, 34s 6d. California wheat, just shipped, 34s 6d. California wheat, nearly due, 34s. English country market, steady. French country market, steady. Liverpool wheat, spot, firmly held. Liverpool wheat, Cal. 6s 7½d to 6s 10½d. Weather in England, heavy rain.

## Foreign Review.

LONDON, Nov. 8.—The *Mark Lane Express*, in its review of the British grain trade during the past week, says: Deliveries of wheat are restricted. The provincial markets are very sparingly supplied. Quotations are firm. Sales of English wheat during the week were 49,325 quarters at 30s 8d, against 60,431 quarters at 31s 1d during the corresponding period of last year. The wheat trade is slow and values are unchanged. Supplies of American wheat have largely increased, exceeding all precedent. Stocks of flour are heavy. Corn is scarce and 3½d higher. Four cargoes of wheat arrived; two were sold, two withdrawn and one remained. At to-day's market wheat was very firm, with limited dealings. Flour was steady. Corn was scarce and 3d dearer. Barley and oats were steady. Beans and peas were 6d dearer. Linseed was firm.

## Eastern Wool Markets.

NEW YORK, Nov. 7.—There has been little change in the market. The demand has been less general and the comparatively dull tone has had the natural effect to create more or less complaint, though there is not sufficient weakness among holders to afford buyers any practical advantage. Last week was the duller of the year in the Philadelphia market, but the depression in trade has no appreciative effect on values, which are generally well maintained. The dullness is regarded by most dealers as a natural pause after a season of activity in the market. Holders show no anxiety to force sales by concessions. Among the sales were 11,000 pounds of California grease at 19 cents; 30,000 pounds of California grease at 20½ cents; 20,000 pounds of California grease at 22 cents; 1000 pounds of Territory bucks at 14 cents; and 40,000 Oregon at 24 cents.

BOSTON, Nov. 6.—The market for wool has been quiet the past week, there being no material change in prices. Election week is generally a quiet one, and the present year has been no exception. Sales for the week have been 3,145,800 pounds, but includes considerable carpet wool. There is no apparent weakness on the part of holders of wools, and manufacturers are obliged to pay full current prices whenever they wish to obtain supplies. There is always a lull in the demand at this time, but when the labor troubles are adjusted and the season for heavy transactions opens, manufacturers will again be large purchasers of wool, and we look for a renewal of the upward tendency of prices, which has been checked for the moment. Business in woolen goods is fairly satisfactory. Colder weather is needed to effect the improvement on the demand for flannel blankets and other branches of the trade. The opening of the next London sales is looked forward to with considerable interest. It is asserted in some quarters that the sales will open at easier prices. Territory wools are weak, but do not show any marked decline, and at the prices now ruling they are considered a good property and will meet with a better demand later on, when the stocks of washed fleeces are more reduced than now. There has been a moderate demand for California wool. The stocks of Spring are small, and there is very little Fall wool here as yet. Sales include 22,000 pounds Spring at 22½c; 40,000 pounds Spring at 21c; 21,000 pounds Fall at 14½c; 25,000 Fall at 19c; 143,000 pounds Spring and 50,000 pounds of Fall on private terms. It is, however, reported here that the San Francisco clip is sold up much closer than it was a year ago. Receipts for the week have been 13,104 bales domestic and 1824 bales foreign, against 2952 bales domestic and 931 bales foreign for the corresponding week in 1885.

NEW YORK, November 9.—Wool is quiet and very steady. Domestic fleeces, 30c at 38c; 1½ lb; pulled, 14c at 35c; Texas, 9c at 25c.

## New York Wheat Market.

NEW YORK, Nov. 7.—In wheat the business of the past week was much larger than for the preceding week, and the figures of the market have plainly indicated confidence in better prices in the early future. The good export demand, especially for the continent, and the disposition on the part of the principal holders to meet that demand at fair prices, show a healthy condition of things, and with more available tonnage the output undoubtedly will be considerably increased. Spot closed dull—½c lower—and futures dull and steady. November, 83½; December, 85½; January, 87; February, 88½; April, 91½; May, 92½ cents.

## New York Hop Market.

NEW YORK, Nov. 7.—The business in the general market was confined to small parcels, and the market showed no features of interest. Holders make little effort to dispose of stock, and brewers make very moderate purchases for immediate use. Pacific Coast crop, 1886, prime to choice, 29c at 30c; 1886, fair to good, 25c at 26c; crop 1885, good to choice, 13c at 16c.

NEW YORK, November 9.—In the hop market new Pacifics are showing marked firmness. Brewers are in many instances giving those goods the preference over foreign hops. For the first-class

article 30c cash is the inside rate, and sales to brewers at 32c at 33c are noted. For less than 28c only an inferior article can be secured. State hops are dull and wholly nominal. Foreign move only in a moderate way, and prices show no improvement, although cable advices are still very firm.

## California Fruit at the East.

NEW YORK, Nov. 7.—California plums, \$1.50@2.50 per box; pears, \$3.50@3.75; quinces, \$1.50; grapes, \$2.25 per 40-lb case.

(Telegram to the Fruit Union).

CHICAGO, Nov. 9.—Supply reduced so that offerings now consist entirely of grapes. Choice 40-lb crates, Muscat, \$3 to \$3.25; Tokay, \$3 to \$3.25; Emperor, \$3.50 to \$4.

## Fruits in Philadelphia.

PHILADELPHIA, Nov. 6.—The *Times*, in its market article, says: Excellent Concord and Catawba grapes are still offered at 10 cents per pound, but they are being crowded to one side by Spanish and California grapes. Sweet and juicy Almeria grapes from Spain bring from \$4 to \$6 per barrel, and retail at from 20 to 30 cents per pound. California grapes are considered by many to be quite equal to the Spanish, and the best varieties bring about the same prices.

## California Products at the East.

NEW YORK, Nov. 7.—Dried Fruit—Raisins, first of new crop, California, can be bought in jobbing way at \$2 for loose and \$2.25 for London; car lots, 15c less. Malagas, owing to free offerings, show an easier tendency.

The canned goods demand is improving somewhat and a better feeling prevails. Gallon tomatoes are strong. Peaches are quiet, but steady. Salmon is offered more freely and \$1.57½ will now buy Columbia river. California canned peaches, \$2.25@2.50; pears, \$2.50; plums, \$1.75@1.85; grapes, \$1.75@2.25; apricots, \$2.10@2.25; quinces, \$2.50.

Seeds—California yellow mustard seed is selling in a small way at 4½c@4¼c; but carload lots are offered at 3½c@4c.

## London Agricultural Seed Trade.

LONDON, Oct. 20.—Messrs. John Shaw & Sons, seed merchants of 37 Mark Lane, London, E. C., wrote that there was a poor attendance on the seed market to-day, with but little business doing. The new American cloverseed, just arrived, shows fair quality, and offers on most moderate terms. French samples also appear to be cheap. There is no change in the value of winter tares; prices continue exceedingly low. Blue peas are rather easier. The new Haricots are good and reasonable. Feeding linseed remains steady. There is but a limited inquiry for mustard and rapeseed. In hemp and canaryseed there is no change on the week.

## Local Markets.

BARLEY—The market has continued to advance throughout the week, with a strong closing to-day. The demand is chiefly export by rail to the East, and also by sail to Europe and South America. On Call options have been gradually creeping up, with higher prices to-day. To-day's transactions were as follows: Morning Session: Buyer season—700 tons, \$1.10; 300, \$1.10½; 100, \$1.10½; 100, \$1.10½; 100, \$1.10½; 100, \$1.09½; 100, \$1.09½. Buyer 1886—100 tons, \$1.06; 300, \$1.05½; Seller season—100 tons, \$1.01½; 200, \$1.00½; Seller 1886—100 tons, \$1.04½; 400, \$1.04½; 100, \$1.04½; 100, \$1.05; 100, \$1.05½. Afternoon Session: Buyer season—100 tons, \$1.09½; 300, \$1.09½; Seller 1886—200 tons, \$1.04½; 100, \$1.04½. Buyer 1886—200 tons, \$1.04½; 100, \$1.04½.

BEANS—The market is dull but steady, particularly for the more choice grades. The stock here is not over large, while the demand is steady. BUTTER—The market is weak for all kinds, with sellers pressing the market owing to heavy supplies and reported improving pastures. CHEESE—Stocks and supplies are very light, causing buyers to pay an advance so as to have their wants met.

DRIED FRUITS—See "Market Information," where a fuller report is given on dried fruits and raisins.

EGGS—The market is exceedingly strong for choice ranch; and as the supply of Eastern and Utah is lighter, an improvement is noted in them.

WHEAT—Buyers have tried in all conceivable ways to break prices for sample parcels, but without avail, as farmers believe in better prices later on. On November 1st, full and complete returns were received from all agricultural districts and from every warehouse in this city and State, giving the stock of wheat on hand. These returns give an aggregate of about 550,000 short tons. As this included the grain in vessels loading here and at Port Costa, it will be seen that the supply is quite short, for, provided they be correct, from them must be taken seed and food from November 1st to July 1, 1887, which is no small quantity. To-day's Call Board transactions were as follows: Morning Session: Buyer Season—400 tons, \$1.44½; 900, \$1.44½; 300, \$1.44½. Buyer 1886—100 tons, \$1.35½; 100, \$1.39½. Afternoon Session: Buyer season—400 tons, \$1.44½; 1300, \$1.44½. Buyer 1886—200 tons, \$1.39½. Buyer 1886—200 tons, \$1.39½.

[COMMUNICATED.]

## Market Information.

## Cereals.

Barley is stronger and higher, under smaller supplies of bright and a continued good export demand. The exports so far this season are all of five times larger than the like time any former season. The consumption in this State of feed is fully up to last month, which was in excess of October, 1885. The demand for dark coast for seed is fair.

Oats have a stronger tone under moderate receipts and a steady demand. The bulk of receipts continue medium. It is claimed that farmers in Oregon and Washington are holding supplies back. Black oats are in increased demand for seed, with a higher range of values asked and received. Some small parcels sold at over \$1.42½ for seed, but to place any quantity at even \$1.40 would be impossible. Buckwheat continues low at unchanged quotations.

Rye is stronger, with the supply lighter under freer buying. Corn continues weak at the low quotations, owing to free supplies of western. Californian is said to show

to better advantage than last year, consequently buyers take it in preference at a higher range of values than rule for western.

From July 1, 1886, to November 7, the exports of wheat from this port, with flour reduced to wheat, aggregated 326,815 short tons. On November 7, the tonnage in port loading and to load (wheat and flour) had a carrying capacity of 145,293 short tons, which, added to that already shipped, makes a grand total of this season's crop already provided for, of 472,108 tons. The Agricultural Department at Washington estimated this year's wheat crop in California at 34,248,000 bushels, equal to 1,027,440 short tons; so that deducting that shipped and the amount to be taken in by the engaged vessels in port, and there is left 555,332 tons; from this must be taken the consumption for food and seed, estimated at 350,000 tons, leaving on November 7 only 205,332 tons of this season's crop for export. But to this amount must be added last season's carry-over (visible and invisible) of 90,000 tons, which makes a total exportable surplus of 295,332 tons, after the present engaged tonnage is loaded. From this estimate a carry-over stock of not less than 40,000 tons, including flour, must be taken, which leaves an exportable surplus up to July 1, 1887, of 255,332 tons, not provided for. Of this quantity, China, Japan, Hawaiian Islands, Central America, etc., will take in flour all of 60,000 tons, which leaves 195,332 tons available for shipping to Europe. This estimate is based on the Agricultural Department's estimate of California's crop, but taking the estimate of this State's crop as compiled by the RURAL PRESS, there ought to be 100,000 tons more available for export to Europe. Accepting the RURAL PRESS' estimate as nearer correct than the Agricultural Department's, even then the position is in favor of farmers, as the following shows: Surplus available for export to Europe on November 7, 295,332 short tons; tonnage in port and to arrive, suitable for wheat cargoes, 505,000 short tons (carrying capacity), which gives 210,000 tons in excess of the available supply of wheat. To the tonnage on the way, other vessels will be added from time to time, which will swell the carrying capacity to quite a high figure before July 1, 1887.

The local wheat market has ruled very strong throughout the week at from \$1.36½ to \$1.40 for fair to choice shipping grades. Export buyers beat down prices for options on Call Board, expecting to secure large parcels of actual wheat at lower prices, but in this they counted without their host, for farmers sold sparingly at the lower bids, \$1.35 to \$1.36½, and \$1.37½ to \$1.40 had to be paid, and even these prices did not tempt many large holders, who claim that \$1.50 is apt to rule before three months pass by, let the English market be what it may.

## Dried Fruits.

The market shows considerable strength, with an advance in some lines. The demand appears to be chiefly from the East. Referring to dried fruits, the *Chicago Grocer* says: "A sharp advance is noted in California pitted plums; and an extensive demand exists. This market seems to be supplying the East as well as the West, and as stocks are rapidly diminishing, it begins to look as if there was not enough to go around—certainly not if the demand continues. Choice grades of California peaches that went into cold storage at about six cents last spring, are now worth about 10 cents, and stocks are inadequate to meet the demand even at this large advance." The *Chicago Trade* confirms the above and also reports higher advancing prices for dried apples, under a strong export and home demand.

## Feedstuffs.

Ground barley is higher and stronger, with a good demand ruling at the advance.

Bran and middlings have a strong tone, with no abatement in the demand.

Hay is higher, owing to lighter receipts and a good demand. The stock in this city is small for the season of the year, and if a cold winter is experienced, it is claimed that the consumption will be quite large, which will probably advance prices.

Carrots are more inquired for, but as the supply is large, higher prices do not rule.

## Fruits.

Heavy receipts of apples from Oregon and the East have lowered, very considerably, all varieties. Only choice Spitzenberg fetch \$1.25 per box.

Grapes, if choice and in good condition, move steadily, but poor are hard to sell. Isabella and one or two other choice and scarce varieties fetch \$1 per box.

Strawberries are weaker under freer receipts.

Pears, under freer receipts and a light demand, are weak and lower.

Figs, plums and prunes are out of the market.

Oranges are coming in more freely and sell for less money; but limes fetch an advance.

Quinces are steady, at unchanged figures.

## Hops.

The market begins to show more strength, with buyers disposed to bid up on choice parcels, but holders do not appear disposed to make concessions on their asking prices, believing that the foreign and Eastern markets justify the belief in better prices.

## Live-stock.

The cooler weather has stimulated consumption in both beef and mutton, and as receipts are only fair, prices for beef cattle and mutton sheep are higher and strong at the advance. Small calves are also doing better. Hogs continue weak, with a further shading in prices. As the weather is growing cooler, packers will soon be in the market, when a more general cleaning up is apt to obtain. It is claimed that there is a larger increase in the number of work horses offering on the market, which causes low prices. If reports now current of large railway construction next year be correct, then we may reasonably look for a better demand for work horses. For roadsters, general utility horses, and matched team the demand is good. Milch cows are slow at the low prices heretofore ruling. It takes a very choice milker to fetch over \$40. Hogs choose stronger, with an advancing tendency.

## Raisins.

The market is stronger for good to choice, but is unchanged for poor to fair. In referring to this year's California raisins the *Chicago Grocer*, of Oct. 30th, says: "The California raisins that are coming into this market are the finest ever received from

that locality. They are conceded to be vastly superior to the imported ones, which appear badly. This is a critical year for California, and she has come nobly to the front, and we believe another year will show California raisins fully as high in price as the imported."

## Nuts.

The market shows an improvement for both walnuts and soft-shell almonds. The demand is chiefly from the East, where a strong and higher market rules. The crop of walnuts both here and abroad is reported light, which is apt to create still better prices later on.

## Vegetables.

Potatoes have weakened off to so low a range of values as to draw in more buyers, who are cleaning up the market. If receipts continue as light as now reported, it is claimed that an improvement in prices will soon obtain. The lower prices shut off receipts from both Oregon and Utah.

Sweet potatoes have a steadier tone, with receipts falling off and consumption good.

Choice hard onions are strong, with a good demand ruling, and only moderate receipts. Soft or sprouted onions are hard to sell at any price.

Cucumbers are out of market, as are summer squash. Tomatoes continue in liberal supply, but the quality, as a rule, is only fair. Canners continue to buy, owing to the higher prices of canned tomatoes inducing them to put up all they can.

Egg plants, string beans and Lima beans are in moderate receipt, but green peppers come in freely.

## Wool.

The stock is closer cleaned up than for many years, making it difficult to place consignments unless the clip is desirable and wanted by several buyers. Medium to fine crossbred continues to command high figures. It now looks as if next year's clip will command quite an advance on this year's prices.

## Miscellaneous.

The tonnage movement compares with last year at this date as follows:

	1886.	1885.
On the way.....	215,279	190,950
In port, disengaged.....	74,268	113,543
In port, engaged.....	81,542	24,052

Totals.....371,089 333,545

The above gives a carrying capacity as follows: 1886, 593,742 short tons; 1885, 533,624 short tons; increase over last year, 60,118.

Poultry, after a severe depression, has a steadier tone, with buyers more anxious for choice large and fat, which will fetch all of 10 to 50 per cent above our quotations for hens and young roosters.

Beans are very dull, but not quotable lower.

San Francisco, Nov. 10, 1886.

## Domestic Produce.

Extra choice in good packages fetch an advance on top quotations, while very poor grades sell less than the lower quotations.

WEDNESDAY, Nov. 10, 1886.

GRANES AND PEAS. —Peanuts..... 4½c @ 11

Bayo, oil..... 1 40 @ 1 55 Filberts..... 10 @ 11

Butter..... 1 25 @ 1 55 POTATOES.

Butter..... 1 05 @ 1 15 Burbank..... 75 @ 1 15

Butter..... 1 10 @ 1 15 Early Rose..... 25 @ 35

Butter..... 1 15 @ 1 15 Jersey Cows..... 50 @ 1 00

Butter..... 1 20 @ 1 25 Jersey Blues..... 1 00 @ 1 15

Butter..... 1 25 @ 1 25 Petaluma..... — @ —

Butter..... 1 30 @ 1 35 Tomatoes..... 1 00 @ 1 10

Butter..... 1 35 @ 1 40 Elmer reds..... 25 @ 35

Butter..... 1 40 @ 1 45 Humboldt..... — @ —

Butter..... 1 45 @ 1 50 Kidney..... — @ —

Butter..... 1 50 @ 1 55 Lima..... — @ —

Butter..... 1 55 @ 1 60 Old Peas, blk eye..... — @ —

Butter..... 1 60 @ 1 65 do green..... 1 00 @ 1 10

Butter..... 1 65 @ 1 70 do Niles..... 1 25 @ —

Butter..... 1 70 @ 1 75 BROOM CORN.

Butter..... 1 75 @ 1 80 Chile..... — @ —

Butter..... 1 80 @ 1 85 do Oregon..... — @ —

Butter..... 1 85 @ 1 90 do Peoria..... 70 @ 90

Butter..... 1 90 @ 1 95 do Salt Lake..... — @ —

Butter..... 1 95 @ 2 00 CHICORY.

Butter..... 2 00 @ 2 05 California..... 4 @ 4

Butter..... 2 05 @ 2 10 do Sweet..... 1 00 @ 1 25

Butter..... 2 10 @ 2 15 do SALT AND GAME.

Butter..... 2 15 @ 2 20 German..... 6 @ 6

Butter..... 2 20 @ 2 25 do Hens, doz..... 5 00 @ 6 00

Butter..... 2 25 @ 2 30 do Roosters..... 5 00 @ 6 00

Butter..... 2 30 @ 2 35 do Broilers..... 3 00 @ 4 00

Butter..... 2 35 @ 2 40 do Ducks, tame..... 4 00 @ 6 00

Butter..... 2 40 @ 2 45 do Mallard..... 3 00 @ 4 00

Butter..... 2 45 @ 2 50 do Sprig..... 1 50 @ 2 00

Butter..... 2 50 @ 2 55 do (case, pair)..... 1 00 @ 2 00

Butter..... 2 55 @ 2 60 do (case, pair)..... 1 00 @ 2 00

Butter..... 2 60 @ 2 65 do (case, pair)..... 1 00 @ 2 00

Butter..... 2 65 @ 2 70 do (case, pair)..... 1 00 @ 2 00

Butter..... 2 70 @ 2 75 do (case, pair)..... 1 00 @ 2 00

Butter..... 2 75 @ 2 80 do (case, pair)..... 1 00 @ 2 00

Butter..... 2 80 @ 2 85 do (case, pair)..... 1 00 @ 2 00

Butter..... 2 85 @ 2 90 do (case, pair)..... 1 00 @ 2 00

Butter..... 2 90 @ 2 95 do (case, pair)..... 1 00 @ 2 00

Butter..... 2 95 @ 3 00 do (case, pair)..... 1 00 @ 2 00

Butter..... 3 00 @ 3 05 do (case, pair)..... 1 00 @ 2 00

Butter..... 3 05 @ 3 10 do (case, pair)..... 1 00 @ 2 00

Butter..... 3 10 @ 3 15 do (case, pair)..... 1 00 @ 2 00

Butter..... 3 15 @ 3 20 do (case, pair)..... 1 00 @ 2 00

Butter..... 3 20 @ 3 25 do (case, pair)..... 1 00 @ 2 00

Butter..... 3 25 @ 3 30 do (case, pair)..... 1 00 @ 2 00



Fruits and Vegetables.

Extra choice in good packages fetch an advance on top  
quotations, while very poor grades sell less than the lower  
ones. WEDNESDAY, Nov. 10, 1886.

Apples, bx com.	30 @ 75	Nectarines...	8 @ 10
do choice...	1 00 @ 1 25	do evaporated...	5 @ 10
bananas, bunch.	1 50 @ 3 00	Peaches...	8 @ 10
blackberries, ch.	— @ —	do pared...	18 @ 22
antelopes, cr.	— @ —	Pears, sliced...	5 @ 24
berries blk.	— @ —	do qtd...	— @ —
do Royal Ann.	— @ —	do evaporated...	8 @ 10
berry plums...	— @ —	Plums, pitted...	7 1/2 @ 8
raspberries...	— @ —	do unpitted...	3 @ 4
strawberries...	7 00 @ 10 00	Prunes...	5 @ 6
currants chest...	— @ —	do French...	— @ —
igs, lx...	— @ —	Zante Currants...	8 @ —
rapes...	30 @ 50		
do Rose Paru.	35 @ 50	RAISINS.	
do Muscat...	30 @ 40	Dehesa Chus, foy 2 65 @ —	
do Tokays...	25 @ 50	Imperial Cabin...	— @ —
abelle...	75 @ 1 00	et, fancy...	1 90 @ —
Vine, Zinfandel 12 00 @ 18 00		Crown London...	— @ —
do Mission...	11 00 @ 15 00	Layers, foy...	1 70 @ —
times, Mex...	6 50 @ 7 50	do Loose Mus-	— @ —
do Cal box...	— @ —	cats, fancy 1 60 @ —	
emona, Cal, bx 2 50 @ 4 50		do Loose Mus-	— @ —
do Sicily, box...	9 00 @ 11 00	Cal. Valencias...	1 50 @ —
do Australian...	— @ —	do Layers...	1 50 @ —
ectarines, box...	— @ —	do Sultanas...	1 50 @ —
ranges, Cal, bx 1 50 @ 2 50		Fractions come 25, 50 and 75	
do Tahiti, bx...	— @ —	cents higher for halves, quar-	
do Mexican, M...	— @ —	ters and eighths.	
do Panama...	2 00 @ 3 00	VEGETABLES.	
leaches, bx...	— @ —	Artichokes, doz...	10 @ 15
do Asparagus...	— @ —	Asparagus box...	— @ —
do Carrots...	— @ —	Beets, sk...	1 00 @ —
do Cauliflower...	— @ —	Cabbage, 100 lbs...	50 @ 75
do Celery...	— @ —	Carrots, sk...	25 @ 35
do Eggplant...	— @ —	Cauliflower, doz...	— @ —
do Garlic...	— @ —	Celery, doz...	50 @ 60
do Green Corn...	— @ —	Chickens box...	30 @ 50
do Lettuce...	— @ —	Eggplant...	60 @ 75
do Lima Beans...	— @ —	Garlic, lb new...	5 @ 6
do Mushrooms...	— @ —	Green Corn...	— @ —
do Okra...	— @ —	do small box...	1 00 @ —
do Parsnips...	— @ —	do large box...	— @ —
do Peppers...	— @ —	Green Peas, sk...	2 00 @ 2 50
do Pumpkins...	— @ —	Lettuce, doz...	10 @ —
do Squash...	— @ —	Lima Beans lb...	3 @ 4
do Turnips...	— @ —	Mushrooms, bx...	— @ —
		do cultivated...	— @ —
		Okra, dry, lb...	10 @ 12 1/2
		do green box...	— @ —
		Parsnips, chl...	1 50 @ —
		Peppers, dry lb...	10 @ —
		do green, box...	40 @ 60
		Pumpkins pr ton...	12 00 @ 15 00
		Squash, Marrow...	— @ —
		fat, too...	5 00 @ 10 00
		do Summer bx...	25 @ 40
		String beans sk...	50 @ 3 50
		Tomatoes box...	40 @ 75
		Turnips chl...	75 @ 1 00

ist of U. S. Patents for Pacific Coast  
Inventors.

From the official report of U. S. Patents in DEWEY &  
Co.'s Patent Office Library, 252 Market St., S. F.

FOR WEEK ENDING NOVEMBER 2, 1886.

351,952.—CHIN REST FOR VIOLINS.—W. V.  
Arthur, Oakland, Cal.

351,829.—Tonic.—I. D. Davis, Stockton, Cal.

351,968.—VARIABLE NOZZLE.—R. F. Derrick,  
Roville, Cal.

351,969.—HYDRAULIC GRAVEL ELEVATOR—  
& W. W. Eastlick, Oro Fino, Cal.

352,053.—TEMPERATURE REGULATOR.—J. M.  
Alsted, Oakland, Cal.

351,773.—CUFF HASP.—J. W. Hollingsworth,  
Los Angeles, Cal.

351,785.—DOLL.—W. J. Lynd, Yreka, Cal.

351,945.—STEAM GENERATOR.—Stutsman & Cole,  
Portland, Ogn.

352,102.—AIR COMPRESSOR.—T. P. Sweeney,  
Acto, Cal.

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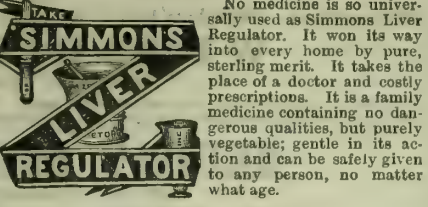
HAROLD C. HOAG—California.  
B. W. INGALLS—Arizona.  
E. L. RICHARDS—San Diego Co.  
R. G. HUSTON—Montana.  
Geo. McDOWELL—Fresno and Tulare Cos.  
D. F. BERGMAN—Tehama and Colusa Cos.  
H. H. SMITH—Plumas and Sierra Cos.  
J. C. SWEENEY—Sonoma and Mendocino Cos.

VALUE OF WOODLANDS AS RESERVOIRS.—We  
have received a copy of "The Forest Waters  
of the Farm; or, Value of Woodlands as Reser-  
voirs." It is a translation by Rev. S. W.  
Howell of the famous brochure by Antonia  
Dusset, discussing the value of forests as con-  
servators of moisture, etc. It is published by  
Forest and Stream Publishing Co., 39 Park  
Row, New York City.

the Best Alfalfa Land in Tulare  
County for Sale.

Dr. W. McFadden, whose postoffice address is Tipton,  
Tulare Co., offers for sale, at the low price of TEN DOL-  
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about 12 miles nearly due west of Tipton, on the S. P.  
R. He has 30 acres of alfalfa stand of alfalfa as can be  
seen growing in the county. It grows green and thrifty  
all year round, without any irrigation whatever. The  
greater portion of this land is also equally good for stock,  
alfalfa, grain or vegetable growing. It affords rare  
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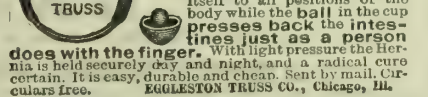


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place of a doctor and costly  
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medicine containing no dan-  
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vegetable; gentle in its ac-  
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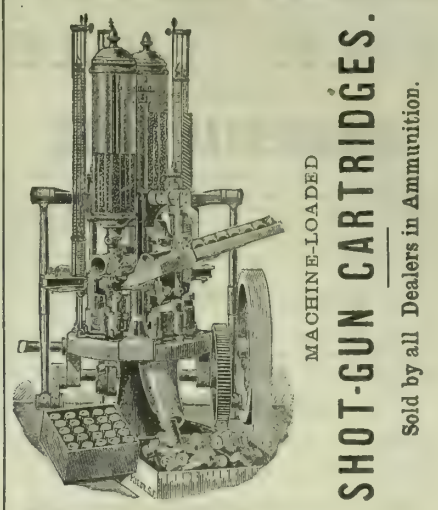
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NO SCALE—I wish particularly to call the attention of Fruit-growers to this fact. I have repeatedly had my nursery examined by experts, and upon no occasion have they found any scale or any indication of scale. The nursery is isolated from orchards, both old and new, and as I take every precaution in importing new varieties to get only clean stock, I feel perfectly warranted in guaranteeing every tree sold by me free from scale and other pests that are proving so disastrous to the fruit interests of the State. SEND FOR CATALOGUE.

E. C. CLOWES, Proprietor, Successor to W. B. WEST,  
Stockton, Cal., October 27, 1886.

This is to certify that we the undersigned have this day thoroughly inspected the Stockton Nursery; that we found no scale or indication of scale, and that to the best of our knowledge and belief the Stockton Nursery is free of this dreaded pest.

WM. H. ROBINSON, Quarantine Guardian San Joaquin Fruit District,  
JOS. HALE, County Commissioner of Horticulture.

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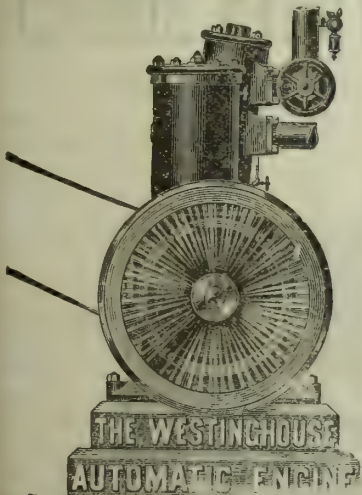
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We are informed that various parties are infringing upon the widely-known Letters Patent granted originally to GEORGE F. WEYMOUTH for an improved Hay Knife. The invention patented by him is a sword-shaped blade provided with operating handles, the edge of the sword-blade being furnished with knife-edged serrations or teeth. It is our purpose to PROSECUTE ALL INFRINGEMENTS, and to hold responsible to the full extent of our ability and of the law, all parties who manufacture any knife infringing upon the patent, or who deal in the same. Several suits are now pending in the U. S. Courts. All manufacturers and dealers are hereby warned of our rights, and the public are cautioned against purchasing any Hay Knives made as described above, which are not of our manufacture.  
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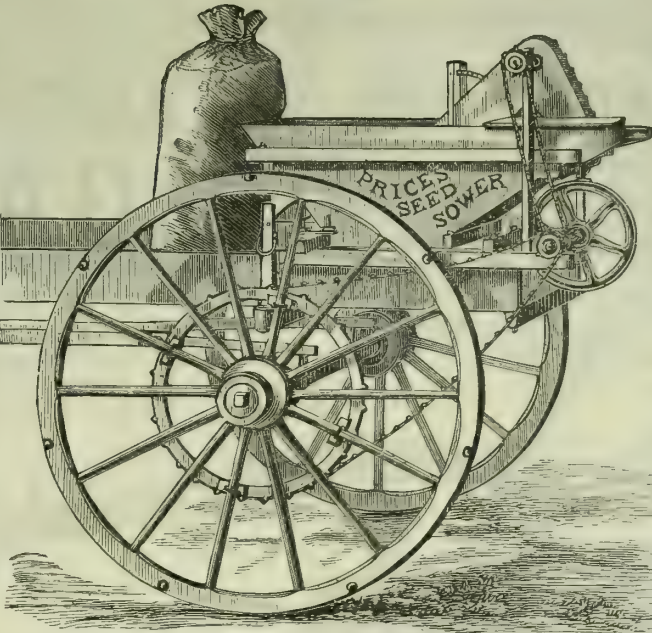
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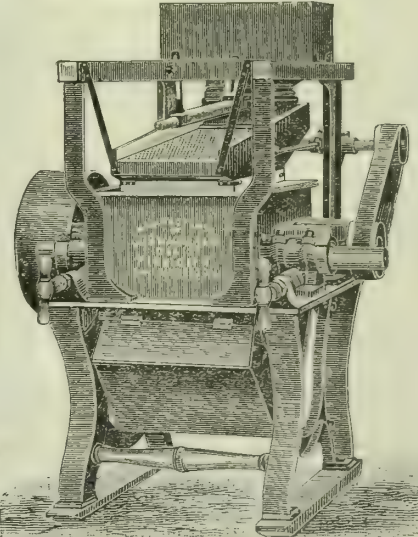
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I will ship a sample to those desiring an agency on a week's trial on liberal terms. A thousand percent the best washer in the world for saving labor, clothes and soap. Pays capable agents BIG MONEY. Write for particulars. Address J. WORTH, Box 516, St. Louis, Mo.; or Box 1968, San Francisco, Cal.

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With Handles underneath the Mold and attached to the Landside, and wooded same as all other common plows

No. 26.	Two-horse general purpose plow, cuts furrow 7x13 inches, weighs 120 pounds.....	\$16 00
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The above prices do not include Wheel or Joiner.

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No. 32.	Two-horse light general plow, cuts furrow 6x12 inches, weighs 94 pounds.....	\$15 00
No. 34.	Three-horse stubble plow, cuts furrow 8x16 inches, weighs 129 pounds.....	16 50
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No. 36.	One-horse garden plow, cuts furrow 5x11 inches, weighs 71 pounds.....	12 00
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The No. 38 Vineyard Plow is made especially for our California Vineyards

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The Wood-work of the Gale's is made from the best quality of White Oak timber, carefully selected with reference to the use intended. The beam is placed in the center of its work, thus securing a center draft under all circumstances. It is secured to the plow by two bolts—one through the slotted standard head in the center of the beam, and the other through the handle brace at its rear end.

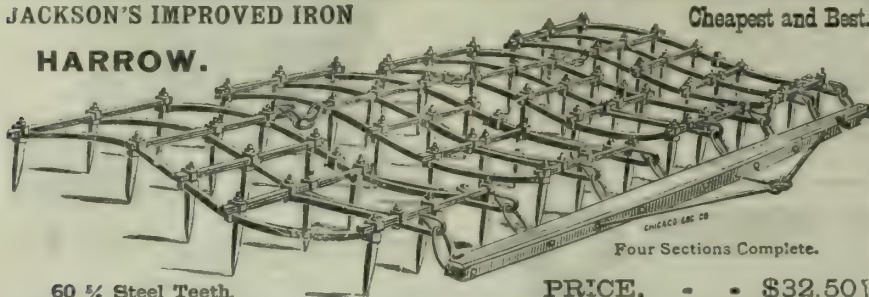
### LANDSIDES.

Until last year the Landsides on our Gale Plows were *straight*. Without a straight landside a plow will not turn all the ground it plows. The *sloping* landside leaves a ridge of unplowed earth at the bottom at each furrow, leaving space for weeds, etc., to spring up; and the farmers who have used the plows with the *sloping* landsides are readily seeing how they have been humbugged. CALIFORNIA IS THE ONLY STATE NOW USING SLOPING LANDSIDES. THEY HAVE BEEN ALMOST WHOLLY DISCARDED EAST. But as many farmers prefer a *sloping* Landside, we have had a special pattern of this kind made for us, which is *far superior to any sloping Landside Plows yet introduced in California*. We solicit a thorough inspection of them by parties preferring this style of Landside, before making purchases.

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#### HARROW.

Cheapest and Best.



60 1/2 Steel Teeth.

PRICE, - - \$32.50

This Harrow was introduced to the farmers of the Pacific Coast, during the season of 1881. Since then, hundreds have been sold, giving entire satisfaction. I have made the malleable iron clamps heavier, and strengthened them, making this the **Best Iron Harrow**. The frame is indestructible, made entirely of iron and locked firmly together by the teeth passing through malleable iron clamps, and having screw-threaded shanks on their upper ends, which bolt the frame-work securely together. This mode of constructing a harrow frame dispenses with drilling or punching holes, thereby securing much greater strength and durability. **It is indestructible.** No shrinking, swelling and rotting of frame-work. It is constructed in narrow sections, each acting independently; will adapt itself to any uneven surface of the ground, and will cut the soil better and more evenly than any other Harrow. Constructed on correct mechanical principles; each section has a center draft, and each tooth cuts a separate track. No one tooth in line with another. The safety-hook prevents unhooking when turning round. Four different sizes to suit customers. **STRONGEST AND BEST HARROW MADE!**

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	PRICE.
No. 1 has three sections, 45 1/2 steel teeth; cuts 9 feet wide. This is a light size for two horses. Weight, 168 pounds.....	\$25 00
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No. 3 has five sections, 75 1/2 steel teeth; cuts 15 feet wide. This is my 3-horse harrow; can leave off one section and use two horses with the same draft-bar. Weight, 291 pounds.....	37 50
No. 4 has six sections, 90 1/2 steel teeth; cuts 18 feet. For this size I use four horses abreast, with two draft-bars coupled together at the ends; adapted for large farms. Weight, 336 pounds.....	48 00

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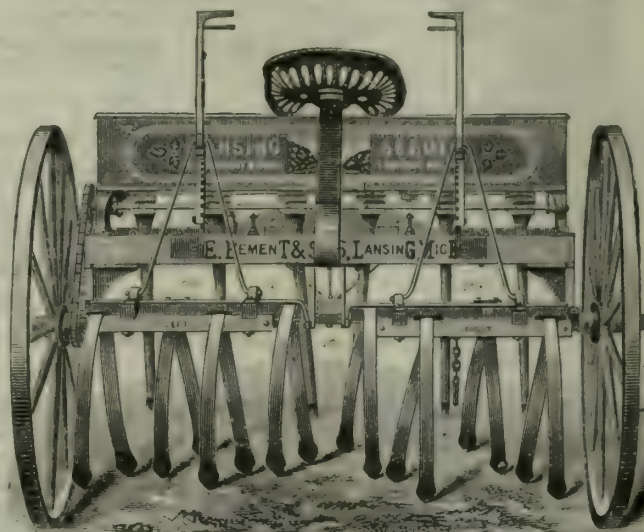
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## LANSING SPRING-TOOTH SEEDER.

Sows the Grain Evenly and Covers it Thoroughly.



Patented August 31, 1880, and June 20, 1882.

IT POSSESSES MORE POINTS OF EXCELLENCE THAN ANY OTHER SEEDER MADE.

Sows Perfectly all Grains and Seeds from the Largest Kernel to the Smallest Alfalfa Seed.

It is the **STRONGEST, MOST DURABLE** and **EASIEST MANAGED**. By means of the lock lever the teeth can be placed in the ground to any desired depth and held there, thus avoiding all bobbing and shaking of the frames so common to other seeders. It is light and compact. **EASY OF DRAFT.** The draft all being from the gang—the center of resistance—it is easier on the team than any other seeder. Any boy that can handle a team can handle it with ease. The frames holding the teeth are made in two sections, which are easily managed by the driver, who is able to regulate the depth of either section without getting off the seat.

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**WE GUARANTEE THE SPRING TOOTH FOR ONE YEAR AGAINST BREAKAGE FROM DEFECTS.**

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# PACIFIC RURAL PRESS

TWENTY-PAGE EDITION.

Vol. XXXII.—No. 21.]

SAN FRANCISCO, SATURDAY, NOVEMBER 20, 1886.

{ \$3 a Year, in Advance  
SINGLE COPIES, 10 CTS.

## November 27th on Yerba Buena.

We notice that our interior exchanges are inveighing against November 27th as an Arbor Day for California. They are quite right in claiming that the day is altogether too early for tree-planting, and it is not unnatural, perhaps, that they should make merry at the lack of practical experience and knowledge which led some of our literary friends to fix the day for it. It should conciliate all to be assured that the fixing of the date is now acknowledged by all to be a mistake. Those who gave the first push to the present movement were all right on the sentimental and the general theoretical considerations involved, but they did not think of times and seasons. The idea of covering our barren areas with trees filled them with enthusiasm, and then they wanted to do it "right away off," as the boys say. They know better now, and when the proposition comes up before the Legislature for formal appointing of an Arbor Day for California it will have a date that can be approved; or, if not, the Legislature may be trusted to have enough practical tree-planters from the different parts of the State to decide upon a proper day.

As for the planting on November 27th, it has narrowed itself down to planting trees on Yerba Buena, or Goat Island, and perhaps in the parks of San Francisco, on that day. If there comes a fair supply of rain in December, probably a fair percentage of those trees will live. In the immediate neighborhood of the bay, of course, planting can be done at an earlier date than in the interior. We see, therefore, in the present shape of the proposition, no reason why our interior friends should object. We know that unless it rains more before Nov. 27th, it will be pretty hard work to make a hole in the crest of Goat Island, and we know that if we have such a drouth as we sometimes have from thence to the middle of January, there will not be any very thick forest from the little eucalyptus and cypress which will be set on the 27th. But what if they all die? The loss will not be great, and the purpose served in awakening interest in the subject will be worth the cost. The failure will be seen to be through no fault in the sentiment, but because the sentiment flowed at the wrong time.

We had the pleasure of attending the meeting called to consider the Arbor Day proposition, at the Palace hotel, on the evening of November 12th, and can assure all who may have found their common sense offended by the proposal to plant trees at a date so closely subsequent to Thanksgiving Day that those in San Francisco who are advocating tree-planting are earnest and enthusiastic and quite willing to take advice about the practical features of the movement. The State Forestry Commission has a bill prepared, and which the coming Legislature will be asked to enact, which will name a day in February. After the affair in November is properly disposed of, the Arbor Day proposition will appear upon a practicable basis.

A GREAT DROUTH AT THE EAST.—A prolonged drouth is one of the worst afflictions which can come upon our eastern friends, who count upon frequent showers during the summer and fall. In California our conditions and

dry, and great difficulty is experienced in getting water for the stock. In the vicinity of Wareham, Massachusetts, families can with difficulty secure water enough for domestic uses. The various ponds and small lakes are very low.

## Are They Coming?

Thanksgiving is eminently the day for family and friendly reunions. In another column we have pointed this out as one of the features of the day. On this page the artist has embodied the expectancy which awaits the coming of the guests. Their arrival is one of the events of the day. It has been preceded by the advent of the big turkey, and by the various culinary sensations which always mark the approach of kitchen crises and their fortunate transits. The dining-room events, too, are successfully passed and the doors are closed upon the tasteful decorations and the glittering silver and glass which has not had such a rubbing and polishing since last Christmas. All the members of the household, save the mother, were long ago ordered to their rooms for holiday attiring—poor mother's work is never quite done, and she still bustles and broils in the hot kitchen, and will have but a moment to don her best gown while the dinner bell is ringing through the house. The young lady of the house has emerged from the chrysalis of her morning gown, and appears upon the upper balcony in the beautiful summer garb which the California climate smiles upon during the Thanksgiving season. In her hair are the marguerites, freshly plucked in the garden below, and around her are the clinging vines which show the balminess of the season by their abundant blooms. She sits in repose, conscious of her treasures of youth and beauty, looking and listening for the carriage wheels, far down amid the trees which shade the winding roadway. Soon the guests must come. The precious grandparents, the beloved uncles, aunts and cousins, will soon be welcomed by a wave of the hand and by a hurried rustle of the robe, as the daughter of the household speeds to the doorway to add her joyous greeting to the shouts of the younger members of the family, who have been running alongside the carriage wheels and shouting their welcome over the last quarter mile of the road. This is a scene fit to thrill the heart and bring new light to the eye—the coming of the guests on Thanksgiving Day.

Does the reader mistrust that all the expectancy of this sweet young face and all the loveliness of the simple toilette are not for the family guests alone? It would be but natural if they should take a wider range and center finally to the stalwart young form which approaches in the saddle, and excites even the youngsters as he draws in his fine animal beside the merry group. But it is not our right to compass degrees of affection and thanksgiving. It is the right of each heart to seek its own, and even the grandparents, looking far away through the vistas of their own lives, are disposed to rejoice anew at each recurrence of love's young dream among their offspring.

THE name of the temporary terminus of the S. P. Co.'s extension in San Luis Obispo county has been changed from Crocker to Templeton.



WAITING FOR THE THANKSGIVING GUESTS.

calculations are different and summer showers are unwelcome. The area east of the Rocky mountains which has suffered this season is very large. It covered the great country from Texas to Wisconsin and seriously affected grazing and dairy interests. We have not followed the subject closely and cannot say how far eastward of the prairie States the drouth extended, but present reports are of severe lack of water in New England. It is said that springs and wells in some of the southern counties of Vermont, that were never known to fail before, are now

A trench has been dug to connect the Little Quittams' pond with Acushnet river in order to increase the water supply for the town of New Bedford. Throughout the States mentioned the drouth is widespread.

THE Los Angeles Times has knocked all the poetry out of orange groves. It says there is more money to be made in growing cabbages than oranges, and gives the figure to prove it. An acre of good ground will yield 25 tons of cabbage.



## CORRESPONDENCE.

Correspondents are alone responsible for their opinions.

## California.

(Written for the RURAL PRESS by I. C. HATCH.)

I realize the impossibility of pleasing both or either of two large classes of people in writing of California. One class will revolt at any due enthusiasm. They care not how much praise one bestows on animals, but flowers and fruit must pass with frigid mention. The other class will insist that you paint California in "the light that never was on land or sea;" that every prospect pleases and each day is a bridal of the earth and sky. Now this latter class err on the side of beauty, an exalted enthusiasm, and in the direction of right and truth. It will not do to sneer at this and call it overdone, the hysterics of æstheticism, sublimated affectation, etc.

The love of mountains and flowers, of balmy climes, is as practical, as true, as love of *belles lettres*, of the fair humanities, of painting, of sculpture, or even of animals. One cannot write soberly of some, and, I think, the best, aspects of California. The pulses refuse to be equable and the pen self-contained. The name is like an elixir, and the imagination is at once plumed with it. Nor is this responsiveness without its uses, aside from its delights. It is a sort of Arethusa, or a spring of Nepenthe, where the wounded sensibilities may find a lenitive; where the "fitful fever" of life may be soothed; where the bondage of routine may be broken; where the dull heart may be gladdened; where a refuge may be found from weary, carping care; where we may enjoy the divine, enchanting ravishment of nature, and the soft witchery of her lofty spell. And why should not California be painted in brilliant hues? If, in describing the polar regions, one should have no glow of language, no hint of flower nor fragrance, because it is fitless, why should not one speak of orange groves, of a "land of delicious lights and floating shades," as a fact? Ought an Italian sunset to be limned in the cold, somber, cheerless tints of an Arctic one? We should be ashamed to talk about vegetables and animals in anything but plain language; but should we rob flowers of their hues because some reader is color-blind? or of their fragrance because another has no sense of smell?

The flowers and fruits have their rights as well as corn and potatoes, and dollars figure just as high and swell a bank account as well from oranges, apricots, lemons, etc., as from the latter.

And yet, even from the standpoint of utilitarianism, into the "horn of plenty," along with the oranges and lemons which Pomona pours, Flora will put her flowers. It does not detract from the sweetness of perfumes because one puts them in the marts for sale. Mere money-getting in California has a halo, a fragrance, an atmosphere about it that it has not elsewhere. This exaltation, this almost glorification of industry, this aureola about the brow of thrift, is one of the unique phases of California life.

Nowhere else does money-making seem so much a pastime and labor a holiday. The sweat of the brow is transmitted to perfume; dry statistics become blooming and odorous; utilitarianism is idealized, thrift is glorified, and the duty and dignity of labor are veiled by its beauty as by a rosy cloud. The clink of the guinea finds an endearing and excellent accord in the melodies of bird-songs. Embellishment is not only the embodiment of the soul's aspirations after the beautiful, not only the pledge and promise of remuneration, but remuneration itself. Industry does not savor in the sweat of toil, but is bathed in the elixir of delight. It brings not only money, but the blissful remuneration of flowers and beautiful fruits. Indeed, labor is not only the handmaid of thrift but her enchanting mistress.

The name of California is certainly a spell. It is not only suggestive of fragrance, but almost redolent. It acts like an incantation upon the imagination. Her clime is at once bounty and beauty. She seems the theater of the selected influences of nature in her softer moods, the haunt of the muses, the land of soft and fragrant airs, perpetual flowers and unfailing bird-songs. It is the Mecca of the cultured voluptuary and the asylum of the invalid; and not only is her spell upon the imagination, but upon the memory. The pages of history and poetry revive—pages where genius has recorded her highest triumphs of description.

Arcadia and the vales of Cashmere bloom afresh; Cathay and Candahar revive; the Tuscan fields, the famous Arno and starbright Italy are constantly in mind. Why should California not become the future nursery of poets, a precious repository of the beautiful, at once a glorious picture-gallery and nursery of genius, where may be stored the ripe fruits of genius and where genius may find her highest aspirations and most rapturous solaces? Why should not there be a civilization of as high a type and more romantic than marked the old world, where poetry and art and song can grow side by side with a seemly utilitarianism not hard and cold and all engrossed in money-making, but where time and opportunity are given for a sumptuous taste and a munificent, superb

æstheticism to revel in, where the triumphs shall be of the poet's page, the painter's canvas, the sculptor's marble?

California will be studied in this aspect by him who seeks a refuge from the irritation of business, who recognizes the music of the "inner voice" in the river, who feels

"A distant dearness in the hill,  
A secret sweetness in the stream."

To such, even the most rapturous rhapsody would need no apology, for there is a time for rhapsodies as well as for plodding gain-getting. Suppose California were, in fact, only some "delicious land," where the

"Graces, knit with the hours in rosy dance,  
Lead on perpetual spring."

Even then it would have its uses; the overworked scholar, the professional man worn with a long life of toil; the tradesman—all who seek to get out of the hurly-burly, the dust and jostle of this feverish, work-a-day world, and find a respite from it, and who seek rest to the overstrung nerves and the faded powers, will find a spell, a harmless but

"Pleasing sorcery that charms the sense,  
And laps it in Elysium."

As did the song of the lady in *Comus*.

Therefore if California were an Arcadia, that were enough. But it is not a fancy, but a fact. You see it, not in the frenzy of a dreamer's eye, but as a sober certainty of waking bliss.

These indescribable lakes, these orange groves, sweet olive, roses, these bowers of live-oak, magnolia, all this wilderness of sweets, this wealth of shade and color and fragrance, are all real. Fancy lags behind fact, the imagination becomes barren and uninventive, when one attempts the theme of description.

And, while there is no glory of time, no halo of history about California; none of that halting effect that endears decayed splendor and bathes it in the purple light of bygone centuries; while there is none of this prestige of age, this consecration of decadence, I cannot see why California should not prove a resuscitation of Spain in her palmy days, her "golden prime," when the latter furnished olives and olive oils, raisins, oranges and other choice fruits, and the wondrous fabrics of her looms to commerce. She may prove a repetition of these. Her silk and woolen and canning factories will spring up, and the wealth, splendors and sumptuous magnificence of her products will vie with those times, without their ignorance and superstition. She will prove of joy the squire; of sickness the asylum; of richest and most beautiful commerce the mart—the home of art. It surely ought to be a pride of patriotism, a solace to national pride, that if other lands have had their vales and mountains embalmed in song, we have our California, where one can revel in the rich bounties of nature, unpersuaded, and where immense rewards of beautiful luxuriance await those who will woo her tender responsiveness with apposite cultivation. And, while we exult in our magnificent vastness of areas, our great rivers and lofty mountains and fertile valleys, why may we not cherish the land of orange bowers, where the landscape is perpetually a flower, and ever redolent with myriad fragrances?

The imagination will not be cheated of its enchantments and the exalted sensibility of its opportunities. If the nightingale will sing on the heath, her temptation to sing will be none the less in a bower.

If the lower slopes of Parnassus yield such inspiration, what will its heaven-kissing heights afford? Up there are the finer vistas, the brighter ether, more purpureal gleams.

And then I think one of the sweetest beauties of California is a subtle power of rejuvenation, that springs from some mystic source, we know not where or how—when the feelings of early youth revive—and of the days when we used to pluck the daisies, chase the butterflies, wade in the brook; when our tears were only of the eye and not of the heart; when sorrow was as evanescent as an April shadow upon a gladsome bird, the days of the "sunshine of the breast," when the spirits flew in feathers; when we were as lightsome as the swallow, chasing itself at its own wild will over the glassy lake or flowing mead; the days ere care came or poverty (or, if the latter, heeded not, in blissful compensations); the days ere the vanishment of loved ones, or even the golden chalice of hope was broken, that used to be "brimmed with such delicious draughts of richest joy." Thankful are we for any joy font, whence we can quaff our fill of rapture from life's embittered cup—and that fountain from the mystic somewhere springs in California.

Santa Cruz.

## The Ventura County Fair.

EDITORS PRESS:—Our first fair for ten years opened at San Buena Ventura, Thursday, October 21st. All exhibits except live-stock were placed in Union hall; cattle, horses, etc., had booths at the race-track.

Persons who visited the Santa Barbara County Fair pronounce the display of fruit and flowers to be much finer at San Buena Ventura. Merchants, hardware and furniture dealers, druggists, etc., placed their goods to show to great advantage. The fancy needlework department exhibited much skill and taste in that line among the ladies of the county.

As the notice given of the fair was short, and

the entry fees for exhibits were two dollars, and the premiums in the art culinary and farm produce departments were only from one to five dollars, there was not as great a variety of samples as there should have been.

The prime object of the fair seemed to be horse-racing.

In the live-stock department the premiums ranged as high as \$20, with purse of \$350 for best racing.

How moral people who decry liquor saloons, billiard halls, gambling dens, etc., can sit for hours and witness pool-selling, jockeying, etc., at the race-track, is one of the "marvelous things in our eyes." But then, many "eminently proper" things always were a puzzle to us—a sort of compromise with Satan.

Santa Paula.

MRS. M. E. DUDLEY.

## THE IRRIGATOR.

## A Decision on Riparian Rights.

The following decision in the case of Stanford vs. Felt was rendered by the Supreme Court of California on Oct. 30, 1886: By the common law of England the right of the riparian proprietor to the flow of a stream is inseparably annexed to the soil and passes with it, not as an easement or appurtenance, but as part and parcel of it. Use does not create the right and disuse cannot destroy or suspend it. The right of such proprietor extends to the natural and usual flow of all the water of the stream, unless when the quantity has been diminished as a consequence of the reasonable use or appropriation of it by other riparian owners for proper and legitimate purposes. (*Ferreira vs. Knipe*, 28 Cal. 340; *Lux vs. Haggin*, 10 Pac. Rep. 674.) The use by the riparian owner of the water for domestic purposes, for irrigation and for the propulsion of machinery, are recognized as proper and legitimate purposes. This we regard as the law of this State. (*See Ferreira vs. Knipe* and *Lux vs. Haggin*, supra.) It appears to be law that where all the water of a stream is needed for domestic purposes and for watering cattle, and is thus consumed by one proprietor, the law allows such use.

But in making such reasonable use of water such proprietor must return surplus which remains after such use to the natural channel of the stream (*Dilling vs. Murray*, 6 Ind. 324; 3 Kent's Com. 439; *Miller vs. Miller*, 9 Penn. St. 74; *Gould on Waters*, 213; and if this is not done the diversion will be restrained at the suit of a riparian owner below. Nor is the owner lower down the stream required to show, in order to procure an injunction, any actual present damage. The diversion by lapse of time may grow into a right. (*Crandall vs. Woods*, 8 Cal. 136; *American Co. vs. Bradford*, 27 Id. 360; *Gould on Waters*, section 214; *Moore vs. Clear Lake W. Co.*, 8 W. C. R. 332; *L. R.*, 19 Ch. 451; *L. R.*, 7 H. L. 697.) To prevent such result an injunction will be awarded. (*Parker vs. Griawold*, 17 Conn. 287, affirming 13 Conn. 279.)

It appears from the findings in this case that water has been diverted from the stream on which both plaintiff and defendants are riparian proprietors, but as to the fact whether it has been returned or not, the finding is as follows:

"That except by natural gravitation, and in the summer-time over dry lands, no means of returning water diverted from the said Trancos creek to its bed have ever existed, and none are provided by defendant Felt.

"That no return of any water so diverted as aforesaid is, or ever has been, usually made, and from personal inspection of the premises I am satisfied that in the dry season of the year no such return of said waters has ever been made, and that none can be made under existing circumstances, except by opening the defendant Felt's reservoir, or the short six-inch pipe which passes through the head thereof and above mentioned, so as to rapidly exhaust its contents and render it practically of no use, and a source of inconvenience, if not injury, to the use of his property; at all events, from my inspection of the premises, it is evident that while the outer end of the discharge pipe from said reservoir was open on the day when I visited the premises, and was then discharging a torrent of water through the defendant Felt's lands, in the direction of Trancos creek, which plowed the ground and made traveling uncomfortable, there had been no such previous customary discharge, and there was no visible indication of any connection or habitual flow between the waters of the reservoir and the bed of the creek ever having been maintained at any time; and I find as a fact that no return of discharged water or any portion of it has been usually made to the bed of the creek by the defendant Felt."

From the language employed here, it is left in doubt whether the finding "that no return of any water so diverted as aforesaid is or ever has been usually made" is based on the testimony given in the case or on facts ascertained by the personal inspection of the premises by the learned Judge who made the finding. In such a state of the case, ought a judgment based on a diversion and no return of the water diverted (for such is the character of the judgment here) to be rendered?

In *Wright vs. Carpenter* (49 Cal. 609) it was held that an instruction which authorized the jury to take into consideration the result of their own examination of the land in contro-

versy, which they were sent by the Court to inspect, in determining its character as swamp and overflowed or otherwise, was erroneous. The Court made the following observations in regard to the instruction:

"In authorizing the Court to send the jury to view the premises in litigation, it was not the purpose of the statute to convert the jurors into silent witnesses, acting on their own inspection of the land, but only to enable them the more clearly to understand and apply the evidence. If the rule were otherwise, the jury might base its verdict wholly on its own inspection of the premises, regardless of an overwhelming weight of evidence to the contrary, and the losing party would be without a remedy by motion for a new trial. It would be impossible to determine how much weight was due to the inspection by the jury as contrasted with the opposing evidence, or (treating the inspection as in the nature of evidence) whether it was sufficient to raise a substantial conflict in the evidence. The cause would be determined not upon evidence given in court, to be discussed by counsel and considered by the Court in deciding a motion for a new trial, but upon the opinions of the jurors founded on a personal inspection the value or the accuracy of which there would be no method of ascertaining." (*See also Wright vs. Carpenter*, 50 Cal. 556.)

The reasons above given which render it error for a jury to base its verdict on evidence derived from a personal inspection of the land involved in the action tried before them, are equally cogent when applied to a Judge making such inspection. The findings of fact made should be upon the oral and documentary testimony introduced at the trial, and not on any fact ascertained by the Judge of the court on an examination of the premises involved in the controversy. As the finding above quoted may and appears to have been on the testimony in the cause and on facts discovered by the Judge on the inspection above referred to, we cannot regard it as a finding that the water diverted has not been returned as the law requires. In such a state of the case, a judgment which is manifestly based on the fact that the water has been diverted and not returned, cannot be regarded as proper.

It may be contended from some of the other findings that the water has been detained for some space of time, but as the defendant Felt is a riparian proprietor he has a right to such a reasonable detention of the water in the use of it. The reasonableness of the detention is involved in the question of reasonable use. Whether the use of water is reasonable or not, is always a question of fact to be ascertained by the Court below. Whether then the water is reasonably or unreasonably detained must be a question of fact, and all such questions are to be determined by the tribunal above mentioned. Whether Felt, in using the water, has made an unreasonable detention of it has not been clearly and distinctly found, and in this state of the case this Court cannot act upon it as a fact in the cause.

It must be remembered that no injunction can be awarded which can deprive the defendant of the reasonable use of the water for domestic purposes and for the support of life.

For the reasons given above the judgment and order must be reversed and the cause remanded for a new trial.

Ordered accordingly.

THORNTON, J.

We concur in the judgment. In our opinion the findings are too uncertain and indefinite to sustain the judgment of the Court below.

MCKINSTRY, J.

MYRICK, J.

McKEE, J.

SHARPSTEIN, J.

## SHEEP AND WOOL.

## Early Lambs for Market.

EDITORS PRESS:—Paul Bradley, of Bradley's Canyon, 10 miles southeast of Santa Maria, has for several years been engaged in wool-growing, but says he feels much discouraged because of the non-protection by Congress of that which might easily be made an important industry of our country; that there is no longer any profit in keeping sheep for wool alone in California, so he has recently turned his attention to raising lambs for the San Francisco market.

He has near 2000 head of sheep. His bucks are Shropshire-down and his ewes Spanish merino. The ewes breed twice a year. Food for sheep is abundant here and his flock is kept in the best of order. He ships his lambs by the Pacific Coast Railway to Port Harford, by way of San Luis Obispo, thence by boat to San Francisco. On the 16th of March last he sold in San Francisco 311 lambs, 90 to 120 days old, at \$2.75 per head. Early in April he made a second shipment of 300, and only sold for \$1 per head. Of course he will not again repeat this costly experiment of shipping at a venture, but will hereafter before shipping ascertain the state of the market, and, if practicable, the probabilities of the near future. Although the business is sometimes attended with losses, he is not discouraged but continues in the business with the hope of at least more than covering expenses in future. His ewes are likely to turn out about 1000 lambs this fall, and if conditions of weather and other contingencies remain favorable he expects to have them ready



for market by Christmas. As Mr. Bradley's sheep are kept in the best condition, his ewes after having had their lambs and passed over the suckling period recuperate very speedily.

The Shropshiredowns are peculiar for their quick growth and early maturity. A Shropshire wether at one year old is better matured than a Spanish merino wether at two and one-half years old.

All lambs are sold, both male and female; and when necessary to add young ewes to the herd in order to keep up the number desired for breeding purposes, the ewes are bred to Spanish merino bucks and thus the ewe lambs saved to resupply the herd are full-blood Spanish merino.

Mr. B. recently purchased five yearling Southdown bucks, which are very thrifty and handsome. He expects to try the introduction of Southdown blood into his herd. Of the results we may learn further on. McD.

Santa Barbara Co.

## POULTRY YARD.

### A Veteran Talks.

"Robin Railroad" gives his experience in the Los Angeles Times in this entertaining fashion: In the year 1824, I remember as well as I remember anything that ever took place, hunting hens' nests in the barn loft for my mother to set under her hens, and ever since then I have taken a pretty active hand in raising chickens, ducks and turkeys. Some years we raised as many as 300 chickens, ducks, turkeys and geese. After I was married my wife and I went to live by ourselves. I thought I could do better than to cultivate the dunghill, so I went to Louisville, Ky., and bought me a pair of Black Polands, with a tremendous big white topknot and crest. I had a nice lot for them in an orchard, where they had plenty of room and plenty of bugs. "For where de hen scratch dar am de bug." My! my! what layers they are when cared for. I had a hen that laid 300 and over eggs in one year. But laying is all they are fit for. They are very poor setters and poor mothers and not very good eating, but we made lots of money by selling the eggs at 50 cents per dozen, when I could buy common eggs for 3½ cents. I built a nice house to keep them dry and warm in winter.

In 1850, I think it was, I sent to Geo. P. Burnham, of Boston, for a pair of Brown Shanghais, as he was then importing direct from China. He sent me a splendid pair by express to Louisville, Ky., which cost me \$18.25. My neighbors laughed at me for being a fool to give that price for two chickens. "All right," said I; "while you laugh I'll make \$100, and have lots of chickens for market left." What fine chicks did come from that pair! Many of the hens weighed six and eight pounds, and the roosters were bigger than hen turkeys. Everybody that made any pretense to raise poultry wanted to buy. "All right," said I; "just as soon as my pullets begin to lay you can have eggs at \$3 per dozen." I made lots of money out of my venture, and had the best fowls to eat we ever had in our lives. When I left that part of the footstool in 1856 for Minneapolis, Minn., I took a coop of these big chickens with me. The rooster was a boomer—just three feet from the end of his toe-nail to the end of his bill.

In order to feed them well and be as little trouble as possible, I made a box the shape of a mill hopper that would hold 100 pounds of oats, 150 pounds of corn or wheat, and nearly as much barley, and made a frame for it to set in. Then underneath it I put a shallow box, say two inches deep and one foot square, close under the mouth of the big box, and fastened it there and put slats so the chickens could poke their heads through and pick grain out of the shallow box. One week I gave them corn, next wheat, next oats or rye, keeping plenty of grain in the box, which ran down and out just as fast as they ate and no faster. The grain was always clean because the fowls could not get their feet into it.

There is a peculiarity about a fowl. Feed him or them three times a day and they will stuff their crop about as tight as a drum, but put the feed in a box where they can get it whenever they go after it and they won't eat two tablespoonfuls at a time except at night, when they will fill up a little more. My wife boiled potato peelings, apple peelings, turnips, cabbage and "sich," and stuck in bran or meal and gave them a mash. Besides, she used to give them sour milk and all scraps from our meals.

To water fowls and keep their water pure and fresh is very essential to their health. I got the biggest jug I could find and drove four posts into the ground, nailed a board on top of them with a hole cut in the board big enough almost to let the jug go through, turned the jug mouth down and put a block under and a tin plate on top of that, which came within half an inch of the mouth of the jug; filled the jug with pure, clear water and turned it upside down. The water will run into the tin plate just as fast as the fowls drink it out and no faster. Then I fixed a barricade to keep them from putting their feet in the plate. Once a day I gave them water, and once a week I gave them grain which lasted all week. They were healthy and nice.

Eleven years ago I came to Los Angeles, and

our chicken and barn yard was about 150x75 feet. If the offal from horses and cattle is thrown into such a yard it is plenty big for fifty or sixty hens and eight or ten roosters, but if it is simply a fowl yard it is not large enough for so many unless they can be allowed to run abroad fall, winter and spring on eight or ten acres. You may turn on as many more and they will do well.

We tried black Spanish and white Leghorn and Brahms and Dominique. We took care of them and did well till the vermin got on to them. I supposed that I had to have warm, dry houses for them as I did in Minnesota and Indiana. But just here was where I went astray badly. I spent \$150 in gold, building houses for them, and they had not been in them six months before they were full of vermin and began to die. I was showing a friend of mine my chickens and my buildings.

"Ah! Robin," he said, "your hen-houses in this county are worthless. Turn out those chickens and shut the door, and don't open it again. Make your hens roost in those willows, and in six weeks you won't have a sore-headed hen on this land."

"Why," said I, "they will catch their death of cold when it rains, and all die with roop."

"Not a bit of it. The rain all through winter won't hurt them the tenth part as bad as those chiggers and lice."

I did that same thing, and it turned out just as he said it would. I tore the house down and made a crib for corn, and we never had healthier chickens in our lives. I set out three pepper trees for the chickens to roost in. We make them roost in the trees yet, or on the ground, just as may suit. The rain and wet kill all the chiggers and lice, but don't hurt the fowls a bit.

## THE FIELD.

### Steam Plowing in Tulare County.

Our Tulare county exchanges bring fuller accounts of the steam plowing now being done by G. S. Berry on his ranch, east of Visalia, using a part of the apparatus which he devised for combined harvesting and which was fully described in the RURAL two or three months ago. The Delta says: The header was detached from the front of the harvester, and the separator from the side—a very easy matter, as both were fastened to the main body of the harvester by hinges. The small engine used to operate the separator was also taken off, and a water-tank for supplying the boiler was mounted on the framework of the machine. When used as a harvester the tank was mounted on wheels and was detachable. These are the principal changes that have been made, except that that which was formerly the rear end of the machine is now the front, and the steering gear has been altered so as to allow the steersman to sit facing the direction in which the machine moves. The greatest part of the weight rests directly upon the wide traction wheels, there being just enough over the steering wheels to facilitate the guiding of the machine.

The steam traction plow, as the harvester is named, after having undergone the metamorphoses described, works as satisfactorily in its new role as it did in the harvest field. Five four-gang ten-inch plows are attached to the rear of the machine, with rods and chains, in such a way that the draught comes in the proper place in each gang and so arranged that the five follow each other in regular order, throwing into furrows a strip of land 16½ feet wide. It can be made to plow any depth desired, and moves along steadily and evenly, doing its work well and thoroughly.

We find in the Tulare Times a letter from Mr. Berry, from which we take the following: "I have been running ten days, and have averaged 35 acres per day. The land where I am plowing now is red, clayey land and is very knolly. The unevenness of the land doesn't seem to have any effect on the running of the machine, whatever. The plows do better work than could possibly be done with them were they drawn by horses; for they are all fastened together, so that they have to keep the furrow—which is not the case when horses are used. I am burning straw which I gather from the field where the harvester left it. It takes five men in all to operate the machine and plow, at a daily cost as follows: Engineer, \$2; man to guide, \$1; hand to fire, \$1; man to haul water, \$1; man to gather straw, \$1; four horses for teams, \$2; oil, 75 cents, and board of men, \$2.50. Total, \$11.25. This makes my plowing cost me, aside from plow-shares and interest on the capital invested, 32 cents an acre. I save by this method \$15 a day on the feed of stock required to do the like work, and, besides that, the stock must be fed, work or no work. The engine, on the other hand, eats nothing of value. There is a stage running to my place thrice a week from Visalia, and persons who want to see my method of plowing will be welcomed."

The Times adds: Parties from San Joaquin, Merced and Fresno counties have visited Mr. Berry's ranch to witness the operation of the steam-plowing machine, as have also several of Tulare's large farmers, and all pronounce it a complete success—one that will revolutionize farming in the great valleys of the San Joaquin and Sacramento.

## THE APIARY.

### Bees on the Santa Lucia Mountains.

EDITORS PRESS:—Among the substantial men of the country around Jolon, we find J. S. Perkins, living some three miles north, engaged in farming, and much of his time in paying particular attention to the bee business. He has about 200 colonies, all of the black variety. He commenced business in November, 1883, and had at the commencement of this year about 110 colonies to start in with, and hived about 90 swarms during the season.

He uses the Langstroth hive, painted all over with two coats of paint. His hives are set on the ground, the bottom board, he thinks, sufficiently protecting from the earth. In this connection, bear in mind that the soil here is sandy and loose. He uses no section-boxes, but extracts all the honey taken from the hives for market. He uses the best of hives, because it pays to be thorough. The honey produced here is of very fine quality, and in color varies from fair to white. Bee forage in great variety, and extending over a long period, abounds in the hills and along the slopes around in great abundance. This remark holds good with reference to about all the country we have visited in the Santa Lucia range of mountains and its extensive system of foothills.

Mr. Perkins puts up his honey in small, neatly-painted tin cans, branded with his name and residence, and usually ships East. He enjoys the best of reputation in the markets where known for furnishing a first-class article of honey.

We were much pleased with the cordial reception given us by Mr. Perkins and his estimable wife and daughter, and will long remember the few very pleasant hours spent by us at their comfortable home. McD.

Monterey Co.

### Californian Honey in London.

EDITORS PRESS:—Some weeks ago a letter appeared in the London Times, signed by Jabez Hogg, the well-known microscopist, stating that the article sold in England as "Californian honey" was badly adulterated. A reply from your subscriber, defending our product, in due course appeared in same columns. I took the ground that if Californian honey was adulterated, the Englishmen did it themselves, as honey was too cheap here to make it possible to debase it profitably—at least, that the honey producers could get the honey cheaper than they could get the adulterant, etc. The reply was thence transferred to the London Grocer. Consequent thereon I am receiving letters from England from parties who mistake me for a honey merchant. I send one for you to publish, as I think some apiarist may seize the opportunity for a deal direct with the English importer. EDWARD BERWICK.

Carmel Valley, Nov. 4, 1886.

No doubt if honest English merchants or consumers would arrange to buy the honey direct from our bee-keepers they could get it pure and cheap, but we cannot answer for its purity after it passes into the hands of those who bottle or can it for the retail trade. As Mr. Berwick intimates, the letter which we publish below may lead to correspondence of importance if there are honey-producers who would like to deal direct with English purchasers:

#### The Letter.

E. BERWICK, Esq.—Dear Sir:—Seeing your letter in Grocer of Oct. 2d respecting adulteration of Californian honey, our experience in purchasing same is that we cannot get two parcels alike. What could you supply the genuine article in bulk for? Also glassed up with the comb, free on board, for cash, we paying freight to London? We could sell a very great deal more if we could obtain genuine honey. We are also wax-melters. Perhaps you could supply the beeswax with advantage to us both. JOHN GIBBS, 124 High St., Wandsworth, London, Eng., Oct. 15, 1886.

NEVADA HONEY.—The improvement that has taken place in the appearance of the honey made by bees in Nevada since 1860, says the Dayton News-Reporter, is wonderful. In the early days the bees were obliged to forage on wildflowers. Most of these yielded very little honey, and that little was of the poorest quality. All the skill of the bees was thrown away upon it. Both comb and honey were brown in color, and the latter had a strong flavor of turpentine which was supposed to come from the wild sunflower. Now that there are large fields of alfalfa and clover, the honey produced in Nevada is as fine in appearance and flavor as any on the coast. It is said by apiarists that the flowers indigenous to the country are almost destitute of honey and also of scent. Not a few trees have also been introduced from which the bees are able to collect honey. Thus far these are principally fruit trees. The basswood or linden might easily be introduced from the West by bee-keepers, half a dozen trees of which are equal to a whole field of clover for bee pasture. The linden is also a beautiful shade tree, with no objectionable qualities, as it is neither a worm breeder nor a cotton producer.

## HORTICULTURE.

### Orange-Growers' Protective Union.

Our Southern friends who were in the Orange-growers' Protective Union last year seem to be so well pleased with their past experience that they have set the organization in motion again to handle this year's crop, and are taking active measures to extend its field. There was a meeting in Los Angeles on Thursday, Nov. 11th. We take a report from the Times:

Fifty-five orange-growers were present. The meeting was called to order by President L. J. Rose, who stated the object of the meeting was to discuss the advisability of perpetuating the organization.

Mr. McKinley formally put the motion that the incorporation of the Orange-growers' Protective Union be continued. Several members spoke in favor of the motion, and it was carried.

The following was then introduced and passed:

Resolved, That the manager of the Union be instructed to appoint canvassing agents for the various orange-growing centers, and that he be authorized to pay them for their work, to secure signatures to a contract to be prepared by a committee of three appointed by the chair.

J. De Barth Shorb offered a resolution that a committee of three be appointed to confer with the railroad companies and see what rebate can be secured for the coming season. Action was postponed.

A committee of seven, to issue a circular setting forth the principles on which the Union will work for the coming season, was appointed as follows: Messrs. Kinney, Bettner, Wall, Sheats, Loop, Chapman and Rose.

The meeting then took a recess till 2 p. m. On reassembling, the following report was read:

#### The Orange-Growers' Protective Union.

The object of this Union is to make orange-growing more profitable, by securing higher prices for the fruit to the grower.

The means by which we expect to attain this is by combination and union.

The Union of last year secured the following results:

1. A better distribution of the fruit than had ever before been attained.
2. A rebate of \$25 per car freight, which could not have been obtained from the railroads without the Union.
3. Higher prices from buyers here on the ground.
4. Better returns and more honorable treatment from commission men.
5. It controlled in shipments over half of last year's crop of oranges.

Our eventual aim is to sell all the oranges of Southern California for cash f. o. b. here.

We feel assured that the dividend declared by the Union of last year will be increased this year. We feel confident that we will obtain special rates of freight, much less than any outsider can secure. The rates of freight obtained by the Union last year were, it is true, eventually shared by outsiders, but the great controllers of rebates in freight is quantity shipped. If we have again, as we have every reason to expect, more than 1000 cars to ship, which we can send over any line of railroad we favor, we have a hold that nothing else will give.

The principles in fixing freights have always been with the railroads, the quantity of freight and the competition.

In union there is strength. By union we can obtain every advantage that is to be obtained in rebates as in all other matters, and we believe that outsiders will not again share the best of these advantages.

Every person joining this Union will have full liberty to sell his fruit or to dispose of it as he pleases. We believe that every orange-grower who is a member of this Union will be able from the strength and information obtained through the Union to increase the price paid for his fruit however disposed of.

The expense of this advantage is only 1½ cents per box. It is more than probable that even this insignificant sum will be returned with a dividend.

The Union has stood and will stand as a sentinel over the whole business. If the buyers on the ground will not pay a fair price, the Union is and will be ready to ship the fruit to the East and open an outlet for it. The Orange-growers' Protective Union has a fixed and good standing in all Eastern markets. It stands prepared to sell your oranges f. o. b. at shipping points at an expense to you of 1½ cents per box. Dealers buying from you here expect to make a profit of from 25 cents to \$1 per box, and even more.

ABBOT KINNEY,

Chairman Committee.

Dr. Chubb moved to adopt the report. Carried. The Chair appointed the following to canvass their respective places for membership:

Lugonia, D. A. Shaw; Old San Bernardino, Frank A. Hinkley; Los Angeles, W. H. Workman, M. W. Geichell, Samuel McKinley; Anaheim, F. H. Keith; San Diego, Frank Kimball; Alhambra, A. C. Weeks; Duarte, E. Watson; Azusa, —Baldridge; Sepulveda, —Mitchell; Sierra Madre, Percy R. Wilson; Pasadena, Byron O. Clark; San Gabriel, J. R. Dobbins; Pomona, C. F. Loop; Tustin, Dr. Wall; Orange, Dr. O. T. Chubb; Riverside, James Bettner, E. W. Holmes, A. J. Twogood.

L. J. Rose was re-elected president. A vote of thanks was returned to the officers for their past services. Canvassers were instructed to report Nov. 30. The Union then adjourned till Dec. 1st.

STRENGTH OF ICE.—It has been found that a sheet of ice three inches thick affords a perfectly safe passage for infantry or horses marching in single file, and for light carriages; with a thickness of six inches it will bear all sorts of wagons and cannon.



## PATRONS OF HUSBANDRY.

Correspondence on Grange principles and work and reports of transactions of subordinate Granges are respectfully solicited for this department.

## State Grange—Session of 1886.

The following written reports from Subordinate Granges were presented to the Secretary: Danville Grange.

Danville Grange, No. 85, located in the southwestern part of Contra Costa county, in the valley of the San Ramon, was organized in 1873. We have now about 90 members, good and true, and are adding to our membership from time to time, gaining more than we lose by death, change of residence, etc., and we may say that we are in a fairly prosperous condition. Our meetings are well attended. We discuss current events—farming, horticulture, markets, etc., and think our time well and profitably spent while in the Grange. Our members believe in our paper, the *Patron*, and will never be behindhand or lukewarm in sustaining it. D. N. SHERBURNE, Master.

## Eden Grange.

Eden Grange would report about 25 working members. It is out of debt and has a little money in the treasury. The Grange has been alive to the issues of the day, among which is the irrigation question, taking a firm stand against monopoly in every form. Meets the second and fourth Saturdays in each month, and it may be said, although not increasing in numbers, the Grange is alive and active in every good work. O. DENNIS, Alternate.

## Enterprise Grange.

I have the pleasure to announce that Enterprise Grange is in a prosperous condition, and we have enjoyed a pleasant year in our work. We have made our meetings both interesting and social during the past years. We have endeavored to bring out the diffident through the system of a question-box, which is placed on the secretary's desk. The secretary is clothed with authority to select such member as she thinks in most need of being brought out. It has worked wonders with some of our young members. We at present number on our roll, in good standing, 50 brothers and 44 sisters—total, 94. We initiated two brothers and six sisters during the present year; one was admitted from Cosumnes dormant Grange; four have withdrawn from the Order and 12 were suspended for non-payment of dues. We held 25 meetings during the past year and always had a quorum. Harmony and fraternal feelings have characterized all of our meetings. A. A. KRULL, Master.

## Florin Grange.

When installed Master of Florin Grange, No. 130, I promised to attend every meeting of the Grange unless sickness or important business prevented. I have done so to the present time. We have missed having but two meetings up to this time, which was owing to such very bad weather it was next to impossible for members to attend. Our meetings are not always well attended, but we never lack a quorum. We have literary exercises and one-half of the members are called upon by the Worthy Lecturer to respond, and the other half at the next meeting. None have been admitted by initiation or card during the year, have lost none by death, have demitted one, and have expelled eight for non-payment of dues. At the beginning of the year our Grange numbered 73; at this time we have 64 members, with some prospect of making up our losses. C. TOWLE, Master.

## Grand Island Grange.

Grand Island Grange is located at Sycamore, six miles south of Colusa. We have a membership of 16 in good standing; have gained but one new member the past year. This was a very flourishing Grange in the early history of the Order, numbering over 90 members. We meet twice a month, on the second and fourth Saturdays. During the harvest season it is difficult to get a quorum, most of the members being busy in the harvest-field.

We cordially invite the Worthy State Lecturer to remember us in his rounds; much good might be accomplished by a few weeks' labor in this vicinity. J. R. TOTMAN, Master.

## Grass Valley Grange.

Grass Valley Grange commenced the present term with 39 members. Three have withdrawn and two have been suspended for non-payment of dues, leaving 34 names still on the roll. There has been no addition to membership by initiation since May 2, 1885, except one who was initiated at a special meeting held on last Saturday, the 2d instant.

A majority of the members take but little interest in the Grange meetings; but there are a few who are determined that the Grange shall still survive, and are opposed to surrendering their charter. From present appearances there is more hope in the Grange reviving in the future, as prejudice subsides that was caused by the difficulties between the miners and the farmers. J. W. DEGOLIA.

## Lodi Grange.

Our Grange is in a flourishing condition. We have had four additions in the last year and have lost two by withdrawal card. Our Grange is 65 strong. We have missed holding

two or three meetings on account of bad weather and the State Fair during the year.

I say our Grange is in a flourishing condition. We have about \$75 in the treasury and our members are prompt in paying their dues. Our average attendance is very good, and we always have a good time. Our members always welcome the *Patron*, and their prayer is: "Long may it live."

I will say for the benefit of State officers that Lodi Grange is on the C. P. R. R., and our Grangers will be there to meet them at any time. A. J. WOODS, Master.

## Magnolia Grange.

As Master and Representative of Magnolia Grange it becomes my duty to make the first report that ever has been made since our existence, through our representative, in person, before this body, although Magnolia Grange was founded over 11 years ago. This was on account of its dormant condition, brought on by lukewarmness of some of its members. And the hall we met in for ten long years would make you smile, could you see it, and you would say that no Grange could exist in such a tenement. But it did exist and could not build up. A little over one year ago the question of building a hall came up before our Grange; the same subject had often been discussed before, but it had always been dropped and nothing came of it. By this time we could see that our charter had to be given up, or something done to build up our Grange. So as usual in such cases, there were some brothers and sisters who would not suffer anything of the kind to happen. They were true to the Order of Patrons of Husbandry, and by putting their little sums together, they have erected a hall which will answer our purpose in the country. It is 20x40, two stories high, which, I think, will accommodate all the members we may expect to get for some time to come. Our Grange now numbers about 48, most of whom take an interest in the Order. This I think is an increase of about one-third in little over a year, and these are scattered over a territory about 16 miles long by 10 miles wide. We are situated in the extreme northern part of Nevada county, nine miles from Auburn, which is in Placer county; so if any of the members of the Grange in any other portion of the State wish to visit us at any time they will know the exact locality, and will be welcome among us. We are to have a union of Granges on the 15th of this month; the State Master and Lecturer have promised to meet with us, and I hope it will cause a revival in the Order. I think we have expelled five for non-payment of dues. Of the members admitted the present year I cannot rightly inform you, for my secretary lives eight miles from me and I did not have the time necessary to consult with her. We have a lively attendance of from 25 to 30, but some of my officers trouble me by non-attendance and I would advise every Grange in electing officers to consider the question as to whether they think they will attend regularly or not, and try and elect those Patrons who attend their duties in this respect. We have literary exercises for the purpose of instructing the members. Our finances are short, having reduced our dues for the purpose of drawing members. W. CUNNINGHAM.

## Pescadero Grange.

Pescadero Grange meets in Good Templars' hall in Pescadero, San Mateo county, on the first and third Saturdays of each month, at 2 P. M.; membership, 45.

The meetings are usually interesting. The exercises consist of discussions of subjects of general interest, reading selections, with occasional essays, music, and a good social time. Our meetings are always harmonious. There are but few young people in Pescadero Grange. We hope to have more soon. The brothers do not find time to attend the meetings as often as they should; but the sisters take time, and what Pescadero Grange knows of prosperity is largely due to their fidelity to the Order.

For the last two years I have been most of the time away from home, and have not been able to give the Grange the attention it should have from its Master. To be prosperous, an attentive, efficient Master is important. Pescadero Grange has neither lost nor gained a member within the year. While there are little surplus funds in the treasury, we are able to meet all demands promptly. There is no other Grange in San Mateo county, and we seldom have a visiting member from any other Grange.

On behalf of the Pescadero Grange I extend a cordial invitation to all Patrons in good standing to visit us, and promise a cordial welcome. I. C. STEELE, Master.

## Placerville Grange.

Placerville Grange, No. 242, is situated in El Dorado county, in that old historical town formerly known as Hang Town, but now known as Placerville, about 55 miles east of the city of Sacramento, and about nine miles southeast of Colusa, which place is famous almost the world over as the place of the first discovery of gold in California. Ours is a live Grange with no drones; the members are all wide-awake, and take a lively interest in all questions pertaining to the good of the Order, and of mankind generally. Grange meetings are held regularly every two weeks, with a good attendance of members. We have had three harvest feasts since the last meeting of the State Grange.

Conferred the fourth degree on 29 new members—12 brothers and 17 sisters, and have another class started. Placerville Grange now numbers 141 members in good standing, and it

is prosperous in every way, owing no man anything, with some money in its treasury, and the quarterly dues to the State Grange regularly paid. But here it becomes my sad duty to record the death of Brother Sanborn, a young man of much promise, in the prime of life, a scholar of more than ordinary intellect, a brother of whom our Grange had expected much. Brother Sanborn had belonged to our Grange but a short time when he was called by the hand of Death to lay down his implements on earth to receive his reward in the golden hereafter.

The district of El Dorado county is without a district lecturer, except in name, and I think it would be to the benefit of the Granges in the county, as well as to the Order in general, if the Worthy Master of the State Grange were to appoint some brother or sister, who would take a lively interest in Grange work, to that position. J. C. MARSH, Master.

## Plumas Grange.

Plumas Grange is situated in the northern part of Plumas county, containing 39 members—19 sisters and 20 brothers—a gain of ten members in the year. Other Granges have been organized in these mountain valleys, but have only lived a short time; but Plumas Grange, far removed from any other, deprived of the encouragement of a sister Grange, with unpropitious circumstances, has, for all that, grown and is doing good in the community, and we still hold the fort.

## R. G. HAMLIN, Master.

## Roseville Grange.

In accordance with a well-established custom, I here submit my annual report to the State Grange of California. Roseville Grange, No. 161, is located in Roseville, Placer county, at the junction of the Central and Oregon railroads. The Grange was organized March 6, 1874, with a charter membership of 26. It had its ups and downs like the most of the Granges, but is at the present time in a healthy, sound and prosperous condition, with a membership of 70. We have everything the Grange needs in abundance, and sufficient in our banquet hall to set a table for 100 people, and have several hundred dollars on interest. We meet the first and third Saturdays in every month. We have, in addition to the regular program, recitations, declamations, reading, poetry and the question-box, which latter is indispensable, and is a regular school of education for the older as well as for the younger members. We had the prospect of building a hall several times, and no doubt, had the present season proved to be a successful one, the hall would be finished by this time. Our meetings are generally fairly represented, and at such times when members become a little dormant we get something up to enliven them, such as a harvest feast, ice-cream or some important question for debate, and we have never failed to bring out a large meeting, and I sincerely hope that we will keep up with the age of progress, and that our improvements are such that we can be proud to pass them over to our posterity. All of which is most respectfully submitted.

## N. MERTES, Master.

## Sacramento Grange.

I have the honor to report Sacramento Grange 144 members strong—70 brothers and 74 sisters; number of members gained during the past year, 15; males 7, females 8; number of members lost, 8; males 6, females 2; net gain, 7; number of meetings held, 18; average attendance, 30. We never failed to have a quorum but once, and then it rained too hard to be out of doors. Sacramento Grange has no hall of her own, but meets on the second and fourth Saturdays of each month at 1000 K street, in a hall belonging to the Grangers' Co-operative Business Association of Sacramento Valley. We own three shares of stock of said association of the par value of \$50 each. We also own five shares in the *California Patron* Publishing Co., and, as you are aware, I have, as Master of Sacramento Grange, subscribed for five shares, which will make us own 10 shares in the *Patron*.

Sacramento Grange is composed of Matrons and Patrons who desire to advance to the uppermost round of the ladder, intellectually, socially and financially. Every fourth meeting is devoted wholly to literary exercises for entertaining and interesting our members. To prove our interest in our Grange and its principles, after passing through two years of financial depression, none of our members making any money, but some of them sustaining serious losses, we are represented in this State Grange by 19 members. We believe that our members have put more money into business enterprises connected with our Order than any other Grange in the State. The social features of our Order are highly appreciated and enjoyed by all, and the intellectual benefits conferred by participating in the deliberations of the Grange are beyond computation. We realize the fact that the Grange is the farmer's school that gives him a chance to make himself proficient in debate; to examine and discuss for him or herself those questions of political economy which will enable us to appreciate and hold in a higher and more exalted estimation our privileges under this great and glorious Government, and that we are the peers of any in the land.

Brothers and sisters imbued by faith in the righteousness of our cause, Sacramento Grange extends to you the right hand of fellowship in fraternal greeting, and, inspired with the hope that we in our united efforts may be able to do

much to advance the objects and interests necessary to the well-being of our Order, renew to you our pledge to guard with fidelity every trust committed to our care.

GEO. W. HACK, Master.

[TO BE CONTINUED.]

## Proceedings at Philadelphia.

The telegraph has briefly advised us, from day to day, of doings in the National Grange at Philadelphia.

On the 11th a resolution was submitted by a delegate from Illinois, favoring the election of senators directly by the people.

On the 12th, Coles, of New Jersey, offered a resolution calling upon Congress to enact laws for the welfare of the farmers, which was referred and finally defeated. At the afternoon and evening sessions the sixth degree was conferred upon husbandmen from all parts of the country, in all, nearly 2000.

On Saturday, J. B. Clardy, of Kentucky, spoke of the defects of the U. S. signal service system. The Committee on Agriculture was instructed to investigate the matter, and report. J. H. Bingham, of Ohio, was elected a member of the Executive Board. It was resolved to commend to the earnest support of every farmer the centennial anniversary of the framing of the Constitution of the United States, and to urge the Governors of the several States and Territories to send delegates to the convention, to be held Dec. 2d. It was also resolved to request the President to encourage the celebration. Darden, of Miss., and Rhone, of Penn., were appointed a committee to see that the intention of the resolution was complied with.

On Monday, 15th, a resolution was submitted and referred to the Committee on "Good of the Order," providing for holding all future annual sessions of the Grange in Washington. Resolutions were passed providing for holding the next annual session at Lansing, Mich.

We hope to present in our next issue full reports of this interesting and important session.

## A Hearty Response.

In the *Sutter Farmer* of the 12th instant, Bro. George Ohleyer, Assemblyman-elect, responds to the voice of his constituency at the polls in a card, at once feeling and manly, addressed to the people of Yuba and Sutter counties:

I deem it incumbent to make a public acknowledgment of my gratitude to the people of these two counties, for the very flattering indorsement received at their hands on election day. It was no reflection against me to vote for my honorable opponent; neither is it against him to have supported me. If elected, Mr. Hutchins must have been as true to all our interests as it is possible to be. The issue tendered by the hydraulickers was not who would make the best representative, but it was to strike down to death all our efforts at self-preservation, and thus to convince the public that there were reasons for distrusting those who had been placed in the front of the battle. A life spent in the two counties, and more than 30 years continuously, and 10 years of that time devoted to public welfare, and measurably successful, was not sufficient to silence the tongue of slander, but it was sufficient to draw the fire of our enemies with a vengeance unparalleled. Let it be known now and forever that during all these years of our unhappy controversy my resignation was ever at the disposal of friends of right and law, but to have been driven off by our enemies seemed too cowardly to be entertained. I know and feel my lack of the ability which is implied in your kind indorsement, but such as I have is wholly at your service. Thanking you for the confidence reposed, and trusting that every expectation may be realized, I remain your obedient servant.

GEORGE OHLEYER.

## Grange Items.

[Condensed from the *Patron*.]

SEBASTOPOL GRANGE, after scantily attended summer meetings, started up as good as new on the 5th inst., and welcomed its guests to a merry Harvest Feast.

ST. HELENA conferred the third and fourth degrees on two sisters Nov. 6th, enjoyed a Harvest Feast and listened with interest to Bro. Flint and others.

PESCADERO GRANGE has passed resolutions of esteem and fraternal affection for the late E. C. Burch, and of sympathy with his family in their bereavement.

GRANGE DISPLAY AT SANTA ROSA. — We mentioned a fortnight ago that the Sonoma Pomona Grange was to have a permanent exhibition of county products at Santa Rosa. The *Democrat* of last week says that members were busy all Monday arranging their exhibit at the Central market. The shelves are taken up with samples of canned goods, seeds, cereals, and every variety of vine known to the agricultural fraternity. Above the shelves are arranged sheaves of the different grains—barley, wheat, oats, etc. The counter-room is taken up with large squashes, pumpkins, etc. There are also samples of Sonoma's famous wines, petrified wood, charcoal, etc. The curious may pass a pleasant half hour in inspecting this tastefully arranged display.

YUBA CITY GRANGE had an interesting session on the 6th. The *Farmer* states that the usual Thanksgiving feast by the Grange will



be omitted this year, and instead a reunion, dinner and Grange anniversary is to be celebrated on December 4th—that being the next regular meeting. The fourth degree will be conferred and other interesting exercises will be had. At a special meeting to be held Nov. 20th, the third degree will be conferred.

### Stockton Notes.

[Written for the RURAL PRESS by MRS. W. D. A.]

Grape-growing is an uppermost interest since wheat rules so low, and young vineyards are coming into bearing, bringing for Mission grapes \$10 and \$12 per ton, and for choice foreign varieties from \$30 to \$60. Ten miles out, good vineyard lands were sold last week for \$50 per acre—lands that before the stress of low wheat prices ranged at \$80 and \$100 per acre. Near Farmington, 20 miles out, good grape land sold for \$37 and \$40 per acre.

This great, dry valley with its months of sunshine (even November is usually sunny) and desiccating winds, with but six weeks of winter fogs, is fast becoming recognized for the yield, flavor and coloring of its raisin, wine and table grapes, either on adobe, sandy black loam or gravelly redlands. The berries are firm and ship admirably. Even Mission grapes ship finely to Texas and the Southern States.

The Natoma vineyard, at Folsom, this summer employed girls instead of Chinamen to pick and pack for shipment, and intend to have accommodations for more next year, so well do they work. Our girls with thick shoes, gloves and hats can, in the fall at least, in time to come, earn what every girl loves, her own money, and defy general prostration and debility with all the ailments that housing-up entails. Two cultured ladies in our Grange pick and box the grapes of a small vineyard and prune the vines also.

Election returns from the six tickets in the field have been the absorbing theme, but the winning parties are now mostly known and accepted till another effort can be made; but the buying and selling of votes that sullied the sacred ballot and degraded manhood, by both great parties, cannot be forgotten—so shameless and open was it!

Street improvement goes on with unusual spirit; 10 blocks of Main street are to be paved with basalt. Grading and graveling are going forward on the water front at the Crown Mills.

The superintendent of the State Asylum is very popular there, and the 1502 inmates are cared for in the best possible way; 1091 males and 411 women (a village of poor distraught beings) have homes in its pleasant grounds. Twenty-five per cent are there from intemperance.

The weather is so warm that fires are quite unnecessary in the middle of the day. Flowers are unhurt by frost. Up the Calaveras and at Clements grain is up, and it is feared that the dry weather will kill the sprouted summer-fallow.

### Stockton Grange

Held a good meeting Saturday, and set for discussion: "The best seed to use in the near seeding time, number of bushels to the acre and the best way of preparing the soil so as to get the best yield."

It is to be hoped that all subordinate Granges will get up petitions to send to Congress at its opening, that the bill on the House record, introduced by Hon. W. W. Hatch, of Missouri, "to establish agricultural experiment stations in connection with colleges," be taken up for discussion and passed.

The National and State Granges have urged these for years as needed aids to tillers of the soil and consumers of its products.

Stockton, Nov. 14, 1886.

### Don't You Sign It!

Sign what? Any paper, certificate, contract or other document offered by an oily-tongued stranger who wants you to take an agency or sign an order for something or other.

We have information as to traveling swindlers in this State who have been doing farmers out of signatures which subsequently turn up at the bottom of promissory notes in neighboring banks. We have cautioned our rural readers heretofore and we have fresh reason to caution them again and right earnestly against being cajoled into putting their names to any papers brought to them by plausible agents on whatever pretext.

**BOGUS WINE.**—The New York Board of Health lately condemned over 5000 gallons of "wine" seized in that city, which had been made from the following formula: Dried fruits, such as currants, raisins and peaches of low grade, macerated with sweetened water and fermented. The fermentation is checked by salicylic acid. The product is then clarified, flavored and colored to resemble port, claret or any other kind of wine desired.

**LOS ANGELES ORANGES.**—We quoted a paragraph in the *Record-Union* in the last RURAL relating to the fruit sent for exhibition at the National Grange. It was said incidentally that "Los Angeles will have no oranges to market until next spring." This is, of course, a great mistake. Los Angeles oranges begin to come into the San Francisco market in December, and continue all winter. We did not notice the statement as we made the clipping, or we should have corrected it.

## AGRICULTURAL NOTES.

### CALIFORNIA.

#### Alameda.

**TO SAVE THE ASHES.**—*Livermore Herald*, Nov. 4: N. B. Holmes is manufacturing, for one of our grape-growers, a new and ingenious device for the destruction of the trimmings of the vines. In appearance it resembles a snow-sled, but it is made of iron. On the bottom a furnace is placed, over which is a large sheet-iron hopper, into which the vines are thrown and immediately burned, leaving the fertilizing powder on the ground from which it is removed. The furnace can be easily drawn by one horse, and will pass through any of the rows. If this invention works as is expected, it will prove a great saving of time and labor.

#### Kern.

**PEACHES SEVEN MONTHS.**—*Kern Co. Californian*, Nov. 13: Those who have given attention to peach culture in this vicinity say that they can supply the market continuously from May 15th until Christmas. A fine variety has been perfected here that does not commence to ripen until the middle of November and does not disappear from the trees until Christmas. The cultivation of such fruit ought to be profitable. Peaches are now quoted in the San Francisco market at 15 to 20 cents per pound.

#### Lassen.

**COUNTY CHARACTERISTICS.**—*Genoa Courier*: The ranches of Long valley are remarkable for their excellence. The land being rich and fertile and well supplied with water, an abundant harvest is realized every year. Reno affords a good market, and the farmers having grown rich, now lead a happy life in a country that is a perfect paradise when compared to many places on the Pacific Coast where there is no market for produce or a scarcity of water for irrigation. There are also many fine farms in Honey Lake valley, well stocked and yielding abundantly each season. The grain crop for 1886 was scarcely up to the average, but the hay crop was excellent and the fruit crop better than ever before. Large herds of cattle are kept in the valley and on adjacent ranges. Nearly every farmer has a dairy, and large quantities of butter are shipped to San Francisco. Susanville is the county seat, and quite a lively place, affording a market for nearly every kind of produce raised in the valley.

#### Los Angeles.

**GRINDING CANE.**—*Westminster Cor. Times*, Nov. 12: Anderson's cane mill is running with a 12-horse power Ames engine, and will soon finish the stock of cane on hand. His peat land will average 300 gallons of syrup to the acre, and he has 4 acres. At the selling price of 50 cents a gallon, the return is \$150 per acre. (There is more land like it in the market at \$85.) The syrup from the cane grown on peat is of excellent quality, almost entirely free from any cane taste, and far superior to the adulterated syrups usually sold in the stores.

**WALNUTS.**—*Anaheim Gazette*, Nov. 13: The walnut crop did not turn out as poorly as was at first expected. Though the trees were rather late in sending forth shoots, they made an average growth this year, as can be evidenced by the groves in this vicinity. One noticeable feature was that the leaves were yellow and somewhat shriveled. The crop is now being gathered, with a fair prospect of obtaining an average yield. Mr. Stone, of Orange-thorpe, is said to have gathered over two tons from 150 trees.

**GLANDERS.**—*Telegram*, Nov. 16: Glanders has been quite prevalent in this county for some time past. At least 100 horses have been condemned. From a veterinary surgeon it is learned that by the energetic action of the Supervisors, and the willingness of the owners to kill their horses, the disease is under control.

#### Napa.

**CANNING.**—*Reporter*, Nov. 12: The managers of the cannery finished putting up the last assortment of fruits some days ago, and will be engaged for the next two or three weeks in casing and labeling their goods. They have on hand about 54 tons of canned fruits. Some days ago they filled an order for a Liverpool house for 32 tons of second-grade fruit for which they will receive over \$3000. Next year they expect to put up a much larger amount of fruit than they did the past season. This year's pack proved to be of first-class quality in every respect.

**FRUITFUL ZINFANDELS.**—*Bee*: From 40 acres, in H. M. LaRue's Napa vineyard, the yield this season was eight tons to the acre, while from 20 acres of older vines the yield was 11 tons to the acre. And from 40 acres he has just completed the packing of a second crop amounting to 140 tons. The vines are of the Zinfandel variety, and varying in age from five to seven years.

**THE WINE PRODUCT.**—*St. Helena Star*, Nov. 12: The season of 1886 has been a busy one for our winemakers, and one most favorable for successful work. A tour of some of the principal cellars shows us that while, perhaps, the majority have finished winemaking, and are engaged in cleaning up and laying aside the vintage machinery, there are a number of large cellars still busily engaged with a prospect of concluding their labors about the first of next week. The grape yield in this county has been large—much larger than any one calculated on,

and the quality of wine made has been good, and taken as a whole, will compare favorably with last year. In some sections there has been some complaint about color, but this has been but a minor difficulty and is not at all general. Our wine men unite in saying that the results of the vintage have been quite satisfactory, and if reasonable prices can be obtained for the wine, all will be well. The season's work has been long and wearisome, dragging out from early in September to the middle of the present month. The *Call's* estimate of 5,000,000 gallons for Napa county is probably approximately correct, though considerably high if only sound marketable wine be taken into account.

#### Placer.

**ORANGES.**—*Bee*, Nov. 12: A. Moger, fruit receiver for the Newcastle Fruit Co., says that the orange crop in that vicinity is looking splendidly, the fruit already being of fine color. On the Rice place are trees 18 years of age, from which one of the best displays of the last citrus fair was made. Placer will make an effort to capture the prize for the best county exhibit, and will put the other counties to their best efforts. The Newcastle Fruit Co. will begin shipping oranges next week. The fruit commands a fancy price—\$4.50 per hundred, or \$9 per box—because of its early ripening.

#### San Diego.

**FLORICULTURE ENCOURAGED.**—*Union*: Yesterday a dozen miniature hyacinth bulbs were distributed to each teacher of the five lower rooms of the Russ school. The bulbs are to be given to as many pupils of each of these rooms for raising. As the bulbs send up their blossom-stalks and mature their colors, they are to be brought to the school for general exhibition, and to determine which room has had the best success. General directions for tending the bulbs are given. All the plants distributed are numbered, the names and numbers corresponding to each number being retained by the teachers. In the course of two or three months, when all the hyacinths are in bloom, it is reasonable to believe there will be quite a pleasant exhibition at the school.

#### San Joaquin.

**MISSION GRAPES FOR TEXAS.**—*Stockton Independent*: Until recently it has been the opinion of vineyardists that Mission grapes would not stand shipment to any distant point, but experiments recently made here show that this California grape can be shipped to Texas at a profit. For more than a month past Robert Aiken has been shipping three carloads every week. He has bought a large quantity of Mission grapes, and finds that they can be shipped to distant points at less loss than is shown in the shipment of fancy varieties. Mr. Aiken paid \$40 per ton for Black Prince grapes and \$50 per ton for the Emperor and Flaming Tokay varieties. His shipments have been made from the Sacramento-street depot. He has also shipped pears, quinces and other fruit to Texas, and in every case has found the venture very profitable.

#### Santa Barbara.

**BIG THINGS.**—The *Lompoc Record's* reporter at the late Santa Maria Fair tells of a squash weighing 227 lbs., raised by A. Stubblefield, at Pine Grove, and of a beet weighing 53 lbs., raised by Adam Smith on Oso Flaco.

#### Santa Cruz.

**A SAVAGE BOAR.**—*Soquel Journal*: About six years ago a band of hogs left Spanish Ranch and took refuge in the mountains above Sulphur Spring. Nathan Hart and his sons and E. Merrill, while out on a hunt, lately, with Winchester rifles, came across one of these wild hogs. He had grown to be a tremendous animal, measuring eight feet in length and weighing nearly 500 lbs. He at once showed fight, and the party, to avoid his immense tusks and ferocious charges, scrambled up trees for shelter, and some of them met with narrow escapes. The wild monster was finally shot and killed by George Hart, after a terrific struggle with men and dogs, two of the latter being killed outright.

#### Shasta.

**COUNTY EXHIBIT.**—*Democrat*, Nov. 10: The first Shasta county exhibit was opened to the public last Thursday, at the land office of D. N. Honn, in Redding. The large hall was completely filled with Shasta county products, manufactures and fancy-work. On entering, the eye was greeted by the immense plank donated by the Redding sawmill and ornamented by a tomato in full bearing and a beautiful amaranthus in bloom. Then came the shelves, in themselves a thing of beauty, manufactured by the Redding planing mill, and loaded with jellies, preserves, canned fruits, raisins, figs, grapes, black walnuts, paper soft and hard-shell almonds, hops, barley, minerals from a number of the leading mines of the county, coal from the Clover Creek mines, and samples of the different woods that grow so abundantly with us. Next was a table loaded with almost every known variety of apples, and a wall decoration of field corn in the ear, yellow and white corn, huge bunches of grapes, clusters of pears, Japanese persimmons, olive branches, tree growths, sheaf rye, wheat and oats, the whole presenting a handsome wall-picture. On the opposite side was a long table loaded with apples and pears, large, firm, bright and beautiful. Around the tables and on low stands are arranged mammoth squashes weighing from 100 to 180 pounds each, Irish potatoes of many varieties, and all of large size, sweet potatoes or yams weighing from 2½ to 7 pounds each, tur-

nips, rutabagas, radishes, cucumbers, cabbage, beets, etc. The cotton plants attract universal attention. They are about 30 inches in height and bear each a boll in full bloom showing the cotton and the seed; by its side stands a glass vase filled with cleaned cotton, showing fiber almost as fine as silk.

#### Stanislaus.

**ORANGES.**—*Modesto Herald*, Nov. 11: The orange trees in this vicinity are loaded with fruit, and so far no damage has been done to them. The fruit here matures earlier than in Southern California, and being free from too much moisture is sweeter and has a finer flavor. The orchards here are mostly seedlings. The oranges produced at Knight's Ferry are especially fine and well flavored. They are produced without irrigation, and have only been properly cultivated during the past two or three years. Our farmers and orchardists have been turning their attention to this fruit more freely during the past two years, and will have all they want for home use in a few years more.

**OLIVES.**—*Modesto News*, Nov. 12: We were shown to-day some fine looking olives, grown on the Buchanan place, about two miles from Modesto. They were on a branch from a tree eight years old, and have had neither water nor care this season.

#### Sonoma.

**HORSE DISTEMPER.**—*Sonoma Democrat*, Nov. 13: Many horses in the neighborhood of Valley Ford are suffering from a disease of the throat, which has grown to be an epizootic and is proving fatal in a few cases. The throat of the animals affected seems to fill up and they refuse to eat. The disease is said to be spreading.

**SHEEP-KILLING DOGS.**—There is considerable complaint in the immediate neighborhood of Santa Rosa, about dogs killing sheep.

#### Sutter.

**JAPANESE PERSIMMONS.**—The *Record-Union* speaks of a fine sample of Japanese persimmons received from T. A. McFarland, of Live Oak. The fruit is finely formed, rich in color and of good size. This kind of tree is made highly ornamental during the late season by its bright-colored fruit, and is becoming quite popular. There are many good-sized trees in this part of the State, and they are grown without much difficulty. The fruit is highly prized in its native country.

#### Tulare.

**NUTS.**—*Times*, Nov. 11: Nanscawen has placed in his show-window a small lot of walnuts and pecans, raised in the yard of Zane Steuben, Visalia. The walnuts are not a fair sample of those we have seen in this section, but the product was a partial failure this year. The pecans are larger than those generally sent here from the S. F. market, and the sample indicates that they would prove productive here.

**HOGS** command only two cents per pound in the Tulare county market, with little prospect of an increase in price. Many hog-raisers think of driving their hogs to the mountains and there butchering and manufacturing them into bacon. With hogs at two cents and bacon at 14 cents it looks as if the project would pay.

**PORCINE PICKERS.**—L. A. Johnson has about 10 acres of wine grapes on his place just north of town. Not meeting with a ready sale for them this season, he turned his hogs into the vineyard and let them eat the grapes. L. A. had too much business on hand to manufacture them into wine.

### NEVADA.

**BURNING OFF TULE.**—*Reno Gazette*, Nov. 8: The margin of Humboldt lake is covered for miles with a dense growth of tules, which often reach the height of 15 feet. The settlers are now burning this off so that the ground can be surveyed, and it makes a vast fire. Black smoke rises in almost solid pillars, and with only wind enough to lean them slightly toward the south. They look strange and picturesque. As the train runs on, it is seen that the fire extends for miles along the lake and the cleanup will be immense.

### Thanksgiving Proclamation.

STATE OF CALIFORNIA,  
EXECUTIVE DEPARTMENT.

In accordance with the custom and in conformity to the proclamation of the President of the United States, I, George Stoneman, Governor of the State of California, do hereby designate and set apart Thursday, the 25th day of November, as a day of thanksgiving and prayer. I invite the people of the State to forego their usual business employment and assemble in their places of worship to give thanks to the Supreme Ruler of the universe for the continued enjoyment of the blessings of free government, for the renewal of business prosperity throughout the land, for the return which has rewarded the labor of those who till the soil, and for our progress as a people in all that makes a nation great. Let us, in the midst of thanksgiving, remember to dispense charity liberally to the poor and needy, so that our services may, by such acts, be made acceptable to God.

In testimony whereof I have hereunto set my hand and caused the great seal of this State to be affixed, at the State Capitol, on this 10th day of November, A. D. 1886.

GEORGE STONEMAN, Governor.

Attest: THOMAS L. THOMPSON,  
Secretary of State.

**THE El Paso de Robles Leader** is a bright and promising journalistic baby, born in San Luis Obispo county, November 13.





November.

The year is waning! Solemn sounds are heard  
Among the branches of each wind-toss'd tree;  
Brown looks the grass; no floral gems we see;  
Forsaken nests by winds alone are stirr'd,  
And not by wing of bird.

The skies look cold—wind-driven clouds scud by,  
While fitful gales whirl sere, dry leaves away—  
Fair once, like friends who come to us one day,  
Creep to the heart, bring love-light to the eye,  
Then droop and fade and die.

Yet, while winds chill and summer joys depart,  
A host of other pleasures now doth come,  
Brothers and sisters scattered, all come home,  
Thanksgiving cheer abounds, while fond smiles start.  
As heart responds to heart.

Then, curtains down, around the fire we press,  
To sing and jest, to romp and laugh and play;  
But, while the fun goes round, each heart can say,  
"November brings Thanksgiving. Lord, we bless  
Thee for our happiness!"

—Sophie L. Schenck, in Brooklyn Magazine.

## The Dawsons' Thanksgiving.

(Written for the RURAL PRESS by FANNIE ISABEL SHERRICK.)

"Hannah! you jest go directly and hunt up that air brother of yours. I never seed sech a boy since I was born. He's never round when he's wanted. Likely as not he's hangin' round that barn awaitin' for a chance to sneak out Whitefoot. It's curious how that boy does like to ride that air horse!"

Hannah went dutifully in search of her brother, but her mother's surmises must have been correct, for James was nowhere to be seen and the horse was gone.

A few moments later, however, she saw him cantering up the lane back of the barn.

"You'll be sorry," she cried, warningly. "Ma has been wanting you fur an hour. She wants you to kill that big turkey gobbler—the very biggest one—fur to-morrow's dinner. You know all the folks, grandpap and all, are comin' here to Thanksgiving dinner, and ma's been bakin' and fussin' all afternoon for them. If you care for your skin now you'll jest hurry, for I tell you Ma Dawson's cap frill stands awry, and you know what that means, I suppose."

James grinned and dismounted with alacrity. He knew, in common with the rest of the family, that when that starched white frill, which was the pride of Ma Dawson's heart, stood awry, trouble was brewing for some one. It was a sure index of the old lady's feelings.

"No back talkin' now," she cried to James, as he appeared meekly on the scene of her pie-making and cake-baking. "Jest you git to work and kill that gobbler. Here it's most sundown and no turkey ready fur to-morrow. An' it'll take a good four hours to bake it if it takes a minute. It's ridiculous you a lazin' round in this fashion. Clear out now!"

James waited for no second invitation, dodging the rolling-pin as he made his exit. It was hard to tell which worked the fastest, his mother's tongue or her fingers. It seemed to his benighted fancy that she could do 20 things at once.

He inveigled Hannah into the turkey hunt, and such a scampering as they did have.

"I think it's likely he's hern of Thanksgiving dinners," said Hannah, as she sat exhausted and breathless on the woodpile, while James tried his softest blandishments on the lordly ruler of the barnyard. "He haint got the least idee of bein' dished up with cranberry sass and mince pies. You could fool the young ones a heap quicker. Law sakes, it wouldn't s'prise me if he could tell what day of the month it is."

"Will you keep that darned old clapper of yours still?" cried James, who was getting as red in the face as the turkey gobbler himself.

"What's the matter with girls, anyhow, that they can't keep still? Your tongue's as bad as mother's, hung in the middle and waggin' at both ends; if you had any sense you'd git some corn and come and help me."

Hannah was divided between her inclination to go into convulsions over her brother's frantic efforts to outwit the arrogant, wily biped and her sense of injured dignity, but she finally consented to go to the rescue.

There was no living creature on the place that did not love Hannah, and usually she was accompanied in her wanderings through the farmyard by a whole train of attendants, beginning with the chickens and ending with Gus, the family dog, and Dick, the family horse; even Shorty, the brown cow, was not averse to bringing up the rear.

So that now, when she brought her corn, she

was soon surrounded by her feathered pets; the little new turkeys were so tame they would come and eat from her hand and even hop on her shoulder. She was much attached to them, but the big gobbler was such a greedy, self-important old fellow that she was willing to immolate him on the Thanksgiving altar.

After much maneuvering on her part and a good deal of shooting on James' side, they succeeded in imprisoning some of the turkeys, among them the desired prey, in the woodshed. After this his capture was an easy matter.

When it came to the killing, however, Hannah disappeared. She left that to James and her elder brother who had just come from town.

"Just like a girl!" cried James derisively; "they're allers afraid of their own shadow. I suppose she'd think she'd see ghosts for a month if she ever killed anything. Girls haint got the backbone of a cricket."

A few moments afterward he was carrying the limp, headless carcass to the house when old Abe, a darkey living in the vicinity, hailed him from the fence.

"I say, chile, dat's a hefty lookin' bird you done got dar. He wouldn't weigh nuffin, would he? Now at a clean chance, how much do you reckon he'd fetch in town? Likely ways more'n foah dollars, hey?"

"Four dollars!" James opened his eyes in astonishment. Four dollars was a magnificent sum in his eyes.

"Turkeys am deah dis yeah. He'd fetch a heap of money shuah, now. What's your ma tinkin' of, to kill birds fur her table 'most worth dere weight in gold? An' you ain't rich folks, nuther."

"Well, you see," explained James, resting the turkey on the fence while he talked, "grandpap and the rest of the Dawsons be invited here to dinner to-morrow, and ma, she wants to make a grand splurge, cause Aunt Sallie is a comin' from town, and she married a rich widower and lives in awful style. Why, do you know," here James lowered his voice to a dramatic whisper, "she has a peer glass, I think that's what they call it, in her parlor worth \$200. Why, you ken see your whole self in it, yes, you ken, and by golly, she wears a silk dress that makes a feller's heart thump, it creaks so when she walks. No wonder ma's settin' out her best china and gettin' the parlor ready for the party. She jest intends to paralyze 'em all with her style. She's baked enuff good things to feed the whole of Griggsville. 'Mighty fine old feller, warn't he?" This last remark alluding to the turkey, which Abe was examining with the air of a connoisseur.

A further parley followed which seemed of a mysterious confidential nature, and then Abe went away and James shouldered the turkey and carried it to the house, where it was soon deftly dressed by Mrs. Dawson and hung on the nail just outside the kitchen door for the night.

About ten o'clock that night Hannah was awakened from her slumber by the creaking of a window, as though it were softly opened and shut. She listened for further sounds, but, hearing none, went to sleep again.

In the morning, great was the consternation of the family to find their fine turkey gone.

"Disappeared just as if it had legs," said Sue, the eldest girl.

"Well, didn't it have, Miss Smarty?" asked James sarcastically. "I don't think we chopped its legs off as well as its head. What a goose you are! Legs don't make no difference after you're dead. But my sakes, what a dream I did have—all for killing that blamed gobbler. I dreamt that he came and set on my chest and cried out in a holler voice, like that woman we was areadin' about onct: 'I want my heart! I want my heart!' It made the cold sweat stand out all over me. I never seed sech a terrible ghost as that thing was. Seemed like he weighed a hundred tons. It was all I could do to fetch a breath when I woke up. My chest seemed 'most caved in."

"Next time you'll leave mince pies alone before goin' to bed," retorted Sue contemptuously. She had no sympathy for James, though he did look a trifle pale after his severe nightmare.

"Law sakes!" exclaimed Mrs. Dawson, as they sat down to breakfast. "I never was so kerfummured in my life. I jest believe it's those pesky darkeys that live in the hollow that stole my turkey. They never was no account nohow. Our chickens have been disappearin' for the last fortnit, and I'll venture to say it's them as took 'em. It's a livin' shame to hev sech a lyin', thievin', shiftless set round decent white folks! An' ef James Dawson don't stop foolin' round old Abe and quit a diggin' pertatoes fur him while he's a lazin' in town I'll break every bone in his body."

James trembled at this threat, for the cap frill was certainly awe-inspiring; but after breakfast he took Hannah into his confidence and showed her two bright silver dollars he had hidden away in a small box.

"This is what I git fur diggin' pertatoes," he said, with a knowing wink. "Aint it wuth while? We'll have a sled for Christmas. It's a fine hill we have fur coasting down in the pig pasture. My sakes, but we'll have fun!"

Hannah was a little skeptical in regard to his methods of money-making. "Workin' fur niggers" wasn't quite up to her ideas of aristocracy, but she rather enjoyed the prospect of future coasting.

Mrs. Dawson and the elder girls were in a flutter because of the loss of the turkey, but it was not long ere another was slaughtered, and

in due course of time browning in the oven. Then, and not until then, was Mrs. Dawson at ease.

By noon the girls were arrayed in their best "bib and tucker," and Ma Dawson sitting in state in the parlor in all the glory of her best gown receiving the guests as they arrived.

Aunt Sallie in a brand new brocaded satin and Uncle Matthew in his "store clothes" were the envy and admiration of James and Hannah. Never was anything quite so gorgeous and dazling to childish eyes.

"No wonder ma looks as if she could most bust with pride!" exclaimed James; "'pears to me Aunt Sallie must have jest stepped out of one of those books that Sue's allus a porin' over when she makes a new dress—you know 'em, the ladies are allus painted red and green and sech like."

"Oh, you mean fashun books!" said Hannah, with superiority. "The ladies are not painted, only the dresses."

"Well, what's the difference? I've allus hern that ladies do paint, anyhow. But jest listen to ma, if she haint rehersein' that blamed turkey-story for the forty-fifth time. What's the use of makin' sech an everlastin' fuss about nothin'? One turkey haint a sarcumstance when we've got a whole yart full, and ma's the most fidgety woman—she allus flies around like a hen with her head out off, and jest listen to that whooper! She adds a pound to the old gobbler every time she tells the yarn. By the time the schoolmaster comes he'll weigh 100 pounds—"

With which remark, James escaped from the house, darning one of his consins on the way out to ride Whitefoot over the farm, a dare which was soon taken up, for Hannah watched their circus performance from the window, expecting every moment one of their necks would be broken.

But boys are watched over by a special Providence, and they came back safely, just in time to hear the turkey-story rehearsed to the schoolmaster.

James fairly groaned. "The turkey agin! It's all 'cause I murdered him I s'pose, an' he set on my chest all night like a thousand of brick!"

"Well, if I looked as queer as you do every time that turkey is talked of, I'd never chop off the head of another as long as I lived," said Hannah, who was mixing the sauce for the plum pudding, in the big, sunny kitchen. "Don't you go way no more now. Dinner's all ready to set down to."

A right merry party it was who sat down to that big table in the pleasant sitting-room, with the three south windows where the sunlight came pouring in, and the huge open fireplace making the room as warm as summer. In all the country there could not have been a happier family group—there was merriment all around, and their voices rose to a higher pitch as the dinner progressed.

But in the very height of their hilarity, a loud knock resounded on the front door.

Rat-tat-tat!

"I'll just warrant you now it's those Casey young ones, come to beg a pie or some doughnuts," said Mrs. Dawson. "Those niggers do beat anything; allus beggin'." But go ahead, Hannah, and let 'em in; the good Lord'll provide, I s'pose. He allus does for the lame and the lazy. Be spy, now; tell 'em to go to the back door. Law sakes, the impudence of these niggers a comin' to the front door that's allus used for company."

But the newcomer proved more important than the Casey children. When the door opened in walked the constable of Griggsville, dragging Abe with him.

The Thanksgiving party dropped their knives and forks in open-mouthed amazement.

"Did you lose a turkey last night, Mrs. Dawson?" inquired the constable.

"Law, yes," replied that lady, "an' I knowed it was that good-for-nuthin' Abe that stole it. I'm glad you ketchin' him. But, law, Mr. Sanders, how you do fluster a person awalkin' in on 'em in this air way."

"Well," continued Mr. Sanders, "I found this fellow tryin' to dispose of a fine turkey in town this morning, and arrested him on suspicion. When he got to the lock-up he confessed that the turkey belonged to you, but that James had sold it to him last night for \$2. He says he's often bought chickens of him and sold them again in town. Here, you rascal, none of that."

The last sentence was addressed to the young culprit, who had been trying to sneak out under the table while the attention of all had been turned on the constable.

Mr. Sanders seized the boy by the coat collar and dragged him forth. He looked like a piece of limp cotton and his teeth chattered in his head.

Ma Dawson raised her hands in holy horror. "James Dawson, could you be so mean as to do this thing agin your poor old mother—a stealin' of my chickens and a sellin' 'em to niggers, an' a gettin' out of your bed nights to do it? An' a takin' of my best gobbler that we all sot sech store by for Thanksgiving! Lord, Lord, what kind of children hev I been bringin' up?"

James could not deny his sins. He felt it was no use, every circumstance pointed to his guilt. The tears rolled down his cheeks, and he wished that the earth might open and swallow him.

Hannah atood by, silently crying. She wished that she might defend him; but she remembered the opening and shutting of that

window, a fact which had not occurred to her before—and then the two silver dollars—all the evidence was against him.

"No wonder that turkey set agin your chest all night," exclaimed Mrs. Dawson. "I should think it would, you miserable, deceivin' wretch. Jest take him along, Mr. Constable, and lock him up along with the rest of the criminals. I don't want no sech lyin', contemptible child round me. Take him along, I say!"

With a gesture of resignation, as though she had washed her hands of the whole affair, Mrs. Dawson sank down in her chair, the white frill flapping disconsolately over her face.

In vain James pleaded and implored forgiveness. The old lady was inexorable. The girls all interceded, but Uncle Matthew came forward, saying:

"No, James must go. He has been guilty of a terrible offense. Let the law punish him."

At the same time he winked at the constable. Mr. Sanders understood, and without further ado marched James to his wagon and took him and Abe to town, the former blubbering all the way and frightened nearly to death.

"I didn't think it was any harm to take those chickens," he kept saying, "cause they was mother's anyhow."

But the constable hushed him up with severity; he was determined that the boy's punishment should cure him effectually.

The dinner party ended rather tamely, all the guests, in deference to Mrs. Dawson's feelings, going home early.

"Law me, if it don't seem as if there'd been a funeral in the house," she exclaimed as they closed the house for the night, "I never was so tuckered out! To think of that boy a bringin' my gray hairs to the grave like this. Dear me, dear me!" and Ma Dawson fell to weeping and would not be comforted. Her mother heart was really sore over the conduct of her wayward son.

The next morning Uncle Matthew went to the lock-up and released James. He was very contrite after his night of captivity, and his eyes were swollen with weeping—it had been a sorry Thanksgiving for him.

"Do you think you can behave yourself now?" asked Uncle Matthew, eyeing the boy severely.

"Yes, sir, sure," James answered humbly, and he kept his promise. The lesson had been a severe one, but it was lasting in its effects. Never again was he guilty of a like offense, and he avoided Abe and the Casey party as though they had had a pestilence.

"Goodness gracious!" exclaimed Hannah a few days after, "I really believe if James had wings, he'd be an angel. The Dawsons will be proud of him yet."

THE SALOON.—The Northwestern Christian Advocate, of Chicago, says: "This 'saloon,' that 'saloon,' the other 'saloon'—saloons, saloons, saloons figure constantly and universally in this anarchist trial. Conspirators met in saloons, dynamite was discussed in saloons, bombs were distributed over saloons; armed revolutionists were drilled above, under, or in rear of saloons; treason made assignment in saloons; and time and time again witnesses say 'we went to' such and such a saloon 'for wine or beer.' There is not a country under the sun in which lurks so much treason, revolution, and murderous threat as in our 'saloons' of the United States, and notably in all large cities.

These saloon pests harbor thieves, thugs, house-breakers, anarchists, robbers and murderers. Nine-tenths of law-breaking in America is hatched in saloons, and the admitted fact is palliated by the axiom that saloons are headquarters for town, city, and even national election gerrymandering. The liquor counter is the scaffold on which a half-hundred beautiful, vital American things are assassinated, and on which scores of horrid public plagues are glorified. If our German-adopted citizens are bound to drink their beer, we wish they would use it at home, and join all classes of citizens to banish the public saloon. This very trial will help to hasten that day." The saloon must go!

HUSKING BEE.—A genuine, old-fashioned corn husking is a rare thing in California, but Daniel Emerson, having raised a good crop of corn this season, determined to give his friends and neighbors an idea of the fun to be had at a down-East husking bee and invited them to meet at his residence Wednesday. When the guests arrived, some 35 in number, they were ushered into the large barn, the gloom of which was relieved by lanterns and "tallow dips." Upon the floor was a huge pile of corn still in the "shuck," and around this the company, old and young, big and little, seated themselves as comfortably as circumstances would permit, and entered with great spirit into the new amusement, called by Southern darkeys "de shuckin' ob de corn." A good deal of dexterity was developed, one old lady of 70 making the best record of all. Red ears were plenty, and each one discovered was the occasion of an oscillatory diversion which created much merriment. After the work was accomplished the company adjourned to the house, where a supper of Boston brown-bread, baked beans, Indian pudding, pumpkin pies and other New England dainties was served. Songs were sung, stories told, and Santa Cruz's first husking voted a great success. Courier-Item.



## YOUNG FOLKS' COLUMN.

## Janet's Thanksgiving.

(Written for the RURAL PRESS by BECCA M. SAMSON.)

It was Thanksgiving eve in New York City. The snow was falling fast and a sharp wind blew from the north, but the brilliantly lighted streets were crowded with happy people, while everything in the great city, from the wagon-loads of turkeys clattering over the stones to the ringing and chiming of the church bells, was saying: "Thanksgiving to-morrow, Thanksgiving to-morrow."

All the way home from the factory little Janet was crying, wiping her eyes on the faded shawl that covered her shoulders and drawing her ragged straw hat far down over her eyes to hide the tears.

Thanksgiving brought no mince pies or frosted plum cakes to her; she was only a poor little orphan girl working hard from morning until night in a flower factory to earn bread for herself and young crippled brother.

Wee, dear, patient, suffering Robbie, who in all the seven years of his little life had never known what it was to run about like other children. He was always pale and thin and feeble—Janet had never seen him otherwise, or dreamed that it meant sorrow; but that morning the gruff old doctor had told her that without fresh air and sunlight her little brother would surely die; so to-morrow morning the big wagon was coming to take Robbie away to the hospital.

The hospital!

Janet had never heard of those beautiful homes where suffering children are so tenderly cared for and loved. To her, the hospital meant some strange, distant place where she and Robbie would never see each other again; where no gentle hands would soothe him when he was in pain, no tender voice would lull his restless moaning. Who loved him but his faithful sister?

All day long Janet had forced back the tears that swelled from her aching heart, lest they should dim her eyesight or fall among the gay flowers she was weaving; but when night came and she was free to leave the crowded work-room, her long-suppressed grief burst forth into convulsive sobs.

"The hospital, the hospital," she moaned as she plunged into the dark, cold night, "how shall I tell Robbie of that dreadful place?"

Patient, suffering little Robbie! Though he was tired of always lying on his hard bed and was very lonesome in his dismal garret chamber, though Janet was often cold and tired and hungry, the two children were very happy, because they loved each other.

And now they were going to take Robbie away.

Never again would Janet see his sweet, pale face when she came home from work at night; never again would she hear his dear voice call her name.

Oh! it was cruel, cruel, to part them. That was why Janet was weeping so bitterly that gay Thanksgiving eve. She was but a child scarce 12 years old, and her burden was hard to bear.

"What shall I do? what shall I do?" she sobbed so wildly that strangers looked wonderingly at her as she passed; but Janet saw nothing—knew nothing but her own great grief.

Once a brilliantly dressed lady, in stepping from her carriage, dropped a cluster of creamy roses.

With a cry of joy, Janet sprang forward to seize the flowers as they fell. "They will make Robbie so happy!" she murmured, hiding them close under her shawl.

Janet soon left the wide, brilliant streets far behind to enter a more familiar neighborhood of darkness and poverty.

The street was lined with dingy, storm-beaten tenement-houses. The dingiest and dreariest of them all was Janet's home, and she had many weary steps to climb before reaching the garret chamber where Robbie lay.

Janet dared not enter until she had smothered the sobs that were choking her. She crouched down beside the closed door, and, burying her face in her cold little hands, tried thus to force back the tears. She must not cry, she must not, she must not.

There were many things to be done before she could tell Robbie of the secret that lay on her heart; until then she must be brave, for his sake.

Strong with her unselfish courage, she rose to her feet and softly opened the door.

The room was in darkness, save for a white glimmer that stole from the frosted window panes; but Janet needed no light to guide her to where Robbie lay moaning in a low, quivering voice, like one in great pain without strength to bear it.

In an instant Janet was by his side, forgetting her own heartache as she soothed her little brother's pain; shaking up the coarse pillows, smoothing back the heavy hair from his forehead, bathing his hot face and hands in cool water.

It was a merciful darkness that hid the children's faces from each other. Robbie would have grieved bitterly at the sight of Janet's tears, and Janet would have wondered at her little brother's bright eyes and strangely flushed cheeks.

"There, there, Robbie," Janet said, in the

pleading voice mothers use to fretful children, "see what lovely roses I have brought you; a beautiful lady dropped them from her dress. O Robbie! I wish you could have seen her; she was covered all over with diamonds."

Robbie eagerly seized the fragrant flowers, holding them tight in his little feverish hands; he lay quiet and happy now that Janet had come home. "Diamonds!" he repeated in a wondering way, "are those flowers too, Janet?"

"Oh! no, Robbie; diamonds are beautiful stones a thousand times brighter than glass," Janet answered, as she moved away to bring Robbie his supper from another part of the room.

Robbie held the flowers tenderly against his cheek. "They must be stars," he mused dreamily, thinking of the diamonds. "I'm glad the beautiful lady didn't drop those, because I can see the stars all night long, when I lie awake, but I never, never see flowers like these. Janet," he called, with a sudden ring of joy in his feeble voice, "do you think the beautiful lady was an angel mother sent from heaven to bring me these flowers?"

Janet was crying softly to herself in the darkness. She had not been thinking of flowers or angels, but of the great grief hanging over herself and little brother.

She could not answer when he spoke to her; she could only brush away her tears and silently carry to his bedside his supper of sweet milk and white bread—luxuries that cost her so dear.

Janet tasted no food herself that night, but throwing off her thin garments, she crept into bed beside her little brother, thinking all the while how best to tell him that after that night they would never be together again.

Her heart throbbed with pain as the dreaded moment of explanation drew near.

Robbie, so unconscious of his sad fate, pushed his untasted supper from him and nestled close to his sister's side.

"Tell me about the beautiful lady, Janet," he pleaded, pressing his head against her shoulder; "where was she going, all covered with stars?"

The question shot through Janet's bewildered brain like a flash of light.

It suggested an idea that would bring comfort for a little while longer.

Suppose she told Robbie of everything bright and beautiful she had ever seen or heard of? She knew nothing of the angels he loved so much, but she could tell him of the gay stores in the city and the merry Thanksgiving sights she had seen.

It would make him very, very happy; and perhaps even she might be happy too, for a time, if she could forget.

Yes, she would do her best to be merry; there would be sorrow enough afterward.

"The lady was going to a grand ball, Robbie," Janet answered gayly. "Everybody is happy to-night, for to-morrow is Thanksgiving day."

"Thanksgiving day! What day is that, Janet?"

"Oh, a very happy day," Janet replied.

"The rich people go to church and thank God for keeping them so nice and warm and comfortable; then they go home and eat turkeys and mince pie. That's Thanksgiving day, Robbie."

"Why, Janet!" Robbie exclaimed, his weak voice trembling with excitement, "we'll keep Thanksgiving day, too. What lots of things we'll have to thank God for to-morrow, won't we, Janet?"

Janet turned quickly to bury her face in the pillow.

"I'll thank Him for these beautiful flowers," Robbie continued in a low voice, all unconscious of his sister's tears; "and I'll thank Him for you, dear, dear Janet," he cried, stealing one feeble arm about his sister's neck and stroking her cheek with his little hot hand.

"Would you thank Him, too, Robbie, if you could lie on a soft white bed and see the bright sunlight all day long?" asked Janet, dimly conscious that the old doctor had spoken about such things.

"Wouldn't my back ache just as bad on a soft bed?" asked Robbie, "and could I see brighter sunlight anywhere than I see here? O Janet!" he exclaimed, clasping his little thin hands together, "I see such beautiful things as I lie here waiting for you to come home. Sometimes, when the sky is very blue, angels with silver wings float by. I often see mother's face among them. To-day she turned and smiled at me. Then, if there are no clothes hanging out to dry on the roofs, I can watch the big yellow sun shining in the windows opposite and see the box of pretty red geraniums blooming over the way. When the sun is gone and it's too dark to see the flowers any more, then I know you are coming home. I'm always glad and happy with you, Janet—always glad and—"

Robbie's voice grew faint and his head pressed heavily against Janet's shoulder.

Was he falling asleep—feverish, restless Robbie, who lay with wide-open eyes half the night through?

Janet's heart stood still with a sudden terror. What should she do if Robbie slept before she had told him of the dreadful thing she had to tell?

It was cruel to let him sleep only to be awakened by strange hands that would carry him far away before he knew what it all meant. "Robbie, Robbie," Janet called, shaking the frail form as roughly as she dared, "wake up, dear, for one moment."

"Where are my pretty flowers, Janet?"

Robbie murmured drowsily. "I must hold them tight so mother will know I've found them. I'm very tired, Janet; good-night, good-night."

Robbie was fast asleep. How quiet he lay! Janet could scarcely hear him breathe.

There was no need for Janet to struggle against her wild sobs. Robbie slept too soundly to be awakened.

From the room below came the harsh tones of a fiddle and a sound of shuffling feet keeping time to the music.

All night long Janet was tortured by the cruel mirth. Sometimes she fell into restless dreams and imagined she heard Robbie's voice calling to her, but she always awoke to find him lying silently by her side and to hear still the wailing music.

In a moment of despair she was tempted to snatch her little brother in her arms, and creeping away through the silent city to where the snow lay deepest, they could both fold themselves in its gentle arms and never open their eyes again. But alas! Janet's arms were but the arms of a child; the frail form of her little brother was a burden too great for them to bear.

Could she think of no way to save Robbie from going to that dreadful hospital? Was there nothing she could offer, nothing she could do or say, to spare him that sorrow? Alas! the poor are so helpless. Janet had only tears to give. Of what use were tears? Would they touch the hearts of the cruel hospital men?

Would they listen to her if she flung herself at their feet and begged and implored them not to take her little brother away? Or, if they could not leave him, could they not take her too to watch over him as she had always done? She would promise to be no burden to them, but would work hard to pay her way. Surely they could not refuse her this.

As soon as day broke she would creep down the steep, rickety stairs; she would wait patiently until the men came with the big wagon; she would tell them her sad story; she would tell them that it would kill her little brother to be taken away from her. She was sure they would listen to her.

Who knows if she and Robbie would not spend a happy Thanksgiving, after all?

Janet was so comforted by this new hope that the pain at her heart flew away and she fell at last into a gentle slumber.

When she awoke again a ray of sunlight was creeping through the frosted window panes. With a low cry Janet sprang to her feet. She remembered that it was Thanksgiving morning, and in a few moments perhaps the wagon from the hospital would arrive.

Robbie was still sleeping. Janet was very glad. She might perhaps get safely back before he awoke, but she hardly dared to hope so much.

Doors were banging and children with shrill voices were already quarreling in the hallways; heavy footsteps passed up and down the creaking stairs, but little Robbie still slept on.

Never before had Janet's lightest movement failed to awaken him. It was very strange. She looked at him in wonder when she at last stood ready to go.

"How pale he is," she thought, as she bent over his still face. "How sweetly he smiles. Perhaps he was dreaming of the roses drooping from his clasped hands—those tiny, waxen hands!" The sunlight flickered across his white face and nestled in his hair like the touch of loving fingers.

Janet must hurry away before it grew too late.

She stood for a moment with her hand trembling on the door-knob.

Heavy footsteps were stumbling through the dark passageway. Suppose they should belong to the men from the hospital—suppose they should burst in upon her and tear Robbie from her, sleeping? The mere thought set Janet's heart madly beating.

She would wait until the strangers had passed by; then she would fly down the stairs without losing another moment.

She listened to the rude steps coming nearer and nearer with all the fascination of terror; she heard rough voices muttering, followed by loud rapping, angry questions and a great slamming of doors.

A sudden silence fell in the midst of the noise; then came the cruel words that pierced Janet's ears like a sharp knife:

"Confound it, Jim, whereabouts is that sick boy, any way?"

A loud cry of anguish answered these words.

Janet, distracted with grief, flung herself across the form of her little brother. "Robbie, Robbie," she wailed, "they have come to take you away from me. Wake up, darling, wake up. See, Robbie, 'tis Janet, your own sister, Janet. I was cruel to let you sleep, but I meant to tell you all. I meant to save you, Robbie. Dear, dear little brother, wake up. Can't you understand—they have come to take you away. You must not sleep; you must not let them take you. Oh! why won't you open your eyes, Robbie, Robbie?"

In vain Janet wept and implored. Robbie smiled when her hot tears rained upon his upturned face. Smiled at her pleading words. Smiled when the door was flung open and two great rough men forced themselves into the room.

Like a wild animal at bay, Janet sprang from the bed, and standing before her little brother as though to shield him with her own slight form, she faced the two men and cried defiant-

ly: "He is my brother. You shall not touch him while he sleeps."

A long hush followed Janet's words.

One of the men stole softly to the bedside and gazed at the little form lying so peacefully there. "Come away, Jim," the man whispered to his companion; "come away; the little chap don't need our help; he'll never wake again."

"Never wake again," cried a young joyful voice.

"Never wake again," echoed the merry Thanksgiving bells all over the city.

As the men crept silently from the room, they caught a glimpse of a radiant upturned face and heard a glad voice crying to heaven, "Thank God! Robbie will never know."

That was Janet's Thanksgiving!

Alameda, Cal.

## DOMESTIC ECONOMY.

**BECHAMEL SAUCE.**—This popular French white sauce is very easy to make in even ordinary households, where economy is practiced. For instance, in making this on a large scale, a whole fowl would probably be boiled down for it, together with a knuckle of veal and a piece of lean ham. Proceed, however, as follows: Put into a saucepan the bones of a boiled or roasted fowl, broken small, with any scraps of fresh veal, and a bit of raw lean ham, or the bones from a piece of boiled bacon; add a bit of carrot, a slice of onion, a tiny bit of mace, a few white peppercorns, and, if at hand, a few button mushrooms, with a pint of cold water, not forgetting a sprig of thyme and parsley. Simmer until there is only half a pint of liquid, or even less, and if it does not taste rich put in a teaspoonful of gelatine. Stir until that is dissolved, then strain the sauce. In a separate saucepan bring to the boil half the measure of cream, mixed with a small teaspoonful of arrowroot; mix the white stock gradually with this, let the whole boil for a few minutes, then serve, adding, off the fire, a few drops of lemon juice or white vinegar and a little salt. If the stock can be allowed to cool before mixing with the cream, the fat will be more effectually removed.

**BOILED CHICKEN AND TONGUE.**—Clean, wash out with soda and water, then with fresh cold water, a large fowl. Fill with a good force-meat of crumbs, bits of fat, salt pork, pepper and salt; bind legs and wings to place with broad tape, and boil slowly until tender, from an hour to an hour and a half, in proportion to the age and size of the chicken. In another vessel boil a nice corned tongue. When the chicken is dished lay the tongue, skinned and sliced, each piece overlapping the next, in a circle about it. Serve a bit of tongue with each help of chicken. Thicken two cupfuls of strained liquor from the pot in which the fowl was boiled. With a tablespoonful of butter rolled in two of flour, add two beaten eggs and a tablespoonful of finely-cut parsley. Season with pepper and salt; boil two minutes, stirring all the time, and send to table in a gravy boat.

**CHOW-CHOW.**—Mince half a peck of green tomatoes, half a peck of small onions, one peck of tiny cucumbers and six green peppers; mince the seeds; to these add three medium sized heads of cauliflower, broken in small pieces; sprinkle salt over all and let them stand for 24 hours. At the end of this time drain the mass well and cover with vinegar. Put three heads of celery, cut in small pieces, one cupful of grated horseradish, half a pound of ground mustard, half a pound of mustard seed, two ounces of ground black pepper, two ounces of brown sugar, half an ounce of ground cloves and half an ounce of turmeric into enough cider vinegar to cover and boil for 15 minutes; then pour over the pickles. Put in glass jars and keep for a month before using. It improves with age.

**OLD DOMINION SAUCE.**—Bring the juice poured off from the can of peaches to boiling point. Dissolve one tablespoonful of cornstarch in half a teacupful of cold water, add to the juice and boil two minutes. Then add a small teacupful of sugar, and if wine is not objected to, one glass of sherry or Madeira. The sauce may be strained, but does not require it. In all cases where wine is mentioned as flavoring it is of course optional, many persons regarding its use as sinful. Education or conviction will govern here as elsewhere. In most rules where wine is specified as flavoring, the juice and grated rind of a lemon will be, so far as sweet sauces are concerned, a pleasant substitute.

**BAKED BREAD PUDDING (WITHOUT MILK).**—Soak about one pound of stale bread in cold water; drain it, and beat it up smooth; add two ounces of well-washed currants, two ounces of raisins, one-fourth pound moist sugar, two ounces melted dripping, a little nutmeg, four well-beaten eggs, and a little water; stir them all well together, and bake in a pie-dish.

**RICE PUDDING (WITHOUT MILK).**—Boil one-fourth pound of rice in water; beat four eggs with half-pint of water, drain the water off the rice; add it to the eggs, with three ounces of sugar, a little grated nutmeg, and a little finely chopped lemon peel, one ounce of currants or sultana raisins; mix all well together, put the mixture into a pie-dish and bake it.





A. T. DEWEY.

W. B. EWER.

Published by DEWEY &amp; CO.

Office, 252 Market St., N. E. cor. Front St., S. F.  
Take the Elevator, No. 12 Front St.

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A. T. DEWEY.

W. B. EWER.

G. H. STRONG

SAN FRANCISCO:

Saturday, November 20, 1886.

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## The Week.

In New England, where so many of us elders passed our younger Thanksgiving days, the approach of the great family festival was wont to be attended with sharp wintry weather. So it has felt seasonable to read, as we have been doing for several days, of the heavy storms prevailing away back East and around the lakes, burying the roads and obstructing traffic and travel with snowdrifts. To some Californians it appears among the things to be thankful for, that their lot is cast in a State where a stiff northern that rattles the windows smartly, with ice a quarter of an inch thick in the cooler spots, is the utmost of this frigid visitation. And in this connection it seems odd enough to have the furious wind (now no longer a blizzard) reported in the self-same paragraph with forest fires. Hoping that the latter will be quickly quenched with welcome down-pour from the gathering clouds, we give our readers all the good wishes of the season.

A NUMBER of capitalists of Gilroy have united in the cost of a scheme to drain Frazier lake, and thus open to cultivation several thousand acres of rich land. A canal is to be built from the lake to the Pajaro river, a distance of about two miles.

## The Day We All Should Observe.

The revolutions of time have again brought us to the verge of another day of gracious remembrance and grateful emotion. As we come into its dawn we are inclined to think that the greatest blessing that could happen to this people would be a good old-fashioned Thanksgiving Day. It is pre-eminently an American holiday. It was born of the external austerities of old New England; like her *Mayflower*, it came of ice and winter. It was a day of deep and sincere religious devotion. They had a hard and rugged theology in those days, but on this special day every man and woman seemed to do all they could to make a small Providence on earth. It was a noble phase of their religion, an oasis in those witch-drowning and quaker-persecuting days. But there were giants in those days. They were heroes, the men who anchored on that "stern and rock-bound coast," and in blood, tears and prayers laid the foundation of our liberties. The sons of the Pilgrims who celebrate this day over their rich viands will recall with wit, humor and eloquence the memories of those grand old nation-builders, but their eulogies will vanish with the smoke of the last cigar, typical of the fleeting sentiment of the hour. And yet human nature is the same. The human heart is still conscious of infinite need and cravings. Steam, electricity, the nation's growth, the multiplication of luxuries and inventions, and the Arctic breath of agnosticism and a stern materialistic science, have not wholly deadened the sense of dependence upon the Higher Powers. Rightly observed, this day brings men back to the realization of something immovable and unchanging amidst this drift of years. It is here we may all find safe anchorage ground.

Many have come to regard this day as more vividly suggestive of gastronomic functions than devotional moods, and think more of their turkey and cranberry sauce than of *Te Deum* Laudamus or Gloria songs and prayers; still, the ideal sentiment of the day is latent in every heart. We all possess at the center of silence the sense of the infinite; and we all have much cause for gratitude. It may be that retrospect brings very little satisfaction. There fit the specters of neglected opportunities, disappointments and failures, shadows that obscure the sun of joy; there dropped the withered buds of early promise, and may be seen graves too fresh for memory to hide. But still, there are glints of gladness and gleams of hope and love that may sweeten the bitterness of grief and pluck the sting from misfortune. In the crannies of the saddest and most desolate home some flower may be found. Gather only that to-day.

But, after all, that is a very narrow view of thanksgiving that thinks only of special blessings. There may be many things that fall straggling along the course of the whirling years we take little or no interest in. Some of us may not like the way the election turned out. Others may be fretting over the prospect of a dry winter. Many are shivering in the byways of destitution and despised neglect. The most of us no doubt feel that our lot has fallen in hard places, that we have been misunderstood and neglected by those who should have loved us, and wrecked in fortune when in sight of port. But a true retrospect is taken from a higher and more comprehensive view, and sees that the incidents and vicissitudes of the individual, the family or national life are only fragments of the mighty song of humanity. Only in this way do we come into any sense of a beneficent meaning in events. Not for the factors, but the sum, we give thanks. Not for the single notes, that may seem in discord heard alone, but for the ringing theme, the psalm of life, the symphony swelling by degrees into majestic grandeur, as the years fall as raindrops into the ocean of time. It is the race, and not man, the State and nation, and not a party or ward election, that touch the sweeping keys of praise, catching up the small tones, whimpers, plaints and tempers of petty men to make the anthem of the universal man.

Still we cannot forget that Thanksgiving is essentially the holiday of home. Christmas has its peculiar and glad some characteristics. New Year's is marked by social observances distinctly its own. Decoration Day appeals to a noble sentiment. Independence Day is enshrined as the occasion for patriotic demonstrations. But Thanksgiving comes with a

domestic charm all its own. It is a time for home gatherings, reunions and interchanges of affectionate greeting. To the pure delight of this happy holiday the *RURAL* commends its many friends and patrons, bidding them all to rejoice and be glad, expressing the hope that while they feast amid their loved ones they may not forget the needy, to whom a kindly remembrance at this festive season means a ray of sunshine through the glooms and mists of misfortune.

## Grand for the City Children.

As this is Thanksgiving week, we turn aside somewhat from the course of comment upon topics connected with practical agriculture and take up instead themes which seem to foster the Thanksgiving idea. One of the gladdest announcements of the week, and one in which we know our rural children will take deep interest, is the fact that the bequest of \$50,000 by the late William Sharon will not be expended in making a pretentious gateway to Golden Gate Park, but will be devoted to making a grand playground for the city children.

Our little people in the country, who have wide fields to roam over and deep canyons to explore, and grand old oaks or laurels or madroñas to play under, can have little idea of the fate of a city child who must generally play in the boarded area of a small city house or invade the dusty roadway of the city street at the risk of being knocked to pieces by flying butcher carts or milk wagons. It is a gala day in the lives of the little city children when they can get out to the Golden Gate for a ramble on the grass and eat their lunches under the trees. This they have done whenever opportunity offered, and yet the park has had no suitable place for the children. They have been in danger from reckless drivers; they have had no swings or ball-grounds or other appliances dear to the childish heart. The announcement, then, that Mr. Sharon's money is to be spent for the children will be hailed with satisfaction everywhere.

This is what they propose to do, as told by Mr. Hall, the State Engineer, in his report to the Park Commission. He favored a children's quarter as affording opportunity for rest and exercise, the true purposes of a great city park. The idea of the quarter is to have playgrounds, rambles, and protected and warm spots where children, in charge of their mothers or nurses, can freely play around undisturbed and uninjured, but within open view of the mass of park frequenters and with all the conveniences for childlike sports. Fitting structures for such a place are those adapted for music and exercise.

The site selected for the playground, which will bear the name of "Sharon's Quarter," is a little valley about 1300 feet long and 800 feet wide, located due west 1000 feet from the terminus of the Haight-street cars. The valley will have to be filled in an average depth of about four feet. The material is to be taken from a small mound northwest of the valley, and there, when leveled, will be erected a music-stand. The playground, which will be reserved exclusively for children, will accommodate 5000 or more. It will be hard, level ground, subdivided into places for lawn tennis, baseball, swings, and a picnic-ground composed of latticed arbors, with many snug nooks and corners. At the west end of the playground will be a sandstone dairy building to cost about \$40,000. There, milk, cream and eggs will be furnished to the little ones at cost price. The contract for this building will be let in 30 days, and the structure will have to be completed within 90 days from that time.

It seems so to us this is a good subject for Thanksgiving. Next summer when our little country readers come to the city with their parents, they must stipulate for an afternoon at the park. What a delightful sight it will be to look down from the hillsides upon a grand playground upon which 5000 children can have all the fun they can possibly think of, and no one with nerves permitted to come near or to complain that they are making too much noise.

**CORN CROP.**—The report of the Department of Agriculture says: The yield of corn, according to revised returns, is 22 bushels per acre, making the product upon the present adjustment of acreage 1,660,000,000 bushels. This accords with recent returns of condition, and will not be materially changed.

## Popular Exasperation.

Every order-loving, right-minded citizen will disapprove of lynching under any circumstance, and lament such manifestations of lawless violence. But there is no doubt that judges, juries, governors and criminal lawyers are largely responsible for these frequent exhibitions of mob law, so far as the punishment of murderers and notorious villains is concerned. When communities have long been harassed by highwaymen and robbers, or have often been horrified by brutal murderers, whom they have seen escape justice through some quiddity of the law, under the plea of insanity or the stupid sympathy of juries, it is not strange they should occasionally lose their patience and resort to the crowbar and a rope. There was a meaning in that multitude the other day that demanded atonement for the brutal murder of poor little Mamie Kelly, that our officials should pause and heed. Such ebullitions of wrath never occur in a community where the law is uniformly enforced. Only a few months before the public had been outraged by the causeless murder of young Guindon. The jails are full of murderers or those who have attempted murder or other monstrous crimes, and there is a latent feeling that the perpetrators of such tragedies should meet the inexorable penalties of the law.

A Scotch judge, who spent some time traveling through this country, made the remark that America had good criminal laws, but they were applied with such uncertainty as to be well-nigh useless. The taunting satire is too true. It has become a standing joke that a rich or influential criminal need have little fear of any serious harm coming to him, however black his crime. It is very easy, by methods known to smart lawyers, to turn a deliberate murder into a mild case of manslaughter or self-defense, or make the very atrocity and diabolism of the crime a proof of insanity, or secure a new trial on some absurd technicality. The Supreme Court in this State granted the scoundrel Wheeler a new trial because the judge had suffered the prosecuting attorney to read a few passages from "Brown's Medical Jurisprudence." That may be the law according to ancient sheep-skin literature, but is it strange that such word-dawdle should incense the people? Not long ago a man stabbed his wife on the street in Cincinnati with a knife he had bought for the purpose. Three times he was convicted and three times given a new trial by the Supreme Court of Ohio. At the first trial he was constrained to use up one of his 23 peremptory challenges in order to exclude a juror he wanted the Court to exclude for cause. The Supreme Court held the ruling to be error. In the second trial the Court made an order excluding all the witnesses on both sides, but one witness was permitted to testify who had inadvertently broken the order. Although the murder was proved beyond a doubt by other witnesses, this was held to be error. We allude to this case as a fair average of the way justice is often thwarted through some frivolous technic of evidence, a flaw in the pleading, or some kindred black-letterism, as prevailed in the Cincinnati case. Is it strange that the people should occasionally be come impatient of such a play at justice and seem inclined to lawless indiscretion?

## Fruit-Growers at the Capitol.

Agreeably to program, the Sixth Annual State Convention of Fruit-growers met in the Assembly chamber at Sacramento on Monday last. Elwood Cooper, president of the State Board of Horticulture, called the meeting to order and made the opening address. A resolution was passed inviting Senator Stanford to attend the convention when convenient. On Tuesday a committee was appointed, consisting of Prof. Kleo, Matthew Cooke and S. F. Leib, to formulate a law to be presented to the next Legislature looking to the suppression of insect pests. About 60 prominent horticulturists were present at the outset, and the attendance was doubled on the second day. The sessions will continue throughout the week. The *RURAL PRESS* has an editorial representative upon the ground, and will, in due time, publish his account of the sayings and doings.

THE Southern Pacific line from Newhall to Ventura is making rapid progress.



## Waking Thankfulness.

Among those who scan this page days before Thanksgiving will be some not so absorbed in preparing the season's cheer for their own family and personal friends but they will feel a desire to reach out beyond that immediate circle and do something toward making the 25th a happier day to others less favored than themselves in the good things of this world. These kindly outgoings of human hearts will often find fit objects in their own neighborhood whereon to spend all means available, but others will be glad of help in giving a definite direction to their generous impulses and will themselves be thankful to be shown how to waken thankfulness in the needy and deserving at this festal time.

To all such, and to any who are in doubt where to bestow their substance, we cordially commend the S. F. Fruit and Flower Mission, whose sixth annual report has just appeared. Says the secretary: "As our annual meeting is held in October, the year's work actually begins, not with the first flowers of the season, but with the activity and earnestness of our Thanksgiving labors. For, almost as soon as we have published our report, we begin to prepare our list of those who are to receive dinners, according to the honored custom of the Mission of giving a complete dinner to every family on its list of deserving poor. The workings of the Flower Mission are so harmonious, its members so imbued with a spirit of unity and helpfulness, that a difficult task is simplified and made easy by the willing co-operation of hearts and hands.

"First of all, every member is impressed with the fact that 'Thanksgiving is coming,' and that country friends must be asked to send something to the Flower Mission. We beg them to give us of the product of their farms, of their vegetable gardens and their dairies. We beseech them to rob their own hen-roosts for us, and to help pride to its proverbial fall by laying low the pompous 'gobble, gobble' of the barnyard. We desire poultry above all things. If it's a turkey, so much the better; but we are thankful for any fowl that ever strutted in the henhouse, paddled in the pond or 'quonked' overhead; the Mission having adopted as an active principle the injunction 'Ask largely that largely ye may receive.'

"From our city friends we ask all this, and more. We beg for cookies, pies and cakes, for poultry, for cooked and uncooked meats, for groceries, for vegetables, especially celery, and for cheese, bread and butter.

"It is endeavored to have all the supplies reach the hall on the Wednesday before Thanksgiving, to facilitate the distribution on the following day. Profiting by experience, we have learned to be quite systematic in preparing and distributing the dinners. Each name on our list has been investigated, and, as far as we know, we have issued tickets to none but deserving cases; and it is only upon presentation of a ticket that any person can get a dinner Thanksgiving day.

"Are you not imposed upon?" is a question that frequently meets us. Perhaps so, once in awhile, but not often. Most of those who have been helped by the Mission have been eager to express their gratitude and appreciation of the slightest favor. It would not be unworthy of a Dickens' pen to portray the various scenes enacted by the recipients of the dinners—and yet there is not much to tell. Many are overwhelmed with surprise and happiness, and their confused attempts to find words to tell how they appreciate the gift are eloquent with gratitude. Ofttimes the deepest grief is the most quiet, the bitterest poverty the most unobtrusive, and the convulsive pressure of the hand, the rising tear and the faltering prayer for blessings to fall upon the Mission and all its members, touch the girls far more than could fulsome praise or voluble thanks."

We will only add that the society is carried on by young ladies; that its address is S. F. Fruit and Flower Mission, 713 Mission St., S. F., and that Wells, Fargo & Co. will not only transport free all packages so directed, but also, when the request accompanies the address, return boxes and baskets to the donors.

## Decorative Art in Agriculture.

There have been some very fine specimens of decorative art, employing agricultural materials or presenting agricultural ideas and symbolry brought out at California fairs. In our notices of the various displays held this year, we have hinted at a number of them. Perhaps the exhibition richest in this direction was the horticultural fair held upon the opening of the new pavilion erected by enterprising horticulturists at San Jose. There were many pieces of decoration presented for the public enjoyment, as enumerated in our account of the fair in the *RURAL PRESS* of August 21st. Afterward we were favored with a photograph of one of the most attractive decorative creations, and a crayon sketch made therefrom is given on this page. It does not pretend to pre-

## Carnivorous Plants.

It has long been known that certain plants catch and kill insects, but only very recently has it been suspected that they devour and digest their prey. The matter has attracted a great deal of attention of late, both in this country and in Europe, and many careful observers are fully satisfied that these plants are really carnivorous. Others, among whom are some eminent foreign botanists, hold that the captured insects are devoured by bacteria, which may be detected by the microscope in the putrefying animal matter. A piece of meat placed on a leaf of *Drosera* disappears in the same way; but, according to these authorities, it is consumed by the bacteria as it decomposes, and is not absorbed by the plant.

The weight of evidence, however, appears to

continued for any considerable length of time. A piece of wood was soon released, and so was a dried fly; but when a live fly or caterpillar or spider was inclosed the contraction lasted on an average for about three weeks. The leaf at the same time gave out a viscous acid secretion. This appeared to be only the case when an insect was captured, and it was always present on such occasions; but whereas with a fat spider it was abundant, with a shriveled fly there was very little.

## Cranks Running at Large.

The murder of a worthy young English artist, Owen O. Leggett, in San Jose last Saturday by John Clark, a young man 20 years of age, in a fit of jealousy, is only another fearful illustration of the danger of allowing disordered minds to run at large. Clark was known to be mentally unsound and had recently been discharged from the asylum, where he had been sent for attempting to kill Leggett some months before. No sooner was he out than the homicidal impulse seized him again.

While there is a large number of persons who are unquestionably insane at all times, there is also a large class whose mental condition is not so well defined. They are insane at intervals. There are times, more or less wide apart, when it is clear they are not evenly balanced, that something is wrong; but the trouble seems a passing cloud, and in a few days they are apparently right again. Then there are many queer people, cranky, strangely eccentric natures, who are evidently standing in the penumbra of a total eclipse.

Now, for reasons readily apparent, many persons of the milder type of lunacy are often allowed to pursue their ordinary avocations without let or hindrance. Their friends and relatives cannot be persuaded to look upon them as seriously diseased as long as they appear perfectly rational most of the time. Their odd, whimsical ways, glooms or violent fits of temper they do not regard as dangerous, or if they do they shrink, as long as there is hope, from the publicity which must occur if their loved and sadly afflicted ones are treated as insane persons. And even when their wild, violent passions are a menace to life and property, and a constant source of terror, they still try to conceal the fact as far as possible, and put off the unwelcome duty. This, in most cases, is a great mistake, and such tragical results as that in San Jose are of frequent occurrence. The family and friends of the aberrant mind are not the only sufferers. The lives and property of the community are often involved by such reckless indulgence. Almost every day we read how some apparently harmless daft, crank or person afflicted with spells of melancholia has suddenly committed deeds of violence, among which arson, suicide or even murder is often numbered. There is something radically wrong in the laws or customs that permit such persons to run at large when ample means have been prepared whereby the various phases of insanity may receive skillful treatment and subject only to as much restraint as the case warrants.

No doubt there are many persons whose occasional lunacy is not dangerous, but it is difficult, if not impossible, at all times to draw the line between such persons and those who should be placed under restraint and subjected to proper treatment. It is always dangerous to allow an unsound mind to enjoy unrestricted liberty. Their friends should not conceal the facts from mistaken motives of pride or delicacy, and only repent when some terrible catastrophe happens, and suffering, sorrow and humiliation are the result. Let no one take the chance of living in the same house with a disordered mind. It is a duty all owe to themselves, their children, and the welfare of the community, to see that every shape of mental obliquity is promptly placed under proper treatment and restraint. The forms of insanity here alluded to are on the increase, and the results to be avoided, even in anticipation, far outweigh any false delicacy which may prevent the proper precautions from being taken. And the frequency with which discharged lunatics commit crime ought to warn the officials of our asylums that they had better err in rigorous caution than in the direction of indulgence and laxity.

Lompoc has probably the largest squash of the season. It weighs 251 pounds.



DECORATIVE ART AT THE SAN JOSE FAIR—THE CHARIOT OF CERES.

sent the beautiful work in detail, but simply to show its general features better than any mere description in words could do. The subject was the "Chariot of Ceres," and the design was by Mrs. E. O. Smith, of San Jose. In a chariot of classic pattern stood a beautiful lady, clad in a white tunic, her head garlanded with ears of grain and a bouquet of the same upon her bosom. Behind her, in the chariot, was a shock of grain of different kinds, as though just cut with the sickle, which hangs upon the prow of the chariot. Upon the front of the chariot there was a wreath of grain ears most artistically arranged, and of which the engraving gives but a faint impression. As one looked closer he saw that the body and wheels and pole of the chariot were all thickly covered with various grains and seeds, more than 25 kinds being used in the adornment of the chariot; the wood, of which the vehicle is made, being entirely concealed. There was also lettering, key patterns, etc., put on the different colored seeds. The design was unique and was commented upon with much appreciation by visitors at the fair.

be on the other side. The more closely these plants are studied the more clearly is their carnivorous character indicated. Some few years ago a series of very careful experiments were made by Dr. Balfour, of the Edinburgh Botanical Society, on *Dionaea Muscipula* and allied plants. These experiments fully confirmed the suspicions entertained by Ellis, Curtis, Hooker and Darwin, that the *Dionaea* is a carnivorous, and, it may be added, a most brutal plant.

Dr. Balfour classified the facts he had observed in regard to it under the heads of irritability, contraction, secretion, digestion and absorption. The irritability, it seems, is resident in six delicate hairs, so placed on the surface of the leaf that no insect can avoid touching them in crawling over. Dr. Balfour touched with a needle every other part of the leaf, and no response followed; but no sooner was the point applied to one of those hairs than a contraction of the leaf ensued. Chloroform dropped on a hair caused the leaf to close like a winking eye, but water had no such effect. It was only when the object seized was capable of affording nutrition that the contraction con-

A SHEEP-RAISER of Mendocino has lost over 8000 sheep during the past season by the depredations of thieves.



## THE STOCK YARD.

## Shorthorn Notes.

Under the head of "Shorthorn Intelligence," in *Bell's Weekly Messenger* of Sept. 27, 1886, Mr. Wm. Houseman says: "Various lessons are drawn from the fact that the highest price of the autumn sale season of this year, all breeds being taken into the reckoning, was paid for a Shorthorn, and that particular Shorthorn which commanded that price was Mr. Foster's Duchess heifer, at the recent Killhow sale. As regards the internal competition—the rivalry of families and tribes, and of strains of blood within the Shorthorn breed—the admirers of the cattle descended from the herd of Mr. Bates have the right to claim that the heifer of the day is bred from their favorite strain."

He then speaks of some of the different methods of breeding, followed by the breeders of Bates cattle, how some—the majority—by their warm defense of the Kirklevington tribes, against those people who held a contrary opinion regarding them, subjected them to a system of breeding which no tribe on the face of the earth could bear without suffering physical deterioration.

That "system of breeding" was a subservience to the fashion of the day, viz.: that of what is only too well—one might almost say disastrously—known in America as line-breeding, no out-crosses from the favorite Kirklevington tribes being allowed of by the so-called breeders of "pure Bates cattle."

"Still, there were Bates men who knew how to use the materials they possessed, and if they did not at all times dare to make the fullest use of their knowledge, because an overbearing fashion imposed fetters upon their judgment, they did, among them, preserve much of those materials for crossing purposes, to reproduce still the highest types of Shorthorn merit by happy combinations of blood."

It is now generally admitted that the best Bates cattle living are those descended from the herds of those breeders who bred their cattle according to their own better judgment and regarded not the fetters imposed by the followers after fashion, who, as a rule, did all their breeding on paper, almost regardless of the merits of the animals they bred. Happily, that kind of breeding has had its day—bred itself out, as it were.

However, our main object is to call attention to what Mr. Houseman has to say on the merits of the Shorthorn breed of cattle for general utility, independent of all theories and fashions about breeding, or of rivalry of families and tribes:

We have, however, a higher argument than this—one more like that which we draw from the queenly cows upon Mr. Wetherell's farms at Kirkbridge and Aldbrough, and the magnificent herds of steers which Mr. Anthony Maynard could drive to fair or market from his Ripon and Cleveland farms, yet telling, not for one strain of blood alone, but for the Shorthorn breed at large. It is drawn from the results of using good, massive Shorthorn bulls with ordinary farm stock, especially in dairy districts; and it has some of its best supporting examples where cows are bought in for milk and sold out for beef. Take, for instance, the supply of the metropolis, or of a country town, or of any large institution, such as an orphanage or an asylum possessing a farm for the supply of dairy and larder. Cows about to produce or having recently produced calves, so as to be immediately or very soon contributors to the supply, and at the time of purchase displaying evidences of their capabilities as dairy cattle, are bought from the farmers who breed and rear, and sometimes milk their own cows through the first year or two first years after they have reared them, and then sell out in rotation according to age, bringing in the heifers to take the place of the cows sold out each year. Now it remains for the dairyman, or the provider for an institution, to decide what stamp of cows he will have, as likely to be most profitable, taking into consideration the end as well as the beginning of their service to the various purposes which he has in view. A mere milker will be skin and bone when her milking is done, and if she is to be made into beef, the process of furnishing those bones and filling that skin will be an expensive one. Cows and calves are costly materials to be turned into beef. At a much less outlay than would be required to provide the necessary quantities of them to make a lean cow fit for the butcher, a large, substantial, flesh-retaining dairy cow may be purchased, instead of the mere milker. Such a cow is often to be found in districts where well-bred Shorthorn bulls are used; and the difference in price will be much less than the cost of buying meal and cake, eventually, to make the lean cow fat; while time, which also has its money value, will be saved by choice of the superior cow. In her case, when the milking season is ended, a very little extra food will give the ripening finish. In the case of the inferior cow, months of costly consumption must follow the last drain of the udder, and the room which might have been cleared for oncoming stock is occupied in the meantime by slow goers. Because really well-bred Shorthorn bulls, used by the farmers, give us the better stamp of cow here described, a cow worth a few pounds more than the one that cannot keep her flesh while she gives milk, the Shorthorn has still a sure footing in the country.

This is the argument on which we may rely more confidently than upon inferences from occasional prices at sales; and those Shorthorn breeders who, by producing cattle of the right sort, enable the friends of the Shorthorn to maintain that argument, deserve good prices for their stock, if they do not always get extremely high prices.

THE Nevada City *Herald* complains that much valuable stock has been killed by hunters in that vicinity recently.

## FORESTRY.

## The Tree-Planting Nov. 27th.

There was a meeting of those interested in tree-planting held on the evening of November 12th, at the Palace hotel, to make arrangements for an Arbor Day and a proper celebration of it. Ex Governor George C. Perkins was called to the chair and accepted the position temporarily. Adolph Sutro, who was unavoidably absent, was unanimously elected chairman of the Arbor Day Committee and John Vance Cheney secretary.

Prof. Hilgard, of the State University, spoke of the necessity of tree-planting for climatic reasons. He deprecated the deforesting of the Sierras and the mountains of the State. He said that in Contra Costa county, since the country had been denuded of trees, the streams had decreased in volume and the farmers had suffered. In Spain the same thing had occurred. In the southern part of the State the people did not like the idea of Arbor Day, thinking if more trees were planted they would have more rain, the streams would be fuller and they would be flooded out. He thought that they labored under a fallacy in regard to the matter, and earnestly advocated the appointing of an Arbor Day for the whole State. The following committee was appointed to make all arrangements for a proper celebration of Arbor Day: Major-General O. O. Howard, Adolph Sutro, J. V. Coleman, W. W. Blow, Sands W. Forman, G. D. Shadburne and Harry Wagner.

A motion made by G. D. Shadburne was carried, that the children of the first grade of the public schools should plant their trees on Goat island and those below the first grade at the Presidio. It was stated that many of the trees given by Mr. Sutro to the school-children had since died.

It being stated that the Board of Education had passed a resolution appointing Friday, 26th inst., as Arbor Day, as that would be the most suitable day for the teachers and scholars to meet together, the Executive Committee was instructed to confer with Messrs. Moulder and Hoitt to harmonize, if possible, any differences that might exist, and to decide on a day for the celebration.

A communication was received from Isaac Trumbo, offering, on behalf of the State Board of Silk Culture, to present 2000 mulberry trees, out of a large shipment that is shortly expected from Italy, for public planting. The trees are ornamental and shading, and the planting will aid the further advancement of our State in the culture of the silkworm.

After the meeting adjourned the Executive Committee met and appointed the following sub-committees: To Visit Schools—Coleman and Wagner; Music and Literary Exercises—Perkins, Cheney and W. S. Dewey; Transportation and Planting—Shadburne and Forman. E. R. Cooper, who has made a survey of Goat island and laid out a Greek cross on the north side of the island where the tree planting will take place, will attend to the preparation of the ground.

The Oakland Canoe Club, which has taken great interest in the matter and to whom Joaquin Miller gave 700 trees to plant, will hold a meeting next Sunday to consider arrangements for the planting on the island. They will attend the celebration in a body in their canoes.

## THE GARDEN.

## Beet Sugar.

Mr. M. D. Nicke is writing some forcible paragraphs for the *Fresno Examiner*, urging an investigation to determine the feasibility of introducing the beet sugar industry in his neighborhood. We hope he will succeed. The first thing to do is to grow some of the true sugar beets, of which seed has been procured by Mr. Denicke. Then, these beets should be examined by an expert to determine their adaptation to sugar-making. Not every place which will grow beets will grow beets which will suit the sugar-maker. Mr. Denicke seems to be on the right track and we wish him all success.

## A Letter From Mr. Dyer.

The following letter will be of general interest:

ALVARADO, Cal., Oct. 28, 1886.  
M. DENICKE, ESQ.—Dear Sir:—Yours of the 26th received. In order to give the cultivation of sugar beets a trial, you should plant several acres at different times. It will not do to plant too early in the season, as they are liable to go to seed. I would advise, in your locality, to plant, say, half an acre as soon as practicable after the first rain, then a month later another lot, and so on until late in the spring. You should plant in all several acres in order to determine what can be done in your locality. You should select land somewhat sandy. Plant at least 12 inches deep as early as you can. After the first plowing all that is necessary is to have the top of the land well pulverized; sow in drills 15 inches apart and put in plenty of seed. We use from 12 to 15 pounds per acre.

Unless you get a good stand your beets will not grow properly for sugar. You should thin them, to stand about four or five inches apart as soon as they are large enough. The sooner the better.

Beets for sugar should grow all under ground ex-

cept a small crown. You should order 15 pounds of seed to each acre you intend to plant. You should not plant before February, in my opinion.

We will test your beets without charge. We can furnish you as much seed as you wish at 20 cents a pound. Beets should not weigh over three pounds; cultivated for sugar, from one to three pounds are the best sizes. I will give you any further information I have at any time with pleasure.

E. H. DYER.

## Prizes at the Sacramento Citrus Fair.

The Executive Committee of the Citrus Fair Association held a meeting yesterday afternoon at the Board of Trade rooms. Several sub-committees made reports. It was decided to secure the Stanton Thompson building, on J street, between Second and Third, in which to hold the Citrus Fair. E. J. Gregory was elected superintendent of the fair.

## Premium List.

The Association has adopted the following:

Best county exhibit of citrus and other semi-tropical products, including wine and brandy, diploma; second best county exhibit, diploma; third best county exhibit, diploma.

Best individual exhibit of oranges, gold medal; second best individual exhibit of oranges, silver medal; third to fifteenth best individual exhibit of oranges, special prizes.

Best 12 oranges raised by one person, special prize; second best 12 oranges raised by one person, special prize; third best 12 oranges raised by one person, special prize.

Best cluster of oranges, special prize; second best cluster of oranges, special prize; third best cluster of oranges, special prize; fourth best cluster of oranges, special prize; fifth best cluster of oranges, special prize.

Best individual exhibit of lemons, gold medal; second best individual exhibit of lemons, silver medal; third best individual exhibit of lemons, special prize.

Three best individual exhibits of limes, three special prizes, according to merit.

Three best individual exhibits of olives, three prizes according to merit.

Three best individual exhibits of olive oil, prizes according to merit.

Three best exhibits of persimmons, special prizes according to merit.

Best exhibits of apples, two special prizes.

Three best exhibits of winter pears, three prizes.

Three best exhibits of pomegranates, three prizes.

Three best exhibits of sun-dried fruits (other than raisins, figs and prunes), three prizes.

Three best exhibits of evaporated fruits (other than raisins, figs and prunes), three prizes.

Best exhibit of raisins, gold medal; second best exhibit of raisins, silver medal.

Best exhibit of dried figs, gold medal; second best exhibit of dried figs, silver medal.

Best exhibit of dried prunes, gold medal; second best exhibit of dried prunes, silver medal.

Three best exhibits of nuts, three prizes.

There will be gold and silver medals and special prizes awarded to the best exhibits of wines and brandies, and there will be a large number of special prizes in addition to the above for various meritorious exhibits.—*See*.

## The Manufacture of Unfermented Wine.

A subscriber of the *S. F. Bulletin* makes the following appeal to the wine-makers of California:

GENTLEMEN:—Believing that you are not blind to the best interests of your kind, and recognizing the great and growing wine interest in the State, and also the great and growing temperance army, who need some safe, pleasant, unalcoholic drink for the table, and as a healthy beverage, I seek to bring this want and supply together. For this purpose I ask you to put up some unfermented wine—that is, the pure juice of the grape, with no deleterious substance in it. Having all the facilities, you are the proper persons to experiment in this direction. The article sought will be found. Demand and supply always keep company. Suppose you try some of the methods already used by private families until some better ways are discovered. One of these methods is pasteurizing the juice by heating to 160°, and keeping it there for some time, then filtering or straining it, and again heating to 160° before bottling. It should be put in the bottles hot. To be sure of killing all the germs, the bottles may be washed out with salicylic acid, and the corks to be thoroughly disinfected, may, when closing the bottles, be taken from a hot salicylic solution. No salicylic acid should ever be put in the wine, as its use is opposed to the healthy action of the stomach in the process of digestion.

The reward offered to him who shall discover the best method of preserving unfermented wine is a fortune for himself and an everlasting benefaction for mankind.

NORMAN HORSES COMING.—We have just received word from Mr. Skillman from London that he is on his way from France with a new importation of ten Norman stallions, seven blacks, one brown, two dark grays. As many of our readers are well acquainted with Mr. Skillman and some of his former importations, and as it is known he takes great pride in importing nothing but the best, we shall expect to see some good ones. Mr. Skillman informs us that he will be here on or about the 8th of December. It may interest those who are thinking of purchasing to see what Mr. Skillman brings here at that time.

## A Great Reward

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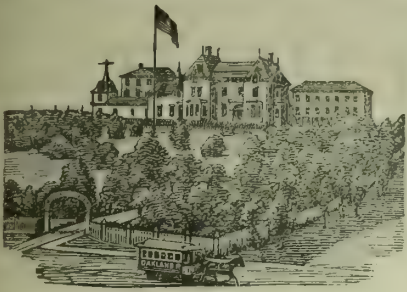
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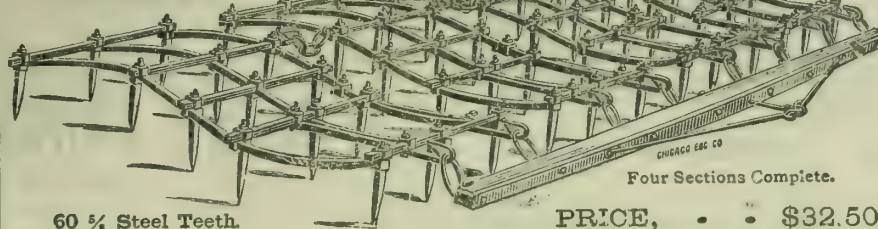
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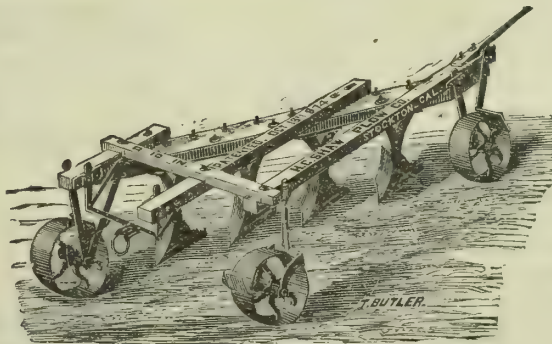
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On the new extension of Southern Pacific Railroads, on the lands belonging to R. T. BUELL, Esq., near Los Alamos, Santa Barbara county, Cal. Parties desiring to visit the property now, can go via San Luis Obispo and take the cars from thence to Los Alamos, thence by stage to the Colony. 20,000 acres of the best lands in California, subdivided into 20, 40 and 80-acre farms; \$20 to \$30 per acre. INTERNATIONAL IMMIGRANT UNION, 401 California St., San Francisco.

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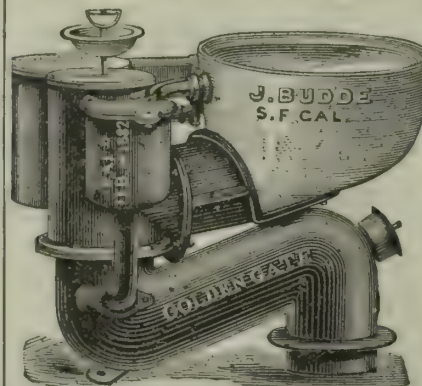
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Vacaville Notes and Other Things.

EDITORS PRESS:—You have a correspondent from this valley who is about as reliable as the average politician just before an election. The fruit crop this season has not been fair, and the prices paid a large majority of growers have been very poor, as some lost by shipping East and the home prices in too many instances did not pay expenses.

The Chinese are more unpopular every day, more especially this season, as a scarcity of them was occasioned by their going to other neighborhoods to gather hops, and those remaining, finding there was a great demand for laborers, became insolent and independent. There has never been a time in recent years when a white man of industrious habits and sober could not find a situation at remunerative prices among our orchardists from one end of the year to the other. It is only those who prowl from one place to another, stopping only long enough to get liquor money, that growl. There has been no time within the past three years that I could not have given a white woman as good a home as any one from any part of this State occupies, at as good wages as is paid in any part of the world, with as nice, genteel work as any farmer's wife is accustomed to do; but she could not be found. If you go to an intelligence office in the city, these women cross-question you and exact more than the average mother-in-law. It is rarely we secure the services of a white man who comes with a dollar in his pocket. Generally at the end of the first week he wishes a few dollars to buy some necessities, and continues those demands for a few weeks and then informs you at a most inappropriate time he wishes to knock off. If you ask his reasons for doing so he will tell you he "knows of a place that will pay him more." He "never likes to stop at any one place long." He "is not generally well and wishes a rest." His "uncle has written to him to come." He "never came to stay." In fact one Irish boy said, "the house, eating and everything is good enough, but you have no ladies in your family, and I would not live on a ranch where there are no young ladies." This was the best reason any one of them has ever given me, and I sympathized with him and gave him a letter of recommendation to a neighbor who had three marriageable daughters.

If you know of any sensible, industrious males or females that want steady employment, whose minds will be upon their employment and not harass a poor scale-bug hunter out of his existence with their rascality, just send them to

Vacaville. "VACA VALLEY."

A Moral Plague.

The Pioche Record says the greatest evil, and one that is rapidly growing on the Pacific Coast to-day, is that of the lottery business. Thousands and thousands of dollars, principally the hard earnings of the mechanic, the laborer and the servant girl, are being shipped East weekly by the agents of the Havana, Louisiana and other lotteries on this coast. Besides the thousands sent East by the lottery agents, many people who dwell away from these agencies established in cities and large towns send their money to the home office in the East for tickets in the various lottery schemes. Notwithstanding that these thieving lottery schemes have been exposed, and particularly the Louisiana lottery, by the press of New Orleans, the public, with their eyes wide open, rush anxiously to these rogues and beg them to rob them (the buyers) of the few dollars which they can ill-afford to lose. This lottery ticket buying business is getting to be as bad a craze with the people of this coast as the mining stock craze was with them some 10 years ago, when people could not spare the money to buy the necessities of life with because they needed it to put into stocks. The lottery craze is growing rapidly in Nevada, and in Pioche and surrounding settlements a large sum is monthly sent to the lotteries in the East, and the senders anxiously hope from drawing to drawing that they will be one of the fortunate ones, but they are always doomed to disappointment. These lottery schemes are prohibited publication by the laws of Nevada; even a raffle ticket, to raffle some small article to raise a few dollars for some poor mortal in distress, cannot be printed without violating the law; yet the press of Nevada publish, as Associated Press dispatches, that Mr. Brown or Mr. Black has drawn a big prize, making him independent for life. These lottery swindles pay the Associated Press for such a dispatch as that, and they get free advertisement in hundreds of papers from the mere fact of it being a press dispatch. Why the newspapers of Nevada, or any other State, should give these thieving schemes free advertisements, thus aiding them to rob the public, we are unaware of any good reason. The New Orleans Picayune, awhile ago, showed that in the wheel of fortune at the drawings of the Louisiana State Lottery, most of the large prizes were put in as blanks. Few fools amass wealth rapidly by dealing in lottery tickets.

A FINE STALLION.—Geo. T. Trescott and Ed. Eaton have a fine gray Norman stallion at the former's ranch, near Tulare City, which is worth seeing by stock fanciers. He is named Naivete, is six years old and weighs 1765 pounds.

Plants for Use and Beauty.

There cannot well be too much done in distributing seeds of useful and ornamental plants. All the enterprise of our seedsmen, all the effort of the Departments of Agriculture of the United States and of our State University, all the gifts from friend to friend, and all that we can do within the circle of our subscribers, cannot overdo the dissemination of desirable plants and seeds. We want to plant California from end to end with plants good for food and pleasing to the eye until the State becomes in fact a garden. The publishers of the RURAL PRESS have done something in this direction besides publishing the announcements of the seedsmen and nurserymen which are in themselves a great assistance to planters. The seeds which we have given in recognition of subscribers' favors have induced many to plant who might not otherwise have thought the garden worth a thought among the many cares and duties which press themselves upon the farmer's attention. We have been shown during our rural rambles many a flower-plat or vegetable-bed which has followed the planting of the RURAL's seeds, and we know that such beginnings always lead to more pretentious ventures afterward. When the gardening idea is once well planted in the Californian head and heart, all available sources of supply are searched for new and desirable things. Thus, our distribution not only acts for the pleasure and advantage of our readers, but serves not a little in extending the very valuable branch of production and commerce which is employed in distributing plants, seeds, and trees. We trust that our readers will avail themselves this year even more fully than they have heretofore of our offer to supply them with seeds for the flower and vegetable gardens. The announcement thereof may be found herewith. We would esteem it a favor if our friends would call the attention of their friends and neighbors to the offers we make, and thus aid us in enlarging the RURAL's parish and extending its influence.

ANNOUNCEMENT FOR 1886-87.

VEGETABLE SEEDS.		
83 Varieties.		
In Papers, post-paid.	Cts.	
BEET.		
1 Early Blood Turnip.	10	
2 Early Extra Bassano.	10	
3 White Sugar.	10	
4 Yellow Sugar.	10	
5 Early Long Dark Blood.	10	
CABBAGE.		
6 Early York.	5	
7 Early Dutch.	10	
8 Early Wakefield.	10	
9 Extra Fine Large Dutch.	10	
10 Early French Oxheart.	10	
11 Large Late Drumhead.	10	
12 Red Dutch (for pickling).	10	
CELERY.		
13 White Solid.	10	
CAULIFLOWER.		
14 Early Paris.	10	
CARROT.		
15 Extra Early Forcing.	10	
16 Long Orange.	10	
17 Early Horn.	5	
18 White Belgian.	5	
CUCUMBER.		
19 White Spine.	10	
20 Early Cluster.	10	
21 Early Frame.	5	
22 Long Green.	5	
23 Eng. Gherkin for Pickles.	10	
LETTUCE.		
24 Early Curled Silesia.	10	
25 Ice Drumhead.	5	
26 Simpson's Early Curled.	10	
27 Prize Head.	10	
28 White Paris Cas.	10	
29 Hanson.	10	
30 Boston Market.	10	
MELONS.		
31 Large Yellow Cantelopes.	10	
32 Extra Fine Nutmeg.	10	
33 Casaba (new).	10	
34 Cuban Queen Watermelon.	10	
35 Mountain Sweet Watermelon.	10	
36 Iron Clad do.	10	
37 Scaly Bark do.	10	
38 Black Spanish do.	10	
39 White Imperial, or Lodi Melon.	10	
ONION.		
40 Early Red.	10	
41 Red Wethersfield.	10	
42 Yellow Danvers.	10	
43 White Portugal.	10	
44 White Portugal, or Silver Skin.	10	
PARSNIP.		
45 White Dutch.	5	
46 New Early Round.	10	
RADISH.		
47 Mammoth California.	10	
48 Olive Shaped Radish.	10	
49 Early Scarlet Turnip.	5	
50 Black Spanish or Winter.	10	
SQUASH.		
51 Early Scalloped Bush.	5	
52 Early Summer Crook Neck.	5	
53 California Field.	10	
54 Marblehead.	10	
55 Boston Marrow Winter.	10	
56 New Hubbard Winter.	10	
TOMATO.		
57 Large Yellow.	10	
58 The Conqueror.	10	
59 Early Red Smooth.	10	
60 Trophy.	10	
61 Canada Victor (earliest var.).	10	
62 Acme.	10	
TURNIP.		
63 Cow Horn.	10	
64 Yellow Rutabaga or Swedish.	10	
65 Early White Flat Dutch.	5	
66 Long White French.	10	
67 Improved Late Rutabaga.	5	
SPINACH.		
68 Round Leaf.	10	
69 Large Flanders.	10	
MISCELLANEOUS.		
70 Kohlrabi.	10	
71 Scotch Kale.	10	
72 Curled Parsley.	5	
73 Sage.	10	
74 Thyme.	10	
75 Tobacco.	25	
76 Blue Gum.	25	
77 Monterey Cypress.	25	
78 Black German Wax Beans.	10	
79 Refugee do.	10	
80 Red Valentine do.	10	
81 Extra Early Peas.	10	
82 Champion of England.	10	
83 Yorkshire Hero.	10	
84 Queen of Dwarfs.	10	
FLOWER SEEDS.		
107 Varieties.		
POST PAID—CTS.		
84½ Acroclonium.	5	
84½ Alonson, Grandiflora.	5	
85 Alyssum, Sweet.	10	
86 Amaranthus Abyssinicus.	15	
87 Ageratum Laseauxii.	10	
88 Adlumia Cirrhosa.	10	
89 Ambronia Umbellata.	10	
90 Amaranthus Caudatus (Love-lies-bl'd'g).	5	
91 Antirrhinum Majus, finest mixed.	5	
92 Calceola Coccinea (Tassel flower).	5	
93 Campanula Speculum, Venus Looking Glass.	5	
94 Candytuft, white fragrant.	5	
95 Centaurea Cynusa (Bachelor's Button).	5	
96 Clarkia, fine mixed.	5	
97 Convolvulus (Morning Glory) mixed.	5	
98 Foxglove, mixed.	5	
99 Glia, mixed.	5	
100 Globe Amaranthus.	5	
101 Gypsophila Elegans.	5	
102 Ice Plant.	5	
103 Larkspur, finest mixed.	5	
104 Linum Grandiflora (Flax).	5	
105 Love-in-a-mist.	5	
106 Marigold, dbl French.	5	
107 Marigold, D'African.	5	
108 Mignonette, Sweet.	5	
109 Nasturtium.	5	
110 Nolana.	5	
111 Portulaca, mixed.	5	
112 Poppy, double mixed.	5	
113 Rocket, Sweet.	5	
114 Scabiosa, dwf, mixed.	5	
115 Sensitiv Plant.	5	

116 Sweet Pea, White.	5	152 Lobelia, Crystal Palace Compacta.	25
117 Sweet Pea, Crimson, Everlasting.	10	153 Lobelia, Blue.	10
118 Sweet Peas, mixed.	5	154 Musk Plant.	10
119 Sweet William, mixed.	5	155 Nierembergia Gracilis.	10
120 Sunflower, Cal. dbl.	5	156 Pansy, fine mixed.	10
121 Adlumia Cirrhosa (Mountain Fringe).	10	157 Petunia, mixed.	10
122 Althea (Hollyhock), fine mixed.	10	158 Phlox Drummondii, fine mixed.	10
123 Aster, mixed China.	10	159 Pyrethrum Aureum (Golden Feather).	10
124 Australian Vine.	10	160 Salpiglossia, mixed.	10
125 Balsam (L. Slipper), fine mixed.	10	161 Stock (Ten Week).	10
126 Balsam, Fine Paris double.	10	162 Wallflower, fine mixed.	10
127 Balsam, Splendid dbl.	10	163 Wallflower, purple.	10
128 Balsam, dbl Dwarf.	25	164 Zinnia, mixed fine.	10
129 Balsam, dbl. Rose Flowered.	15	165 Zinnia, dbl. Scarlet.	10
130 Balloon Vine.	10	166 Belles Perenniss (Daisy) single.	15
131 Brovallia Grandiflora.	10	167 Campanula Medium (Cantebury Belle).	15
132 Canna (Indian Shot).	10	168 Canary Bird Flower.	15
133 Canna, fine mixed varieties.	10	169 Thunbergia, mixed.	15
134 Celosia Cristata, variegata.	10	170 Aquilegia Alpina (Columbine).	20
135 Celosia Cristata, purpurea.	10	171 Heliotropium, fine mixed.	20
136 Clematis Flammula.	15	172 Heliotropium, dark, mixed.	20
137 Dahlia (Superbua), mixed.	25	173 Verbena, choice mix'd.	20
138 Dianthus Chinensis (Indian Pink).	10	174 Violet, Blue.	20
139 Dianthus Chinensis, dbl. White.	10	175 Balsam Camelia, flowered.	20
140 Celosia Cristata, fine mixed (Coccomb).	10	177 Carnation, fine mix'd.	25
141 Chrysanthemum Album.	10	178 Digitalis.	5
142 Datura, fine mixed.	10	179 Dolichos (Hyacinth Bean).	10
143 Evening Primrose.	10	180 Gaillardia Grandiflora Hybrid.	10
144 Four O'Clock, mixed.	10	181 Nemophila, fine mix'd.	10
145 Forget-me-not.	10	182 Perilla Nankinensis.	5
146 Geranium Zonale.	10	183 Saponaria Multiflora.	5
147 Geranium, Fancy Colored Leaves.	25	184 Scabiosa Atropurpurea.	10
148 Godetia (The Bride).	10	185 Scarlet Runners—Climbers.	5
149 Gourd (Hercules Club).	10	186 Schizanthus—Hardy Annuals.	5
150 Ipomoea (Cypress Vine).	10	187 Schizanthus, finest mixed colors.	5
151 Indian Pink, double mixed.	10	188 Myrsiphyllum Asparagoides (or Smilax).	25

For \$1.00 we will furnish new subscribers the PACIFIC RURAL PRESS for three months, and \$1.00 worth of the above seeds. For \$1.75 the RURAL six months and \$1.00 worth of seeds. For \$3.25 the RURAL one year, and \$1 worth of seeds. For \$4.50 the RURAL for eighteen months and \$1 in seeds. The seeds will be promptly forwarded, post paid, from some one or more of our leading and reliable seedsmen, whose name will accompany the package. In ordering, write on a separate sheet the number only of each article wanted as numbered, together with your address.

Old subscribers can advance payment so that their subscriptions will be paid the same length of time in advance and receive the same terms as above. Those who have remitted since this offer was made can send the additional amount which would have entitled them to a premium, and receive the same by stating which numbers they prefer.

For other kinds of seeds, or for seeds in larger packages, patrons are referred to reliable seedsmen advertising in this paper. We wish to aid in increasing the planting and cultivation of gardens.

We are not going to embark in the regular seed business, and have not time to investigate or answer many questions of private interest only, nor respond to orders received without remittances.

Subscribers will please notify neighbors who do not take this paper of this offer, and the merits of the RURAL. In writing correspondence, items of information, or on other business, please use a separate sheet.

Our Agents.

OUR FRIENDS can do much in aid of our paper and the cause of practical knowledge and science, by assisting Agents in their labors of canvassing, by lending their influence and encouraging favors. We intend to send none but worthy men.

JARED C. HOAG—California.  
G. W. INGALLS—Arizona.  
E. L. RICHARDS—San Diego Co.  
R. G. HUSTON—Montana.  
Geo. McDowell—Fresno and Tulare Cos.  
J. H. SMITH—Plumas and Sierra Cos.  
J. C. SWEENEY—Sonoma and Mendocino Cos.  
O. F. BERGMAN—Yolo and Solano Cos.  
M. S. PRIME—El Dorado and Placer Cos.

BLACK MUSCATS.—The Black Muscats are making an exceedingly favorable impression as a table grape. We enjoyed the bounty of W. H. Aiken, of Wrights, Santa Clara county, in the shape of a box of assorted varieties of table grapes, and the Black Muscat was the king of the lot. We are glad to hear that the Santa Cruz mountain grape-growers have the prospect of doing very well with grapes from their late ripening neighborhood. They expect to send East about 20 carloads of them.

KANSAS HORTICULTURE.—If any of our readers are able to get to Emporia, Lyon Co., Kansas, on Tuesday, Dec. 7, they should give the balance of the week to attendance upon the annual meeting of the Kansas State Horticultural Society. The program sent us shows that there will be a host of interesting subjects brought forward. G. C. Brockett, of Lawrence, Kansas, is the secretary of the society, and no doubt programs of the meeting and other information can be gained from him.

PACIFIC COAST WEATHER FOR THE WEEK.

[Furnished for publication in this paper by NELSON GOROM, Sergeant Signal Service Corps, U. S. A.]

DATE.	Portland.		Red Bluff.		Sacramento.		S. Francisco.		Los Angeles.		San Diego.	
	Rain.	Temp.	Rain.	Temp.	Rain.	Temp.	Rain.	Temp.	Rain.	Temp.	Rain.	Temp.
Nov. 11-17												
Thursday	.05	44 SE Cy.	.21	57 NW Fr.	—	54 NW Cy.	.05	58 SE Fr.	.00	69 S Fr.	.00	63 NW Cy.
Friday	.18	48 NW LR.	.00	63 N Fr.	.00	60 NW Cl.	.00	61 NW Cl.	.00	72 SW Cl.	.00	65 NW Cl.
Saturday	.02	38 NW Cl.	.00	60 O Cl.	.00	64 SW Cl.	.00	59 NE Cl.	.00	76 SW Cl.	.00	68 N Cl.
Sunday	.00	44 NW Cl.	.00	62 N Cl.	.00	62 NE Cl.	.00	59 W Cl.	.00	74 SW Cl.	.00	68 NW Cl.
Monday	.00	34 NW Cl.	.00	66 N Cl.	.00	57 NW Cl.	.00	62 N Cl.	.00	66 S Cl.	.00	63 NW Cl.
Tuesday	.00	46 E Fr.	.00	60 N Cl.	.00	54 NW Cl.	.00	61 N Cl.	.00	64 SW Cl.	.00	60 W Cl.
Wednesday	.03	44 SE Fr.	.00	53 NE Cy.	.00	55 SW Cy.	.00	54 NE Cy.	.00	64 SE Cl.	.00	63 NW Cl.
Total	.28		.21				.05		.00		.00	

EXPLANATION.—Cl. for clear; Cy. cloudy; Fr. fair; Fy. foggy; — indicates too small to measure. Temperature Wind and weather at 12:00 M. (Pacific Standard time), with amount of rainfall in the preceding 24 hours.

Good Health.

SLEEP AS A TONIC.—A scientific writer says: Sleep, if taken at the right moment, will prevent an attack of nervous headache. If the subjects of such headaches will watch the symptoms of its coming, they can notice that it begins with a feeling of weariness or heaviness. This is the time when a sleep of an hour, or even two, as nature guides, will effectually prevent the headache. If not taken just then it will be too late, for after the attack is fairly under way it is impossible to get to sleep till far into the night, perhaps. The giving of anodynes and the forming of the disastrous opium habit has often arisen out of such circumstances and ignorance of the preventive value of sleep. It is so common in these days for doctors to forbid having their patients awakened to take medicine if they are asleep when the hour comes round, that the people have learned the lesson very well, and they generally know that sleep is better for the sick than medicine. But it is not so well known that sleep is a wonderful preventive of disease—better far than tonic regulators and stimulants.

SUGAR AS AN ARTICLE OF DIET.—Dr. Phipson advocates, in a German scientific journal, the general use of sugar as a regular article of diet. For 40 years he has eaten at least a quarter of a pound daily, not counting sugar-forming substances taken at the same time, and has found it very healthful. Man's condition would be greatly improved if the use of sugar should substitute that of alcohol.

STRENGTH OF BLOOD-VESSELS.—Experiments reported to the Paris Academy of Sciences prove that the pressure necessary to cause the rupture of blood-vessels is very much greater than that to which they are normally subjected. The carotid artery of a dog required from 35 to 55 times the normal pressure of the blood, and the jugular vein from 32 to 35 times the usual force.

TARWEED FOR MEDICINE.—The Valjeo Chronicle says: "For the past few days a man has been at the navy yard clearing out the tarweed that grows in such abundance at the rear end of the island and bringing it over to Valjeo. He is going to dry the weed and use it for medical purposes. Several truckloads will be cut. It is worth \$1 a pound when properly dried."

An Appreciative Reader.

One of our subscribers at San Diego, remitting his postal order for another year in advance, thus voices his esteem and good-will:

No farmer or stock-breeder can afford to be without the RURAL. It would be a cheap paper to me at ten times the amount of the annual subscription. You keep square up with the progress of the day, and I can see an improvement in every number, and it is in fact a first-class, honest, candid journal and the tribute for all the people of the Golden West. May success attend your every effort to improve and extend its circulation.

Complimentary Samples.

Persons receiving this paper marked are requested to examine its contents, terms of subscription, and give it their own patronage, and, as far as practicable, aid in circulating the journal, and making its value more widely known to others, and extending its influence in the cause it faithfully serves. Subscription rate, \$3 a year. Extra copies mailed for 10 cents, if ordered soon enough. If already a subscriber, please show the paper to others.

GRAPE PHOTOGRAPHS.—H. J. Lewelling, of St. Helena, has made a large collection of photographs of fruit which do him great credit as an amateur photographer. His grape series is very comprehensive and includes most of the varieties now popular in this State. Being himself a fruit-grower, he has applied his pastime of photography in the direction of horticulture with great skill and success. We hope to receive further samples of his work, which consists of a charming variety of fine rural scenes.

A FRENCH army officer is not allowed to marry a woman unless she can furnish an income of \$240 a year.



## Breeders' Directory.

Six lines or less in this Directory at 50c per line per month.

### POULTRY.

**JAS. T. BROWN**, 18 Georgia St., Los Angeles, Cal. Breeder of Thoroughbred Poultry of the leading varieties. Send for circular and price list.

**CHOICE LAND AND WATER FOWLS** for sale at all times of all the most popular and profitable varieties. Please inclose stamp for new circular and price list to R. G. Head, Napa, Cal.

**T. D. MORRIS**, Sonoma, Cal. Tuolouse and Embden Geese, Bronze and W. Holland Turkeys, and all leading varieties of Thoroughbred Poultry.

**D. H. EVERETT**, 1616 Larkin St., S. F., importer and breeder of Thoroughbred Langshans and Wyandottes.

**AXFORD'S IMPROVED INCUBATOR**.—400 eggs, \$50; 150 eggs, \$25. Guarantee satisfaction. For particulars address, I. P. Clark, Mayfield, Cal.

**J. N. LUND**, Box 118, Oakland, Cal. Wyandottes, Langshans, L. Brahmas, P. Rocks, B. Leghorns, B. B. R. Game Bantams, T. Guineas, Hom'g Antwerp Pigeons.

**D. D. BRIGGS**, Los Gatos, Cal. Fancy Poultry breeder.

**O. J. ALBEE**, Santa Clara. Thoroughbred poultry.

**E. C. CLAPP**, South Pasadena, Cal. Light Brahmas and Plymouth Rocks. No fowls for sale. Eggs from first-class stock, after Nov. 1st.

**CALIFORNIA POULTRY FARM**, Stockton, Cal. Send 2-cent stamp for Illustrated Catalogue.

**W. C. DAMON**, Napa, Wyandottes, W. and B. Leghorns, P. Rocks, L. Brahmas, Pekin Ducks.

**MRS. M. E. NEWHALL**, San Jose. White and Brown Leghorns, Langshans, Plymouth Rocks, Light Brahmas, Pekin Ducks and Bronze Turkeys.

### HORSES AND CATTLE.

**SETH COOK**, Danville, "Cook Farm," Contra Costa Co., breeder of Aberdeen Angus, Galloways and Devons (Registered). Young stock for sale.

**PETER Saxe & Son**, Lick House, San Francisco, Cal. Importers and Breeders, for past 16 years, of every variety of Cattle, Horses, Sheep and Hogs.

**WILLIAM NILES**, Los Angeles, Cal. Thoroughbred Poultry, Cattle and Hogs. Write for circular.

**J. R. ROSE**, Lakeville, Sonoma Co., Cal., breeder of Thoroughbred Devons, Roadsters and Draft Horses.

**THE BEST HERD OF JERSEYS**, all A. J. C. C. registered, is owned by Henry Pierce, San Francisco.

**P. H. MURPHY**, Brighton, Perkins P. O., breeder of Shorthorn Durhams, and Poland-China Hogs.

**ONTARE RANCH**, three miles west of Santa Barbara, Santa Barbara county, California. Coach Horses, Draft Horses, Trotting Bred Horses and pure Holstein-Friesian Cattle. Young cattle and matched teams always on hand. Francis T. Underhill, Proprietor. C. F. Swan, Manager.

**COTATE RANCH BREEDING FARM**, Pages Station, S. F. & N. P. R. P. O., Penn's Grove, Sonoma Co., Cal. Wilfred Page, Manager. Breeders of Short Horn Cattle, English Draft Horses, Spanish Merino Sheep and Berkshire Swine.

**P. S. CHILES**, Davisville, Yolo Co., importer and breeder of registered Shorthorns of the best families.

**STINSON & MARSH**, Dayton, Nevada. Registered Shorthorns of choice breeding strains.

**T. P. A. WILLIAMS**, Columbia, Boone Co., Mo., breeder and importer of Thoroughbred Herefords.

**LEONARD BROS.**, Mt. Leonard, Mo., importers and breeders of Galloway, Aberdeen-Angus and Short-horn cattle.

**M. D. HOPKINS**, Petaluma, importer of Thoroughbred Shorthorns and Red Poll cattle for milking strains.

**HYDE & MOORE**, Visalia, importers and breeders of Shorthorn cattle. Young stock for sale.

**J. A. BREWER**, Centerville, Alameda County, Cal. Shorthorns and Grades. Young stock for sale.

**R. J. MERKELEY**, Sacramento, breeder of Norman, Percheron Horses and thoroughbred Shorthorn Cattle.

**Estate of M. E. BRADLEY**, San Jose, Cal., breeder of recorded thoroughbred Shorthorn Cattle and Berkshire Hogs. A choice lot of young stock for sale.

**E. W. STEELE**, San Luis Obispo, Cal., breeder of Thoroughbred Holstein and Jersey Cattle.

### SHEEP AND GOATS.

**J. B. HOYT**, Bird's Landing, Cal., importer and breeder of Shropshire Sheep; also breeds cross-bred Merino and Shropshire Sheep. Rams for sale.

**L. U. SHIPPEE**, Stockton, Cal., importer and breeder of Spanish Merino Sheep, Durham Cattle, Red Duroc and Berkshire Swine. High graded Rams for sale.

**KIRKPATRICK & WHITTAKER**, Knight's Ferry, Cal., breeders of Merino Sheep. Rams for sale.

**G. N. WHITAKER**, Santa Rosa, breeder of Shropshire Down Sheep; 10 fine bucks for sale.

**T. H. HARLAN**, Williams, Colusa Co., breeder pure blooded Angora goats, & Merinos; young stock for sale.

**R. H. CRANE**, Petaluma, Cal., breeder and importer. South Down of Long John Wentworth herd for sale.

**E. W. WOOLSEY & SON**, Fulton, Sonoma Co., imp'rs & b'ders Thoroughbred Merino, & Jersey Cattle.

**EASTON MILLS**, Lakeville, Sonoma Co., thoroughbred Spanish Merino Sheep. Choice rams for sale.

### SWINE.

**JOHN RIDER**, Sacramento, Cal. Breeder of Thoroughbred Berkshire Swine. My stock of Hogs are all recorded in the American Berkshire Record.

**W. D. RUCKER**, Santa Clara, breeder of registered improved Poland China Swine. Pigs for sale.

**I. L. DICKINSON**, Lone Oak Farm, Sonoma, Tuolumne Co., Cal., breeder of thoroughbred Essex Hogs. Pigs now ready for sale. Prices reasonable.

**TYLER BEACH**, San Jose, Cal., breeder of thoroughbred Berkshire and Essex Hogs.

**G. O. BEMENT & SON**, Redwood City, Ayrshire cattle, Southdown Sheep, Berkshire and Essex Swine.

**WILLIAM NILES**, Los Angeles, Cal. Thoroughbred Poland-China and Berkshire Pigs. Circulars free.

## HOLSTEIN-FRIESIANS.

STOP! THINK! INVESTIGATE!

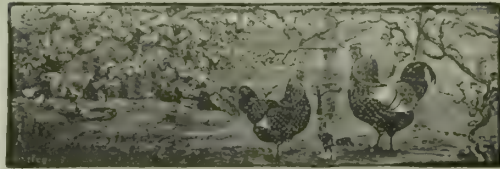
### LAKEVIEW STOCK FARM HAS

The only Cow that has given 26,021 lbs. 2 ozs. of milk in a year.  
The only four-year-old that has given 23,000 lbs. in a year.  
The only two-year-old that has given 19,484 lbs. 13 ozs. in a year.  
The only herd of mature cows that has averaged 17,166 lbs. 1 oz. in a year.  
The only herd of two-year-olds that has averaged 12,409 lbs. 8 ozs. in a year.  
The only two-year-old that has made 16 lbs. 9 ozs. of butter in a week.  
The only herd in which 37 two-year-olds have averaged over 11 lbs. each in a week.  
Twenty-three cows in this herd have averaged 18 lbs. 3 ozs. of butter in a week.  
Also a fine stud of Clydesdale Stallions, Mares and fillies of all ages.  
Send for Catalogue giving full records and pedigrees. In writing always mention RURAL PRESS.  
**SMITHS, POWELL & LAMB**, Syracuse, New York.

## MARTINEZ, } ALHAMBRA POULTRY YARDS { JASPER J. JONES

CAL.

Proprietor.



### HIGH-CLASS POULTRY.

Clean sweep on Plymouth Rock Chickens at Great California Poultry Show at San Francisco, Jan. 11th to 16th, 1886. The Best is the Cheapest. Illustrated Catalogue sent free on application; worth \$1 to any breeder of poultry. Send me your name on a Postal Card; 5000 copies of fine Illustrated Catalogue for free distribution.



## HOLSTEIN & JERSEY CATTLE

Heifers in Calf in such grand bulls as Netherland Star, Clifden Prince (Holstein) and Ashantee's Sultan (Jersey) for sale at reasonable prices. Also POLAND-CHINA and BERKSHIRE PIGS.

### POULTRY—All Varieties.

WRITE TO **WILLIAM NILES**, Los Angeles, Cal.

## HORSES AND CATTLE.

### ANOTHER IMPORTATION!

#### THEODORE SKILLMAN,

PIONEER IMPORTER OF

### Norman and French Coach Horses,

IS NOW IN FRANCE

Selecting the Best Horses for the California Market, and will land them in PETALUMA about the 1st of December, 1886. HE WILL BRING THE BEST.

### FOR SALE.

### HOLSTEIN-FRIESIAN CATTLE

FROM THE HERD OF

**HON. LELAND STANFORD.**

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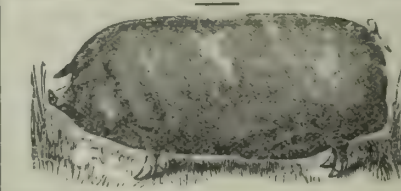
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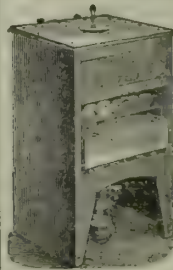
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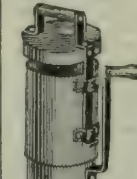
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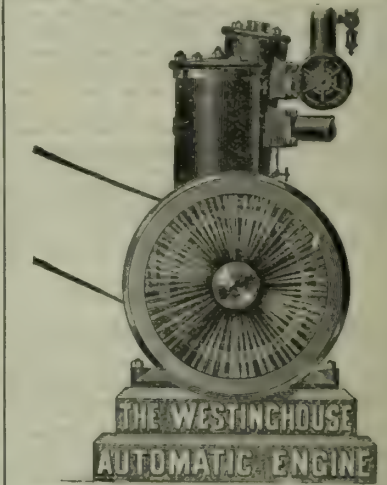
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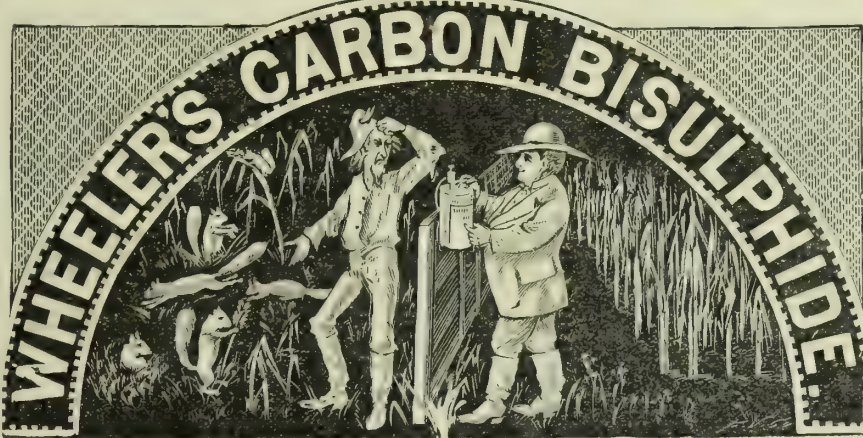
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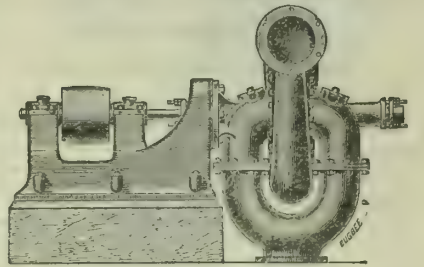
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## S. F. MARKET REPORT

NOTE: Our quotations are for Wednesday, not Saturday, the date the paper bears.

## Weekly Market Review.

## DOMESTIC PRODUCE, ETC.

SAN FRANCISCO, Nov. 17, 1886.

The past week has been unusually dull in all farm products, but while dull, prices did not shade off, but advanced for several, particularly wheat, barley and oats. To-day's cable from England giving the market is as follows:

LIVERPOOL, November 17th.—Wheat—Turn dealer. California spot lots 6s 3/4d to 6s 11/4d; off coast, 34s 9d; just shipped, 35s; nearly due, 34s 9d; cargoes off coast, firm; on passage, firmer and held higher; Mark Lane wheat, firm; English country markets, turn dealer; French, firm; wheat and flour in Paris, steady; wheat on passage to continent, 730,000 qrs.; wheat and flour to U. K., 1,875,000 qrs.

## Foreign Review.

LONDON, Nov. 15.—The *Mark Lane Express*, in its review of the British grain trade during the past week, says: Deliveries of wheat have been very small. Values at provincial exchanges have improved 6d/8s. Sales of English wheat during the week were 49,777 quarters at 31s, against 47,410 quarters at 31s during the corresponding period of last year. Flour is in better demand, and values are supported. Trade in foreign wheat in London is slow, and values are firm. American Red is scarce. Indian wheats are in request for mixing with the native crop, by country millers. Corn is firm. Barley and oats are quiet. Beans and peas are 6d dearer. One cargo of wheat arrived, and one cargo was sold. To-day the wheat trade was very slow, but values were firm. English, American, Russian and Indian wheats each advanced 6d. There was an increased inquiry for flour, and prices were 1s 6d dearer. Corn was scarce. Oats were 3d cheaper. Beans were 1s dearer. Linseed was quiet, and 6d lower.

## Eastern Wool Markets.

NEW YORK, Nov. 14.—Inquiry last week was mainly for parcels for some specific purpose, and regular line buyers were not represented. Consequently the market had a rather dull tone, but prices are unchanged. The sales of the week included 20,000 pounds of Oregon, at 24c. The Philadelphia market remains quiet. Pulled wools and average Territory wools are easier, but fleeces are generally held with confidence at unchanged prices. Bids for Territorial wools that were declined a few weeks ago were accepted last week, but the rates then refused and now accepted are about as high as any previously paid for similar wools. Among the sales were 20,000 pounds Territory fine medium at 22 1/2 cents, 5,000 pounds Territory medium at 25 1/2 cents, and 65,000 pounds Territory at 25 cents. The Boston market has ruled quiet, being a buyers' and not a sellers' market. Prices are generally from 1 to 2 cents less than two weeks ago. Among the sales were 343,000 pounds Territory at 22 1/2@24 1/2 cents and 47,000 pounds California fall at 15@18c.

NEW YORK, Nov. 16.—Wool is quiet and firmly held. Domestic fleeces, 30@38c; pulled, 14@35 cents.

## New York Hop Market.

NEW YORK, Nov. 14.—There is no indication of a favorable turn in the temper of the market; business between dealers is insufficient, and brewers buy in an indifferent manner; some very fine 1886 Pacifics have sold at 31@32 cents cash to brewers, but local buyers will not go above 28@30 cents on choicest samples; some offers from San Francisco were made at 2 cents under prices held a week ago; Pacific coast crop, 1886, prime to choice, 28@31 cents; fair to good, 26@27 cts.; 1885, good to choice, 13@16 cts.

## New York Wheat Market.

NEW YORK, Nov. 14.—The wheat market the past week was dull and weaker. The export demand has been rather light, owing principally to the fact that immediate shipments are impracticable, on account of the lack of tonnage, and because large shipping orders are now being held in abeyance, in consequence of which spot closed 1/4@1/2c lower, and options heavy and down three-quarters of a cent for November, at 83 1/4; December, 84 1/4; January, 86 1/4; February, 88 1/4; May, 93 1/4.

## California Fruit at the East.

CHICAGO, Nov. 13.—The receipts of grapes continue quite liberal, all consignments coming by passenger trains. A large portion of the grapes arrive in bad order, showing the effect of rains west of here, and are selling at low prices. It is so late in the season that there is more or less risk of freezing in transportation. Should it be pleasant and warm, the receivers would be able to sell the fruit at reasonableness, but if cold and wet they can only get low prices. Choice Muscats bring \$2.50@3. Tokays sell for about the same, while occasionally some fine lots bring a little over this, and some poor lots range down to \$2. Choice Verdals grapes keep as much as Muscats, and seem to have better keeping qualities. Pears are scarce and firm at \$3@4 per box. As to variety and condition, the market for California dried fruits remains steady and unchanged at former prices.

NEW YORK, Nov. 14.—Green Fruit—California pears, \$2@4 per box; quinces, \$1@1.50; grapes, \$2@5 for 40-lb cases.

## California Products at the East.

NEW YORK, Nov. 14.—In canned goods the demand for some descriptions continues to show a gradual though steady increase. Peaches are meeting with more attention, and the market is firmer. Tomatoes sell well at full figures. Corn is firm. Fine grades of canned pears are very scarce, and packers have no stock to offer. Dealers anticipate a positive shortage before winter is over, and higher prices are looked for. The imports of canned goods by rail, the past 7 months, amounted to 90,640 cases. California canned peaches, \$2.25@2.50; pears, \$2.25@2.50; plums, \$1.75@2; grapes, \$1.75; apricots, \$2@2.25; salmon, \$1.50@1.55.

Dried Fruit—Dealers in California raisins here say they cannot supply the New York demand for them. The recent heavy consignment was all taken previous to its arrival. There is no doubt Californians are being taken in preference to foreign. The prices run

from \$1.25 to \$2 per box. Malaga raisins have been moderately active at \$1.80, \$1.90 for loose Muscats, and \$2.40 for London.

Beans—California Limas were firmly held at \$1.90@2.

Mustard seed is dull; yellow quoted at 3 1/4@4 1/2c.

## London Agricultural Seed Trade.

LONDON, Nov. 1.—Messrs. John Shaw & Sons, seed merchants, of 37 Mark Lane, E. C., state that there was an average attendance on the seed market to-day, with a moderate amount of business doing. Cloverseeds generally are neglected. The new American Red just landed, being very cheap, is attracting some attention. White seed in Germany promises to be scarce, and high prices are therefore demanded which buyers here refuse to pay. Winter tares continue to sell slowly on former terms. Values have now dropped to holding over basis. Available supplies of canary seed are short, and firmly maintains the late rise. There is no change in hemp seed, which continues to sell at the remarkable low rates previously noted. Rape seed is in better favor. White mustard remains quiet. New French buckwheat, on account of its extremely moderate price, has been bought for speculation, and in consequence has become firmer. In Feeding linseed, the tendency is against buyers. Blue peas and Haricot beans are without alteration.

## Local Markets.

BARLEY—A strong, active market has ruled throughout the week, with a strong closing to-day. On Call transactions have been freer on steady advancing prices. The following are to-day's Call Board transactions: Morning Session: Buyer season—500 tons, \$1.46 1/4; 100, \$1.46 1/4; 200, \$1.46 1/4. Buyer 1886—400 tons, \$1.41; 700, \$1.40 1/2 c. Afternoon Session: Buyer season—100 tons, \$1.45 1/4. Buyer 1886—400 tons, \$1.40 1/2 c.

BEANS—The market is dull and heavy under heavy receipts, and only a moderate demand. Many are storing, expecting better prices later on in the season.

BUTTER—Both fresh roll and pickled are heavy and weak at the lower quotations, but solid in firkins is stronger and higher, with large dealers packing pickled so as to meet the demand for firkin.

CHEESE—The market continues exceedingly strong, owing to light supplies and a good demand.

EGGS—Heavy receipts from the southern counties and also from the East have created a weaker feeling, with concessions necessary to effect sales.

WHEAT—Farmers are offering very sparingly, consequently export buyers and millers have to bid up, with the closing indicating still higher prices. Two carloads of No. 1 hard are on the way from Chicago, bought for seed by a large farmer in the Sacramento valley. Transactions on Call the past week have been larger and at hardening prices. To-day's sales were as follows: Morning Session: Buyer season—300 tons, \$1.09 1/4; 200, \$1.09 1/4; 400, \$1.09 1/4. Seller 1886—200 tons, \$1.05 1/2 c. Afternoon Session: Buyer season—1100 tons, \$1.08 1/4; 300, \$1.08 1/4; 400, \$1.08 1/4. Seller season—100 tons, 99 cts. Seller 1886—200 tons, \$1.04 1/2 c.

[COMMUNICATED.]

## Market Information.

## Cereals.

Full returns of the wheat exports from this country for the months of July, August, and September this year, in comparison with the like months in 1885, give the following, which is of interest to the trade:

	1886.	1885.
TO	Bu.	Bu.
Great Britain and Ireland	13,644,995	7,342,169
Germany	158,252	46,223
France	7,069,166	109,803
Other countries in Europe	5,939,575	1,850,739
British North America	1,079,364	1,060,727
Central American States and		
British Honduras	15,329	10,073
Other countries	217,180	3,095
Total	28,723,861	10,512,829

The above comparison, which shows an increase to all consumptive countries, gives a most remarkable increase in the shipments to France. The increased exports emphasize the correctness of reports heretofore given that the crops abroad are short, and that the European countries' main reliance is on this country to tide them over into another season. The average increase for the first three months of this season over the like time in 1885 is all of 6,000,000 bushels per month. While the wheat exports give so large a return, that of flour shows equally as large an increase, as the following comparative table for July, August, and September shows:

	1886.	1885.
TO	Bls.	Bbls.
Great Britain and Ireland	1,836,258	943,529
Germany	7,429	2,028
Other countries in Europe	153,971	24,243
British North America	232,166	200,000
Mexico	4,014	5,214
Central American States and		
British Honduras	29,063	26,040
West Indies	214,875	269,986
Brazil	148,191	127,994
United States of Colombia	17,117	12,067
Other countries in S. America	56,431	83,134
Asia and Oceania	119,668	84,220
Africa	5,258	3,529
Other countries	6,154	7,273
Total	2,830,595	1,789,257

The above gives a wonderful large increase in the flour export to Great Britain, and affords food for study to those who delve into the mystery of the where and wherefore of our export trade in bread-stuff. Eastern advices indicate that Western farmers have delivered wheat more freely than any former season, and, consequently, have less in their granaries for delivery next spring.

In our market the sample market has ruled very strong, with a gradual but steady advance in prices, owing to an improvement abroad, light offerings from farmers and shippers' pressing necessities b reason of the heavy engaged tonnage in port to load. Sales have ruled from \$1.37 1/2 to \$1.41 1/4 for fair to choice white shipping, and \$1.40 to \$1.45 for good to gilt-edged milling.

The barley market has ruled very strong, with buyers' necessity causing them to bid up for both feed

and brewing. The demand is chiefly for export for both choice bright feed and also for good to choice brewing. The local and interior demand is fully up to last month, while there is a strong speculative demand under the belief that prices will rule quite high before the winter has passed, particularly if it shall prove to be cold and severe.

Notwithstanding receipts have continued free, prices have not shaded off. The firmness is due to an impression that barley will advance still more, which will create a better and higher market for oats. Much of the choice received goes into warehouse, to be drawn from as the trade call demands.

Owing to the low prices ruling here, there is less Western corn sent to this market, but notwithstanding which, values keep down by reason of the strong selling pressure of Californian.

## Dried Fruits.

Receipts are freer, yet all coming to hand are quickly placed, particularly if they be good to choice. The large proportion of consignments received are of better quality than last year, and therefore move off more quickly. The East is drawing liberally from us, with the outlook good for a continuance for some time to come.

## Feedstuffs.

Owing to colder weather there is an improved demand for both bran and middlings, which creates a strong market.

Ground barley continues very strong, with an advance for the better quality.

Oilcake meal is unchanged.

Hay is stronger, with a good demand ruling for the more choice grades. Sales of choice wheat have been made at \$1.50 per ton, by the carload.

Feed carrots are in liberal supply, but prices rule steady.

## Fruits.

The market for table grapes strengthened some on Friday last; since then prices have ruled steady, but the demand is not urgent, owing to the lateness of the season.

Pears are barely steady, with the poorer qualities hard to sell. Considerable coming in are overripe. Oregon sends us liberal supplies.

Apples, under very heavy receipts from Oregon, are weak and low, with the market in a very unsatisfactory condition. It takes something very choice to fetch \$1 per box. Fair to good are hard to sell, except at concessions.

Strawberries continue to contest the season with old Winter, and so far hold out against the severe frosty nights. So free are receipts, that even \$7 is difficult to get for choice.

Quinces are steady and in better demand.

Limes and lemons, under free receipts and an inactive demand, are in buyers' favor at the lower quotations.

Oranges are coming in more liberally, and as the demand is only fair, prices rule in buyers' favor. The quality of those received show an improvement on the earlier receipts.

## Hops.

The market, though reported dull, is said to have a very strong and healthy tone, with the outlook favorable to better prices later on. Shipments to the East continue free, both from this State, Oregon and Washington Territory.

## Honey.

Receipts are lighter, with the stock here well reduced; yet prices do not appreciate, owing, so say buyers, to our market being relatively higher than either at the East or in England.

## Live-stock.

Beef cattle and mutton sheep are higher and strong under a lessened selling and a good demand. It is claimed that large buyers secured in September all the cheap cattle and sheep they could handle, and are now holding for higher prices. Hogs are stronger, as packers are taking more freely. In horses, cows, etc., last week's report covers this week's. The following are to-day's meat prices: Beef—Stall-fed, 7 1/4@8c; grass-fed, extra, 7c; first quality, 6 1/2c; second, 5 1/2c; third, 4@5c. Calves, small, 9@10c; larger, 7@8c; 1 lb. Mutton—Ewes, 5@5 1/2c; wethers, 5c. Lamb—Spring, 6 1/2@7c; 1 lb. Pork—Live hogs on foot, 2 1/2@3c for grain and dairy feed; 2 1/4@2 1/2c for soft; dressed, 5@5 1/2c for hard, and 4 1/4@4 1/2c for soft. Grass-fed stock sell on foot, gross weight, at one-half the price they fetch dressed; stall-fed on foot, fetch one-third less than they sell at dressed.

## Nuts.

The strong market reported last week is continued, with the outlook favorable for good prices throughout the season. There is an improving demand for the holiday season.

## Raisins.

The market is reported in good position for good to choice, with the East continuing a heavy customer. Raisin-curers, to establish a market for their individual pack, ought not only to be very particular in packing the raisins in the best and most improved manner, but ought also to put them in neat, attractive boxes, having handsome labels. The bulk shipped by many persons come in boxes that are repulsive; consequently the raisins are hard to sell, even if the quality is unimpeachable.

## Vegetables.

Contrary to general expectation, potatoes shaded off still more, leaving the market, at the close, weak and heavy. Continued free receipts caused buyers to fight shy of the market, and only buy for immediate trade wants. To-day the market was stronger, owing to lighter receipt.

Sweet potatoes have ruled strong, with a slight advance at the close, owing to light receipts and good demand.

Onions held to strong prices for choice hard up to Monday, when more ease was noted, with a decline on Tuesday, and a weaker tone to-day. Sprouted onions are hard to sell.

Tomatoes continue to come to hand, but the quality is not good, owing to the lateness of the season. Other spring vegetables are out of market.

## Miscellaneous.

The tonnage movement compares with last year at this date as follows:

	1886.	1885.
On the way	204,644	179,100
In port, disengaged	81,258	117,853
In port, engaged	73,596	27,900
Totals	359,498	324,853

The above gives a carrying capacity as follows:

1886, 575,186 short tons; 1885, 519,764 short tons; increase over last year, 60,128.

The poultry market has ruled fairly steady throughout the week, with choice large well-conditioned fetching an advance.

The demand for seed is improving, but prices are unchanged.

## Wool.

Owing to light stocks and light receipts very little can be said, outside of a continued strong market for all grades, particularly crossbred and merino.

San Francisco, Nov. 17, 1886.

## Domestic Produce.

Extra choice in good packages fetch an advance on top quotations, while very poor grades sell less than the lower quotations. WEDNESDAY, Nov. 17, 1886.

PEANUTS AND PEAS.	PEANUTS.	POTATOES.
Bayo, cti. 1 1/2 @ 1 1/2	Wilberta 10 @ 11	Barbark 75 @ 1 15
Butter 1 25 @ 1 50	1 25 @ 1 50	Early Rose 25 @ 65
Peas 1 65 @ 1 75	1 65 @ 1 75	Curley Blue 1 00 @ 1 15
Red 1 10 @ 1 15	1 10 @ 1 15	Jersey Blue 1 00 @ 1 15
Pink 1 10 @ 1 15	1 10 @ 1 15	1 10 @ 1 15
Large White 1 60 @	1 60 @	1 60 @
Small White 1 60 @	1 60 @	1 60 @
Lima 2 00 @ 2 35	2 00 @ 2 35	2 00 @ 2 35
Mid Peas, blk eye 1 80 @ 1 80	1 80 @ 1 80	1 80 @ 1 80
do green 1 00 @ 1 12	1 00 @ 1 12	1 00 @ 1 12
do Niles 1 25 @	1 25 @	1 25 @
BROWN CORN		
Southern per ton 50 @ 70	50 @ 70	50 @ 70
Northern per ton 50 @ 70	50 @ 70	50 @ 70
CHILORY.		
California 4 @ 41	4 @ 41	4 @ 41
German 5 @ 7	5 @ 7	5 @ 7

DAIRY PRODUCE, ETC.	POULTRY AND GAME.
Cal fresh roll, B. 20 @ 30	Hens dos 5 00 @ 7 00
do Fancy brand 32 1/2 @	Roosters 3 00 @ 4 00
Pickle roll 17 @ 20	Ducks, tame 4 00 @ 6 00
Pork, new 15 @ 18	do Mallard 2 00 @ 3 50
Eastern 15 @	do Sprig 1 00 @ 1 50
	Goose, pair 1 00 @ 2 00
Cheese, Cal, B. 12 1/2 @ 15	White Leghorn 3 00 @
Eastern style 15 @ 16	Turkeys, B. 13 @ 14
	do Dressed 15 @ 17
Cal. ranch, doz. 42 1/2 @ 46 1/2	Turkey Feathers, 10 @ 20
do store 35 @ 40	tail and wing 10 @ 20
Ducks 15 @	Salp. Eng. doz. 10 @
Oregon 22 1/2 @	do Common 75 @
Eastern 32 1/2 @	Quail 75 @
Utah 32 1/2 @	Quail 75 @
	cabbits 1 00 @ 1 25
Bran, ton 15 50 @ 16 50	Hens 1 50 @ 2 00
Cornmeal 25 @ 27 00	Venison 3 00 @
Ground Barley 23 @ 25	
Hay 8 00 @ 11 00	Cal Bacon 8 @ 9
Middlings 19 50 @ 22 00	Heavy B. 8 @ 9
Old Cake Meal 26 50 @ 28 50	Medium 8 @ 9
Straw, bale 35 @ 50	Light 10 @ 11
	Extra Light 12 @ 12 1/2
Extra, City Mills 4 12 1/2 @ 4 50	Leaf 7 @ 9
do Country Mills 4 00 @ 4 50	do Smoked Beef 11 @ 12 1/2
Superfine 3 00 @ 3 50	do Eastern 10 @ 12 1/2
GRAIN, ETC.	do Bacon 13 @ 14
Barley, feed, cti. 96 @ 1 07 1/2	
do Brewing 1 10 @ 1 30	Alfalfa 20 @
Chevalier 1 45 @ 1 60	Canary 30 @ 4
do Coast 1 40 @ 1 45	Clover red 12 @ 13
Buckwheat 1 00 @ 1 20	White 17 @ 18
Corn, White 1 05 @ 1 15	Cotton 20 @
Yellow 1 05 @ 1 15	Flaxseed 20 @ 24
Small Round 1 10 @ 1 20	Hemp 4 @ 4 1/2
Nebraska 97 1/2 @ 1 05	Italian Rye Grass 25 @
Oats, new 1 35 @ 1 40	Perennial 7 @ 9
Choice feed 1 35 @ 1 40	Millet, German 4 1/2 @ 5
do Med. 1 40 @ 1 50	do 7 @ 10
do fair 1 20 @ 1 25	Mustard, white 3 @ 3 1/2
do black 1 20 @ 1 40	Brown 2 25 @ 2 75
do Oregon 1 25 @ 1 45	Rape 1 @ 1 1/2
Rye 1 10 @ 1 25	Ky. Blue Grass 1 1 @ 1 13
Wheat milling 1 43 1/2 @ 1 45	2d quality 11 @ 12
Gilt edged 1 40 @ 1 42 1/2	Swet Grass 75 @
do good 1 38 1/2 @ 1 40	Orchard 20 @ 25
Shipping choice 1 41 1/2 @	do 15 @
do good 1 38 1/2 @	Hungarian 8 @ 10
do fair 1 37 1/2 @	Lawn 20 @ 40
	Muesquit 10 @ 12
	Timothy 5 @

FEED.	PROVISIONS.
Bran, ton 15 50 @ 16 50	Cal Bacon 8 @ 9
Cornmeal 25 @ 27 00	Heavy B. 8 @ 9
Ground Barley 23 @ 25	Medium 8 @ 9
Hay 8 00 @ 11 00	Light 10 @ 11
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List of U. S. Patents for Pacific Coast Inventors.

Reported by Dewey & Co., Pioneer Patent Solicitors for Pacific States.

From the official report of U. S. Patents in Dewey & Co.'s Patent Office Library, 252 Market St., S. F.

- FOR WEEK ENDING NOVEMBER 9, 1886.
- 352,385.—ROAD ENGINE—W. Applegarth, Fresno, Cal.
  - 352,181.—WINDOW—M. B. Burk, Dayton, W. T.
  - 352,182.—IRONING BOARD—L. M. Darrow, Stockton, Cal.
  - 352,482.—OPERATING VALVES OF HYDRAULIC ENGINES—Jos. Moore, S. F.
  - 352,483.—TRACTION WHEEL—R. R. Moore, Modesto, Cal.
  - 352,346.—SELF-PROPELLING WAGON-TRAIN—J. B. Osborne, Daggett, Cal.
  - 352,260.—WRENCH—J. M. & W. H. Parsons, Great Western Mine, Cal.
  - 352,278.—LINIMENT—O. W. Storer, Snelling, Cal.
  - 352,282.—FUMIGATOR—Jos. Watson, Petaluma, Cal.
  - 16,979.—DESIGN—F. S. Johnson, S. F.

NOTE.—Copies of U. S. and Foreign patents furnished by Dewey & Co., in the shortest time possible (by mail or telegraphic order). American and Foreign patents obtained, and general patent business for Pacific Coast inventors transacted with perfect security, at reasonable rates, and in the shortest possible time.

Water Down the Gage Canal.

About three years ago Matthew Gage undertook to irrigate 4000 or 5000 acres of dry land above Riverside. Possessing no capital, he contracted with the owners of the land to supply water, on the basis of one inch to five acres, for the sum of \$100 per acre. With these contracts, to the extent of nearly half a million dollars, he entered upon the work. He secured some water from the Santa Ana river, purchased a large tract of arid land, sank wells and obtained some of the finest flows in the State. His canal is over 11 miles long, and on its line are 16 tunnels, one of which goes 700 feet through solid granite. It has a capacity of 3000 inches of water, sufficient for irrigating 15,000 acres, and he is confident of obtaining enough to fill it, mostly from artesian wells.

On Tuesday, November 9th, 500 inches of water—about one-third of the amount available—was turned into the canal upon the upper plain. The next morning it had made its way past the point of rocks east of Riverside, and by night reached the Turquoise Arroyo—the end of its course for the present.

In noticing the triumph of this enterprise, the *Press and Horticulturist* adds: When Mr. Gage commenced work the land under his proposed canal and above the Riverside upper canal was not really worth a cent an acre, although it had a speculative value of about \$5. Between the time that he commenced work and the day of his turning down the water, over 2000 acres changed hands on a valuation ranging from \$200 to \$300 per acre. Such is the confidence to-day in his water system that \$300 per acre is readily paid, cash down, for some of the choice locations.

But the end is not yet. Mr. Gage has recently purchased a large tract of land above the canal in Arlington, and it is now an open secret that in a short time surveys will be made for the extension of his canal across the big arroyo, and thence down along the foothills to the Temescal tin mine hills, below the present Arlington depot.

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An old physician, retired from practice, having had placed in his hands by an East India missionary the formula of a simple vegetable remedy for the speedy and permanent cure of Consumption, Bronchitis, Catarrh, Asthma, and all Throat and Lung Affections, also a positive and radical cure for Nervous Debility and all Nervous Complaints, after having tested its wonderful curative powers in thousands of cases, has felt it his duty to make it known to his suffering fellows. Actuated by this motive and a desire to relieve human suffering, I will send free of charge, to all who desire it, this recipe, in German, French, or English, with full directions for preparing and using. Sent by mail by addressing with stamp, naming this paper, W. A. NOYES, 149 Powers' Block, Rochester, N. Y.

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S. W. CARPENTER, Esq.—Dear Sir: I have examined the digest and compilation entitled "The Law of Water for Irrigation in Colorado," which you have prepared, and beg leave to say that in my opinion it will prove to be of much use and value to the community. The work so much needed has been done by you remarkably well, considering the brevity necessary in preparing a book for the use of all parties interested in irrigation, as well as of members of the bar. Respectfully and truly,  
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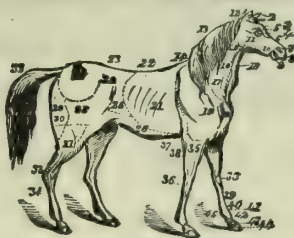
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Horse.

1, ears; 2, forelock; 3, forehead; 4, eye; 5, eyelid; 6, nose; 7, nostril; 8, point of nose; 9, lip; 10, lower jaw; 11, cheek; 12, poll; 13, mane; 14, withers; 15, parotid glands; 16, throat; 17, neck; 18, jugular vein; 19, shoulder; 20, chest; 21, ribs; 22, back; 23, loins; 24, hip; 25, flank; 26, belly; 27, hump; 28, thigh; 29, buttock; 30, stifle; 31, leg; 32, tail; 33, back; 34, cannon or shank bone; 35, arm; 36, knee; 37, passage for the girth; 38, elbow; 39, shank; 40, hock; 41, pastern; 42, coronet; 43, foot; 44, hoof; 45, fetlock.

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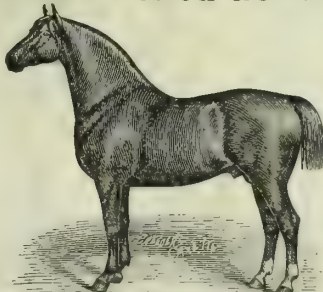
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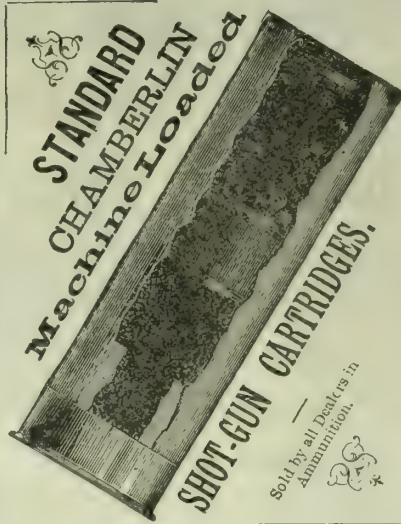


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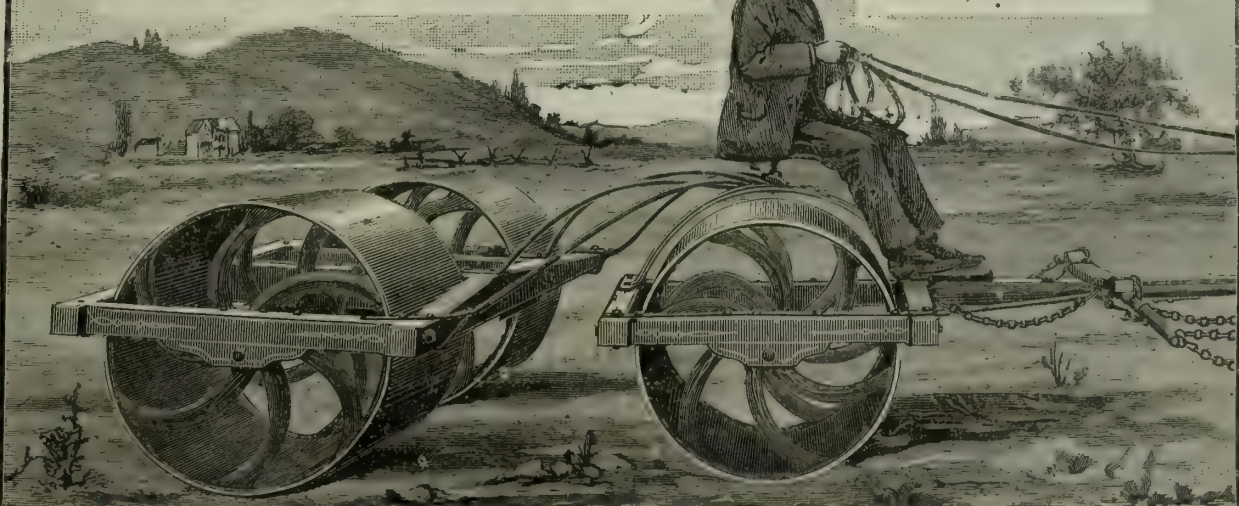
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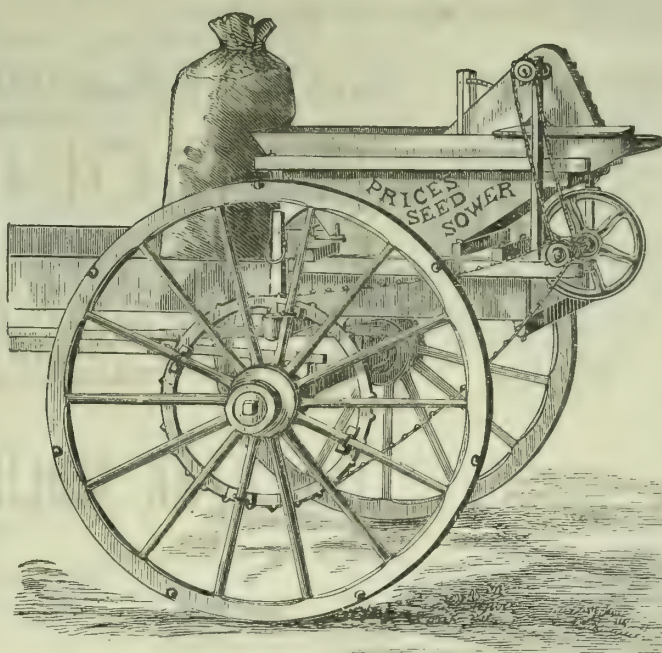
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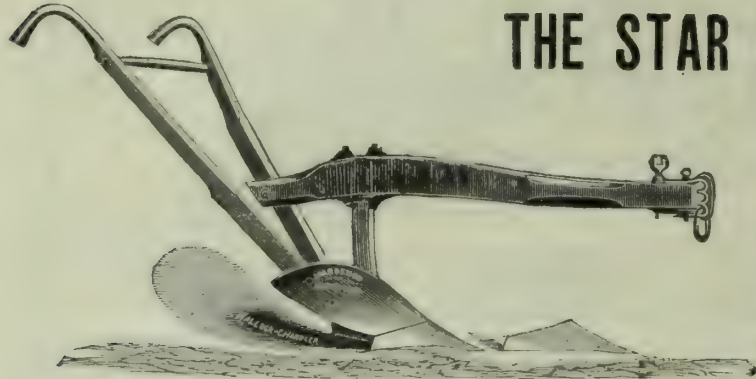
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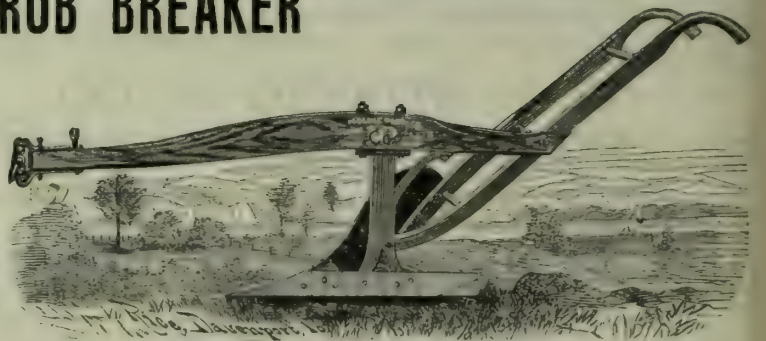
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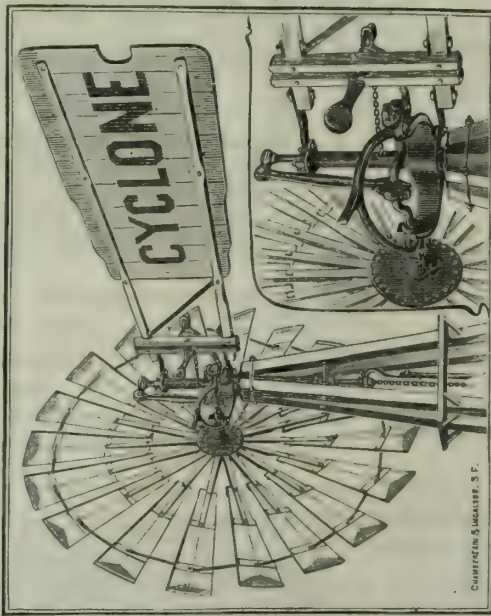
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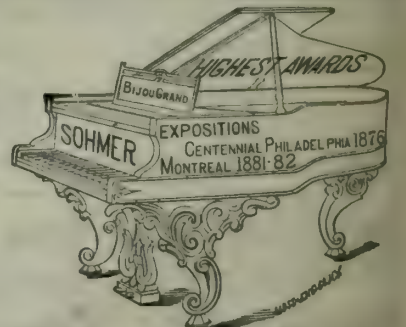
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TWENTY-PAGE EDITION.

Vol. XXXII.—No. 22.]

SAN FRANCISCO, SATURDAY, NOVEMBER 27, 1886.

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### The Abyssinian Banana.

The engraving on this page depicts a grand massing of a grand ornamental plant, which has already secured a strong foothold in this State, and is destined, we believe, to be very widely distributed. It is the Abyssinian banana, *Musa Ensete*, a native of the east coast of

tory plant for a long time. Its growth in the open air marks another era of its California life, and bounds can be set upon that. In November, 1882, a paper was read before the Gardeners' Society, of San Mateo, by John McLaren, in which he sets forth the beauty of the plant, the method of growing it, and announced that one had been set out of doors upon Mr.

color. As soon as the first whorl is in full flower another whorl follows, and so on to the end of the flower stalk. About the first week of December the seeds ripened. In the early spring these seeds were planted, as described by Mr. McLaren in the *RURAL* of May 8, 1886, and at this last date there were a lot of seedlings which were offered for sale, and, we presume,

### Fashion and Prices.

It looks very much as though Dame Fashion was stepping in to help our struggling silk industry upon its feet, if, indeed, it be found to have standing strength. Not long ago the same fickle lady stepped into the precincts of another California industry, but with a depressing



THE ABYSSINIAN BANANA (*Musa Ensete*)—A MAGNIFICENT ORNAMENTAL VARIETY.

Africa. It is a fine, noble-growing banana of rapid growth, attaining a height of 30 feet. The leaves of this species are of immense size, being the full height of the plant with a breadth of about three feet. The ground color is a deep green of a very rich hue, to which the deep red color of the very prominent mid-rib and veins forms a very pleasing contrast. For centers of foliage beds, for single specimens or for grouping with other plants, it stands unrivaled, and gives a tropical character to the landscape peculiarly its own. As none of our sub-tropical plants can compare with it either in size or beauty of outline, and now since it has proven to be hardy and can be had cheap, it ought to be in every garden in the milder portions of the State.

We are not aware when or by whom the Abyssinian banana was introduced into California. It has probably been here as a conserva-

Howard's place at San Mateo and was about to enter upon its first winter in the open air. The experiment was very successful. The plant made a noble growth, and in June, this year, Mr. McLaren brought us a photograph of the plant taken the preceding summer, which showed the banana towering up, reaching the second story of Mr. Howard's residence.

In an article which Mr. McLaren prepared for the *RURAL* last June, he stated that the plant had survived the hard winter of 1885 without any protection whatever. The frosty nights browned the leaves a good deal, but it started out again in the month of February, and made a new leaf about once a week until the month of September, when it sent up its flower stalk, which is about six feet in length by six inches in diameter. The flowers grow in whorls around the stalk, and are partly covered by enormous bracts of a reddish brown

were quite widely distributed in this State.

We have record in our columns also of the successful growth out of doors of the Abyssinian banana in Los Angeles. In the *RURAL* of June 7, 1884, is a note from Mrs. Jeanne C. Carr, of Pasadena, extolling the beauty of the plant and describing it as one of the most superb foliage plants known in modern gardening, and stating that Mr. Hollenbeck's splendid sample has grown without protection on Boyle Heights, in Los Angeles. Mrs. Carr had at that time one under cover and one in the open garden.

The engraving upon this page is from a photograph of a group of Abyssinian bananas in a garden in Germany. We are indebted for the engraving to the B. A. Elliott Co., of Pittsburg, Pa., large growers and importers of plants. At the East the plant is recommended for summer growth on the lawn, and it is to be consigned to the cellar or conservatory for the winter,

rather than an elevating influence. This was in the mohair production, and when mohair goods were frowned upon by the ladies the Angora breeders pined until enterprising manufacturers found in mohair a fine material for upholstery goods, etc., and now the Angora is climbing again.

What Dame Fashion is doing now is described by a recent New York paper. It says that Fashion in Europe decreed some months ago that women should use more silk for dress and personal adornment than had been their custom for the last few years. This made business lively for manufacturers and drove up the price of raw silk. Now raw silk costs from 10 to 25 per cent more than in the summer. Further advances are expected, and importers and manufacturers feel that the present stiff rates will be maintained and soon have a perceptible effect on the retail trade.



## CORRESPONDENCE.

Correspondents are alone responsible for their opinions.

## Notes on Soils and Cultures.

NUMBER I.

EDITORS PRESS:—"Freely you have received, freely give." My hints and directions on this subject are general, and apply to all kinds of crops. I do not claim entire originality, but progress in application of chemical and natural philosophic facts.

The art of soil-cultivation has more unforeseen difficulties, arising from the large exposed area where the labor is performed, the changes of temperature, the sunshine and rain, than any other art.

Ever since the settlement of California, how to obtain and retain moisture for growing crops through the rainless summer, has been the most important problem.

My purpose in No. 1 is to give practical hints and directions on this point, in connection with well-established scientific facts and theories on which they are based.

I hope none of my readers are among the number that would, when seeing land plowed, exclaim, "What a pity the soil was not put right side up!" Capillary attraction, the term applied to water rising in tubes or pores, is but one point in the universal law that all fluids and gaseous elements tend to diffuse toward an equilibrium, as when one end of an iron bar is heated the whole becomes warm.

Water continues to rise as the heat evaporates it from the surface of the soil. Now, if the soil is settled and uniform the tubes extend to surface, and the water from below is soon exhausted.

Cultivation should break the capillary tubes a few inches below the surface and cover the ends from the heat and evaporation of wind and sun. Mulching, or a covering with a stratum of different material, will have the same effect. Practically, this should be done at the end of the rainy season; for a heavy rain would settle the soil and again connect the tubes from below to the surface. Low wet spots and pools get dry first, because the rain has compacted the soil, reduced the size and connected the pores from below to the surface. Crops that are put in the first of the rainy season should be left loose and rough, not harrowed down smooth; first, because the rains will pass down quickly and not run off; secondly, the elevated lumps dry and warm first, and the temperature of the whole is thus raised. At the next rain the lumps, after being partially dried, dissolve and crumble down—effecting, so to speak, self-acting cultivation. Toward the close of the rainy season harrowing and rolling, either or both, are of great benefit.

With plants of deep roots, such as trees and vines, it is not necessary to pulverize so finely; simple plowing and harrowing is enough.

The following pertains to subsoil and preparation before planting. The reader must bear in mind that the finest interstices or tubes best favor capillary attraction, and that it is comparatively a slow process. All kinds of soil are honey-combed with holes of all sizes. Bugs and worms tunnel in all directions. Some holes appear lined and cemented, so that water will not affect them without their being mechanically crushed. The depth to which these smooth defined holes extend varies with the kind of subsoil from three to eight feet. In a climate where the ground freezes, these little tunnels are more or less broken up. Extreme dryness and then rain acts in a similar manner.

These facts show the benefit of subsoiling, which would be still greater if the subsoil could thoroughly dry, then dissolve and unite again. In this vicinity there is seldom, if ever, want of rainfall, but sometimes it nearly all falls in three or four months. In March or April, before the rains are quite done, it is too cold to plant corn, beans or seeds that require a high temperature to grow. As it gets warmer the surface gets too dry for the seed to germinate unless in perfect tilth, and thus it often happens that a mistake of a few days' time causes a failure.

In my next I propose to treat upon fertilization by cultivation. C. P. SCRANTON.  
Lower Lake, Nov. 12, 1886.

## Corn, Sorghum and Beets.

EDITORS PRESS:—"This is the time of year to prepare for the above useful crops. All require the same preparation of the soil. First give the land a good liberal dressing with manure in autumn; turn the soil over deeply in spring at the right time. Harrow well; mark the rows off about four feet wide with a plow. Strew the seed as fast as you can walk; cover with a harrow, going lengthwise. Roll the ground to keep in moisture. Let the plot be convenient to the house. No one who has not availed himself of about one acre of the above crops can appreciate their benefits. Begin to cultivate and thin out early, so as to bring the corn one foot apart from one stalk to another, and one or two good ears will be on each stalk. Sorghum or Chinese sugar-cane is not refused by any animal of mine. The pigs are fond of it; cows give the richest milk and make yellow butter at the season of dry feed. Stir the ground well with cultivator, and no water is required to irrigate. J. T. HOYT.  
San Mateo, Nov. 15, 1886.

## From Portland to S. F. Overland.

EDITORS PRESS:—"In this beautiful part of the country we have seen during the past year many tourists from the Atlantic and Central States, and hundreds from Chicago and its environs. Eastern exchanges are full of pleasant letters from friends who have seen and wondered with us at the beauties of these Willamette and Columbia valleys. Numbers who come by the Northern Pacific to this coast go by steamer from Portland, on the sound, to S. F., returning home by one of the roads east from that city.

All your readers know these roads, almost without seeing them, so many and fine have been the descriptions of all points of interest. Few, however, have taken what is called here the "Overland route" to S. F. You hear in the winter, occasionally, that trains are stalled, tunnels full of snow, etc., on the Oregon & Pacific road, which is about all that has been mentioned concerning it. Few have taken this trip, because to do it one must ride many miles in a Concord stage over mountain and plain between the terminus of the O. & C. road at Ashland, and the C. & O., which is fast being extended to meet the former.

Having no dread of a Concord stage, in one of which we passed many pleasant days in bygone years, both in Maine and Iowa, before a railroad had reached either State, we started on the Pullman car from this city one bright morning resolved to see the mountain route before the iron rail had bridged the 100 miles between Ashland and Dunsmore (now the terminus of the C. & O. road), which is being pushed through with their usual vigor by the S. P. R. R. Co.

The 24 hours' ride on the cars in Oregon, from Portland to Ashland, is through the best part of this State. Beautiful towns are growing all along the way, with an appearance of thrift and prosperity about them. Salem, Eugene City, Albany, etc., are well known to your readers, for many of them have friends and relatives in these places. Orchards and farms and fertile fields are seen all the way, and buildings which show the taste as well as the money invested in them. Ashland is a prosperous place, having a population of about 2000, and is considered the center of as rich a belt of fruit land as can be found even in California. Ashland creek and Bear river, into which it empties, make fertile the lands on which fine stock ranges are located and also give water power for mills.

The beautiful foothills of the Cascade mountains are south of Ashland, and both the soil and climate are found peculiarly adapted to fruit raising.

Our "homesteaders" on the prairie would look with dismay on land covered with brush and timber, which is sold every day here at from \$25 to \$30 an acre, and when grubbed and ready for the plow, cannot be bought for less than \$100. Yet buyers at these prices come from all parts of the world, and land is being cleared rapidly. There is no winter weather to prevent plowing, seldom one "freezing" day, and the beauty of the scenery can hardly be excelled.

The stage road, from Ashland south, commencing in Rogue valley, with the Cascade range on the east, the Rogue River mountains on the north, and the Siskiyou to the south, is full of interest and beauty. Though the valley has been settled more than 30 years, it has made little advancement until the last year or two. The parts of it through which we pass going on from Ashland show that in fertility and beauty it has great advantages. It is about 60 miles from the Pacific, the Coast Range mountains separating it from that ocean.

With a seat by the driver on top of the stage, with a jolly load of passengers below and the air fresh and sweet with the breath from pine forests, we passed a day more full of delight than we can describe. Soon we began the ascent of the mountains—and time fails us to tell of the wonderful places in sight as we progress. Pilot Rock, so often described by those who came in early days across the plains, and who hailed the first sight of it as the "beginning of the end" of their weary journey, is in view for hours. Castle Rock with its battlements and towers, bringing to mind many of Scott's fine descriptions of Scottish scenes, as we wind around and behold it in different lights and shades; Mt. Shasta in its grandeur appearing far away and then again so near that we seem at its very foot. The steep ascents of the Siskiyou range with mighty forests on one side the road, and deep ravines and gorges on the other; then down the mountains, over short curves, near the edge of the cliff, where the six horses go over the road at break-neck speed and all the strength of the driver is required on the brakes; these are new and most wonderful experiences.

Yreka is a quaint little town where we change coaches and make an hour's delay. Such a throng of cowboys, farmers and farmers' wives as crowded the platform here to see us mount our seats on top and crowd into the stage below! We are evidently the circus for the day. Mountain scenes again, with glimpses of Shasta, which, though nearer, seems more distant. This mountain is grand beyond description—not beautiful as our own snow-clad Oregon mountains, but like the mountain heights of Colorado, snow only at the top, with rocks and sand below and rugged sides covered with brush and dwarf pines. The grandeur of a mountain

14,442 feet above the level of the sea can only be appreciated by dwellers on the prairie when in full sight—no description can give any idea of it. The light of the setting sun shone on it as we silently watched it that evening, brightening the surrounding country with a beauty not of earth, while on Shasta itself "each purple peak, each flinty spire, was bathed in floods of living fire." The glory of that sunset hour is a picture on our memory for life.

As night came on we were entertained by the driver's stories of his wanderings and adventures over this part of the country—on foot, on horseback and with the stage—and so full of interest were they that when midnight came and we found ourselves at Sisson's, we had hardly thought of fatigue or sleep.

"Sisson," as every one calls him, is a pioneer who, for more than 30 years, has lived at the foot of Shasta and entertained in his way tourists, hunters and teamsters, at all seasons. In summer his rural house is thronged with Californians, who come for the bracing air, the mountain scenery, the fishing, and to drink the mineral water, both hot and cold, which is found in springs in several localities near. The railroad has been completed now nearly to his door, and "Sisson's," now that it can be reached without staging, will be changed from a country home to a railroad hotel. We are glad to have been there while it was in its rural state, for nowhere else have we found so quaint a home or so restful a spot, since Mt. Washington became a city hotel. The vicinity of Shasta, the lovely rural ride among the Sierra forests, the excursion to the headwaters of the Sacramento river, and the streams where mountain trout are actually caught, are attractions which visitors appreciate.

From Sisson's a 12-mile ride brought us to a tent town, where a ticket office in an old car and a few saloons make the station, where at daylight we took the cars on the California & Oregon road. We thought we had seen "scenic" routes of travel in Colorado and Southern California, but nowhere is beauty and grandeur found so combined as in the forenoon ride on this road, winding along the bank of the Sacramento river as it rushes to the sea. Sudden curves in the road, here a whirlpool with precipices on each side, and there a few acres of mighty forests. Another curve and the river has widened, and an island with a prospector's cabin among the rocks. All the way the track seems to overhang the river, and the only sign of civilization is the abandoned shanties of the laborers. The road itself is a marvel of engineering and is finished in the most perfect manner, but to us it looks as if no way-travel or freight would ever crowd the cars, so wild and rocky is the valley of this river.

By afternoon we "reach the settlements," and steam into San Francisco from Sacramento by the C. P. road, through towns and country so well known to your readers. "Fair as the garden of the Lord" is the whole of this region, and the vineyards and orchards and cultivated fields bear testimony to the fact that it is fertile as well as beautiful. PIONEER.  
Nov. 12, 1886.

## THE DAIRY.

## Improved Methods in Dairying.

EDITORS PRESS:—"Last June, in driving from Santa Cruz north along the coast to my place at San Bruno, I observed the country, especially in reference to dairying.

Most of the land along the coast is rich and abundantly supplied with water in small streams coming down from the Coast Range, which skirts the ocean but a few miles away.

It seemed to me that the opportunities for successful dairying in this district were superior to any portion of California that I have visited, and I may say that I have seen pretty much all of this State.

I must say, however, that these splendid opportunities have not, to my mind, been made use of to anything near the extent or in such a manner as to render the situation near as profitable as might be done.

I saw but very little cultivated grass and scarcely any of the splendid water privileges put to practical use, either for irrigation or motive power, and it puzzled me very much to understand why there was not more enterprise in this direction on the coast.

I will suggest an ideal dairy, which could be established in hundreds of places from Santa Cruz to Sanisnton, so far as location is concerned.

## Water Power.

I would secure the water first, as the main thing, sufficient for irrigation and power, with an elevation sufficient to make use of it by gravitation to irrigate at least an acre of ground thoroughly for every four animals kept.

I would locate my buildings at the central point of irrigation, that all the liquid manure and drainage from all the buildings could be carried by the water to all portions of the land, and so that the waste water, after being used for power, could either be used for irrigation or returned to the natural stream.

It is much easier, of course, to irrigate land when nearly level, yet by surveying carefully, rolling land can be irrigated with but little more expense.

The expense attached to bringing water

through pipes in order to retain the power seems to be the great obstacle to many that have the water. They undervalue the water in most cases, simply because they have not had the experience necessary to exercise a reasonable judgment in the matter.

In many places I saw, water might have been brought in a ditch, preserving the elevation until it reached within a distance of half a mile perhaps from where the building should be located. Now a half mile of pipe, say 14 inches in diameter at the head and 6 inches at the foot, strong enough for a 200-foot head, would cost not far from 50 cents per running foot, or about \$1300.

Such an investment would be worth far more to a dairy than if put in land, because every acre irrigated would produce at least five times as much as unirrigated land, or, in other words, 100 acres of land irrigated and manured by liquid manure, and otherwise, would produce as much as 500 acres, by the old process, and by much less labor.

The power can be used for many purposes; the grain can be thrashed and ground; the hay cut, the churning and wood-cutting; and with the hose everything can be kept clean and the fires put out.

## Farm Mechanics.

Every dairyman would find it profitable, especially if he has sons to help, to keep a good-sized shop, with an assortment of tools, so that repairs may be made at home.

With a shop that has a water power attached there would be an attraction that would tend to keep the boys at home, and the men too, for that matter, and a constant exercise of their ingenuity, would soon make mechanics of them.

There are many ingenious men that can be had by the month at moderate wages that could in a winter's work put in a water-wheel, a line of shafting, a turning lathe, drilling machines, a blacksmith's forge with power blast, run the grindstone, churn, cream separator, circular and jig saws, and put up a thrasher, feed-mill and fanning mill and make the most of the machinery themselves out of the raw material—iron. Horse-shoes and nails are so well assorted and completely made now that every farmer ought, with a forge, to be able to shoe his own horses. Extras in wagon and carriage material can be had so nearly complete now that every farmer's boy in his shop should be able to make their repairs.

The time, in fact, has gone by when a man who puts in his time with a team perhaps one or more days in a week in going to a distant shop for repairs can be successful.

A farmer without experience in mechanical work, on reading this, will no doubt smile and be incredulous, but I can assure him that I am writing from actual experience and am doing what I write about, and I have learned that if I had to go to a distant shop for what I needed in the mechanical line, the profit in my business would be small.

## To Return to the Dairy Business.

It is quite important to have your largest supply of butter or cheese when the market is the highest, say from August to February, and this can be done by having the cows come in at the right time and by having plenty of green feed for them when they do come in; and I know of no better way than by irrigation of the grasses, root crops and grain.

Along the coast the perennial grasses, such as rye grass and orchard grass, will remain green most of the year without irrigation, but with a free use of water two or three times during the dry season these grasses will furnish an abundant supply of food the year through. Butter or cheese from cultivated grasses is far superior to that from the native grasses, and will bring much higher prices, and the labor required in a dairy after the fields are in permanent pasture is perhaps not one-fourth of that required in the annual tillage of the soil. Natural pastures will not pay, considering the average price of land to-day, as they will not furnish the requisite quantity of food.

I know of a few parties along the coast that have been quite successful in the use and irrigation of cultivated grasses, and have only heard of one who was not successful, and from what I learned his failure was due to the fact that he used too much water and raised rushes and fresh-water plants in place of grass. Water should be used quickly and in large quantities, that the whole field may be saturated thoroughly and then allowed to dry. Once a month is quite often enough to irrigate, if done thoroughly.

A large proportion of the finest land between San Jose, Alviso and Milpitas is being water-logged and destroyed by the surplus artesian well water that is allowed to overrun the land. This, if properly cared for, would make magnificent perennial meadows and enrich the owners.

The tremendous growth of weeds that overtop the fences (soon after the annual crop of grain along the coast is secured) shows the wonderful fertility of the soil as well as poor farming. These weeds are mostly annuals, no doubt, and could be eradicated in a short time if the land was seeded to perennial grasses.

In making hay from cultivated grasses before these weed-seeds are ripe, they are prevented from coming, and should the field be needed for pasture—if the cattle do not keep them down—every weed-stalk should be cut down with a mower before its seed ripens, and if thus treated a few cuttings will destroy them entirely and leave a sod of pure cultivated grasses. The weeds thus cut will mulch the land and do



no harm, in allowing them to remain, as cut and lying upon the land.

I have seen hundreds of places throughout California where dairies could be established upon the basis herein indicated, and which would be profitable even with the low prices for their product that have ruled at times; and when these numerous places are utilized to their capacity, the dairy interest of California will make a showing far different from what it does now.

R. G. SNEATH.

Jersey Farm, San Bruno.

## HORTICULTURE.

### The Prune.

[By W. H. AIKEN, Wrights, Santa Clara Co., Cal.]

The following essay was read at the Sacramento Fruit-growers' Convention. The other papers presented at the meeting will come in due time:

The word prune is derived from the Latin *prunum*, which means plum, and may be more specifically defined as a plum of firm texture, easily dried whole in the sun or by artificial heat without fermenting at the pit.

Prune culture in this State has become a large and growing industry, and to successfully compete with foreign prunes, a protective tariff, an intelligent culture of the trees, and the best method of curing the fruit are indispensable.

The policy of this government is, and has been from its foundation, the protection of home industries and manufactures by proper duties upon foreign imports.

The products of the soil have not been protected to the same extent or degree as manufactured articles so much used by the farmer, and especially is this so with the prune. The tariff of one cent per pound on prunes was fixed before they were raised to any extent in this country, and was rated for purpose of revenue and not protection, as appears from the fact that the *ad valorem* duty on prunes amounts to only 18½ per cent, while the average *ad valorem* rate of duty on all articles is 42½ per cent.

The importation of prunes for the year ending June 30, 1885, was 57,631,820 pounds, valued by importers at \$2,147,505; and for the year ending June 30, 1886, 64,995,547 pounds, valued at \$2,026,595, showing an increased importation in 1886 of 7,363,725 pounds, but a decrease in value of \$120,910.

The prune product of California for the year ending June 30, 1885, was estimated at 1,875,000 pounds, of the value of \$150,000, at 8 cents per pound. For the year ending June 3, 1886, 1,550,000 pounds, valued at \$93,000 at 6 cents per pound, showing a falling off in production of 325,000 pounds, and in value of \$57,000.

The explanation of this is that there was not sufficient rainfall last year to mature a large prune that would command a fair price in competition with an unusually large and cheap importation.

The prune crop of this year is still in the hands of the producer, and cannot be definitely estimated; but it may be safely said, judging from the good quality and fair quantity on the trees, and the increased bearing acreage, that it will amount to about 2,000,000 pounds, which, at 8 cents per pound (a low price for so good an article), would yield the producer \$160,000.

The names of prunes cultivated here are French, German, Italian, Hungarian, Bulgarian and Silver prunes.

#### French Prune.

The French prune has been extensively and profitably grown in certain sections of this State, where the soil, climate and other conditions have proved favorable.

The first trees of the kind were grown by Louis Peller, at San Jose, about the year 1857, the graft having been brought from France by his brother in December, 1856.

The French prunes which are so largely exported from France are made of the Prune d'Agen or date plum, which is also named Prune d'Ente and Robe de Sargent. The Prune d'Agen is, according to the best authorities, the plum from which the finest French prunes are made, and is known as the prune of commerce. Orchards have been planted and cultivated in California for nearly 30 years, under the impression that we had the true prune of commerce, cultivated in France under the name of Prune d'Agen.

This was first seriously questioned by Mr. Felix Gillet, a Frenchman by birth, and a prominent and enterprising nurseryman at Nevada City, California, who asserted in July, 1884, that our French prune was very different from the Prune d'Agen of France, both in size, color, shape and time of maturity.

He based his opinion upon the conclusions drawn by certain horticulturists in France, from an actual comparison of the prunes raised and sent to them by him for that purpose with what they claimed was the true Prune d'Agen.

They failed to agree upon the points of difference, one insisting that the California prune is a seedling from the Prune d'Agen, and not as large and fine; another, that it is the same in shape, but not so regularly ovoid; another, that it is the same shape and color, but that there is a difference in the pit; and still another, a leading prune merchant of Agen, France, that it is exactly the kind known in France by the name of Prune d'Agen, or Prune d'Ente, and

that the nature of the soil has much to do with the beauty and size of the fruit.

Mr. Gillet, desiring to correct the error, and to introduce in California the Prune d'Agen, obtained trees from the north and south of France, and spared no expense in fully investigating the prune subject, and kept people the advised of his progress from time to time through the RURAL PRESS.

His investigations up to November, 1885, resulted in a change of opinion, as shown in his letter to the State Horticultural Society, in which he makes the following statement: "Our prune is a true type of the Prune d'Agen, and the kind grown in the north of France and the valley of the Loire is a very poor type of that famous prune." Our prune is not the very type of the Prune d'Agen, cultivated in the valley of the Lot, in France, where are grown the largest prunes, which are sold by merchants of Agen and Bordeaux, under the name of Prune d'Ente or d'Agen.

Through the kindness of Mr. Gillet I sent to a horticulturist, at Agen, a small package of my own prunes for inspection. In reply, under date of Aug. 16, 1886, he states that my prune has the shape and color of the Prune d'Agen, but is not the same type, the difference being in the pit, and sent me two pits of his prunes for inspection and comparison.

I am of the opinion that the French prune of this State is a true type of the Prune d'Agen, the prune of commerce of France, resembling it in shape and color though differing it may be in pit; the exact difference I am unable upon inspection to clearly define. This slight difference may be owing to climatic influence.

Whether the exact type of the prune grown in the valley of the Lot, in France, would prove a better and more profitable prune if grown in California than the one we have, is a matter for future experiment and consideration.

"Prove all things and hold fast that which is good."

The German prune is not generally grown; but as it contains more acid than the French, is preferred by some.

The Italian, or Fallenberg prune, sometimes called German, is quite well known; it has a rich acid flavor, is of a dark color with blue tint, and is nearly round.

The fruit thins itself, and often rather too much for profit, so that a full crop cannot be depended upon each year.

The Hungarian prune was brought to San Jose with the French prune, and quite generally planted and known as Gros prune. The tree is a strong grower and prolific bearer, the fruit growing large and fine, if properly thinned; and it is sometimes double. It has an acid flavor, light red color, and is in demand for Eastern shipment as a handsome plum. Pond's seedling plum is supposed to be its true name.

The Bulgarian prune is not generally grown, but is well spoken of by a few at Haywards, Alameda county, as bearing as well as the French, resembling the Italian but not quite as large.

The Silver prune was originated by a Mr. Alderman, of Dayton, Oregon, who believes it to be a seedling from Coe's Golden Drop plum, but a thrifter and hardier tree, and bearing larger fruit; the tree bears more on the body and the fruit does not break the tree down, and it ripens a week or two earlier. Many growers and nurserymen consider that it cannot be clearly distinguished from Coe's Golden Drop plum, which is a good plum for drying with the pit.

#### Prune Culture.

There seem to be no well-established rules governing the planting and cultivation of the prune in California. It might be well, however, to state briefly what the most experienced horticulturists have been doing, and think essential to be done.

Prepare the soil by deep plowing and harrowing early in the winter, and set out trees one year old, about an inch deeper than in nursery, the scar of old stock to the north, and not less than 20 feet apart; cut back the trees, after planting, to 18 inches from the ground, and shade on south side by some convenient shade. Three or four buds should be allowed to grow at the top, and the terminal buds of those below pinched back, after they have grown out a little, so that the buds will put out leaves and shade the stalk the first year. The second year, remove them and cut back the limbs to a foot in length; the third, two feet, etc.—the object in view being to shape a handsome tree with strength and bearing space, which can be attained only by low training and intelligent pruning.

After about six years of age, when in full bearing, the tree does not need cutting back as much as it does thinning out cross limbs, if any, and pruning out unfruitful wood. The sprays or small twigs in body of the French prune tree should be cut back to one or two fruit buds, so that the fruit may be large; some, however, advise the removal of all such sprays, as the fruit on them is small at best.

It is important in pruning to select buds on the upper side of limbs, as they will have a greater weight-bearing power than buds forming branches from under side of boughs. Summer pruning is not advisable; a full season's growth, properly pruned back in the winter and trained low so that the branches take a natural upward and oblique direction, will shape a tree that will be strong and broad enough to live long and be fruitful.

There is a natural adaptation of tree to root,

and it is generally believed that the apple should be budded upon the apple, the peach upon the peach, the pear upon the pear and the plum upon the plum.

The plum root generally throws out suckers from the root, and ought not to be used in budding plums or prunes. The myrobalan plum, however, does not sucker, and is much preferred as a root for the prune, especially in rich, damp or heavy soils; while in dry, light or sandy soil the peach root is found to be good for the prune, although some contend that the sap starts earlier and stronger in the peach root than the prune top is ready to assimilate, and becomes flooded and unhealthy.

In planting prune orchards, ascertain from those in your vicinity upon what root the prune does the best.

#### Method of Curing Prunes.

The French prune should be ripe enough to fall from the tree when shaken.

Dip the fruit into a boiling-hot mixture of one pound of concentrated lye in ten gallons of water and let it remain long enough to scald the skins; then dip in pure cold water and put out on frames or boards to dry in the sun. After the fruit has been out ten days or two weeks it should be taken up and put in bins to heat for a few weeks, then dipped in boiling-hot water two minutes, dried awhile, when it is ready for packing for the market. Do not dry prunes too much; they will keep without being dried to death. A common galvanized pail, made for the purpose, with three-eighths-inch holes on sides and bottom, makes the best dipper.

A canvas cloth may be spread under the tree, so that, in shaking, the fruit may be gathered clean and unbruised. Some, however, shake and pick from the ground.

The French method of curing prunes is substantially as follows:

The fruit-grower dries his fruit in an oven sufficiently to keep about two weeks without molding. The prunes are then sold to factories, where they are cured in this manner: After being graded by use of wire screens they are packed in long, hollow, metal tubes. After being filled a cap is screwed on them to make them airtight. These tubes are put in a steam drum and live steam is turned on and they are cooked for a longer or shorter time, according to the size of the fruit, at a temperature of 110 degrees. They are then ready to pack for the market. The peasants frequently cure or bake prunes in their bread ovens sufficiently for sale to the merchant, who grades and packs them.

It is not certain that we need imitate the French method of baking the prune. We may produce even better results in our own way.

The California sun-dried prune is delicious when stewed, while the French, being already cooked in the process of curing, tastes well before stewing, but becomes rather insipid afterward.

We can profitably imitate the French method of grading our prunes into at least three or four grades. After gathering the fruit, pass it over wire sieves arranged on an inclined frame two or three feet wide and eight or ten feet long. The fanning-mill movement is given to the frame by means of a wheel turned by hand; the largest prunes drop through the last and coarsest sieve, or pass over it entirely if very large.

The French merchants separate their prunes into several grades; the first four, ranging from 30 to 70 to the pound, are kept for the European market.

The fifth, or first grade for importation, about 70 to the pound, are sent to this country; also grades of smaller fruit, with which we have to compete for a market, with four grades of prunes, ranging from 40 to 100 to the pound.

Some rule of action should be adopted by prune-growers and merchants in California in grading prunes.

#### Prunes of California.

Samples of green prunes preserved, and others dried, are submitted for your inspection; many orchardists have kindly favored me with specimens. They are believed to be true to their names; the difference in color and size is owing to the soil, rainfall and temperature of the several localities where grown. There is no doubt that conditions in certain places are more favorable to the growth of the prune than in others.

A critical examination and study of such conditions and the habits of the prune, in wood and fruit growth, would be of interest and importance at our next meeting.

#### Crystallized Fruits at the East.

We have given information from time to time of the advancement of the crystallized fruit industry in this State. There are now large establishments in San Francisco, San Jose and Los Angeles, and others perhaps of less extent in other places. The business seems to court extension, and may result in the use of a large amount of our fruit and at the same time profitably employ the labor of women and young people. The following from the New York *Mail* is of interest: California is now acknowledged to be the fruit garden of the United States. In this productive State can be grown all the fruits of which France and Spain have heretofore had the monopoly. Finer grapes are now produced in California than Europe has ever sent to this market, and at prices much lower. The great abundance of the

product in the California vineyards has encouraged growers to make, for the American market, not only wines, but a class of raisins that even excel some of the finest imported. From samples sent to this city it appears almost certain that the California raisin will drive out the European in a very short time. Notwithstanding the fact that they have to be transported entirely across the continent, the expense of transportation does not so much increase the cost but that the dried fruit can be laid down in this city at a much cheaper rate than the French raisin, and far superior in quality. California also grows a very large-sized prune, which in flavor equals, even if it does not excel, the French "Imperial." These can be brought to New York at a much cheaper first cost than the foreign. Already the principal cities of the West, such as Chicago, St. Louis and so forth, have given up purchasing the foreign prunes and now deal entirely with those grown in this country. Other fruits could be mentioned, but these serve to illustrate the fact that home productions are making great headway against the foreign. But the newest industry arising from the California productions has been in the way of crystallizing fruits. About Christmas, it has been the custom among the rich to present to their lady-friends a box or basket of choice candied or crystallized fruits, but as these were imported from Europe, the cost was so great as to be beyond the means of the masses. Many a young man would have been pleased to have made such a present to his lady-love had his purse been plethoric enough for the purpose. Crystallized fruits were too high in price, and he had to confine his expenditures to candies of a less aristocratic character. This, however, is now likely to be remedied by home industry. Mr. J. M. Chapman, of this city, has just returned from California, and told a reporter for the *Mail and Express* that within 60 miles of San Francisco can be produced as fine crystallized fruit as ever was imported from France. He has had an opportunity while traveling through the State of visiting the fruit orchards, and there saw some fine specimens of crystallized apricots, plums, oranges, cherries, and other fruit grown in that State. Although the enterprise is yet in its infancy, he saw enough to warrant him in believing that these candied fruits would ultimately drive out the French. In point of excellence in taste, they are, in his opinion, not only equal, but superior, to the imported goods. And with regard to price, they can even now be laid down in New York 25 per cent cheaper, and, in course of time, at one-half the first cost of the French. Besides which, the supply of the fruits in California is so abundant that the crystallizers can have the pick of production without materially enhancing the cost. Many dealers here have ordered the crystallized fruit from California in bulk, and by putting them up in home-made fancy boxes, form as tasty a present to a lady as anything yet brought to New York from the other side of the Atlantic. And, what is more pleasing, this can be done at a price which will bring the articles within the reach of persons of even moderate means without being a heavy tax on their resources. Many of the uptown retail dealers in these fancy candied fruits said to the *Mail and Express* reporter that the prejudice against American productions in favor of foreign is dying out. The excellence of the article is now more sought after than the mere fact that they have been imported from abroad. Purchasers had found out, in many instances, that native productions had been passed off as foreign, and charged for accordingly. Preference is, therefore, now given to the home productions, if equal in quality to the imported, and, as a natural result, the dealer sells his goods for what they are.

#### Late but not Frozen Peaches.

EDITORS PRESS:—In your issue of November 13th, I noticed a communication from this place signed "G.," in which it is said that "McKevitt and Thurber have peaches so late that they always freeze upon the trees." That the two gentlemen named have some very late peaches I admit, but that Mr. McKevitt ever had any peaches freeze upon the trees I know to be a mistake. FRANK B. McKEVITT.  
Vacaville.

THE EFFECT OF CERTAIN ODORS.—The aroma of red cedar is fatal to house moths; the aroma of black walnut leaves is fatal to fleas. It is a matter of common observation that persons engaged in the business of making shingles from odoriferous cypress timber in malarial districts are rarely, if ever, affected by malarial diseases, and the persons engaged in gathering and distilling turpentine do not suffer from either malarial diseases or consumption. It is said that when cholera was epidemic in Memphis, Tenn., persons working in livery stables were entirely exempt from it. It is affirmed that since the destruction of the clove trees on the Island of Ternate the colony has suffered from epidemics unknown before, and in times when cholera has prevailed in London and Paris those employed in the perfumery factories have escaped its ravages.—*Boston Journal of Chemistry*.

THE LION AND THE TIGER.—It has been shown that the strength of the lion in the forelimbs is only 69.9 per cent of that of the tiger, and the strength of his hind limbs only 55.9 per cent. Five men can easily hold down a lion, but nine men are required to control a tiger.



## PATRONS OF HUSBANDRY.

Correspondence on Grange principles and work and reports of transactions of subordinate Granges are respectfully solicited for this department.

### Good of the Order.

Address on the Work of the Grange.  
Good Reading for the Anniversary.

We find in the *Daily Farmer's Friend* the address of Dr. John Trimble, of Washington, D. C., Worthy Secretary of the National Grange, at the Grangers' Inter-State Picnic Exhibition, at Williams' Grove, Cumberland Co., Pa., beginning the first of last September. The following is a summary of the salient points. It will be found appropriate reading for all the Granges which may be without an orator at the anniversary December 4th.

1. After some personal and local allusions the speaker launched out by asking: Whence came this organization, and how came it to spread, so like light from the rising sun, till it envelops the continent from ocean to ocean and from the frigid to the torrid zone? It came in obedience to the great law of compensation. At the close of the greatest and most expensive war in the world's history, in which vast areas of the country had been decimated and impoverished, and its productive industries unsettled, agriculture found itself held remorselessly by the throat, by the hand of giant monopolies, rendered possible by immense aggregations of capital, against which it was powerless to contend. In its unorganized condition agriculture was helpless and hopeless. From whence was its deliverance to come? Legislatures and Congresses, Courts and Administrations were controlled by its oppressors. Helpless and defenseless agriculture cried aloud. It could depend on nothing outside of itself for relief. In my opinion, and I say it reverently, Divine Providence put it into the hearts of the Founders of this Order to speak the words "combine" and "co-operate," and to devise and arrange the simple machinery by which combination and co-operation could be secured and made effective.

2. That the organization of the Order came in answer to a necessity for its existence, is evidenced by its phenomenal growth. Since its organization more than 25,000 charters have been issued, and probably more than one million and a quarter members have been initiated into the Order. That the Order has answered the call for its existence, if not all that was blindly expected of it, more fully than has ever been done by any similar organization, is now known and acknowledged of all men. Unjust and ruinous discrimination in the rates of transportation have become almost a thing of the past. Millions of dollars have been annually saved to its members in simplifying and systematizing methods of purchase and distribution of supplies, while the productions of American genius and the value of those productions have been vastly increased by the existence of the Order. Legislatures, both State and National, as well as the Executive and Judicial branches of the Government, have learned to entertain wholesome respect for the farmer whenever he speaks through his organization. A noticeable illustration of this is instanced in the recent triumphant passage of a bill by Congress, and its prompt approval by the President, relieving, in a measure, a principal farm product, butter, from ruinous competition at the hands of a fraudulent imitation which was backed by its dishonestly acquired millions. A few years ago oleomargarine would have controlled legislation, and the dairy farmer would have been powerless.

3. The intellectual importance to the farmer. The discussions in the Grange and the comparison of views and experiences have everywhere and always resulted in enlarging and strengthening their mental and moral status.

"The spirit grows with its allotted space.  
The mind is narrowed in a narrow sphere."

It educates speakers and parliamentarians. Men who lack confidence and skill in debate soon learn to be able debaters. When called to the chair, I have seen them preside over a body that, in appearance and deportment, would not compare unfavorably with the Senate of the United States, with an ease and dignity and a ready familiarity with parliamentary law and usage that would have done honor to Sherman or Carlisle. They had been educated in the school of the Grange. The principles and teachings of the Order, its ritualism and its laws, inculcate and enforce the spirit and the practice of fraternity, of good neighborhood and good citizenship.

4. The social feature. The brightest jewel in its crown is what the Order has done for women.

It is the first secret Order that ever admitted women to a full and free participation in its secrets, its benefits and its honors. In former times, and even now, where the benign influence of the Grange has not been felt, the lot of the wife and daughter of the farmer is more deplorable than that of the farmer and his son. While the farmer occasionally met his fellows at the store or the mill, or spent a social day with them at court or election, the poor wife was left at home to perform the monotonous drudgery of her daily rounds, with little of joy in the present or hope in the future. You

know that the Grange came to woman as a Savior, and that its announcement was to her "full of glad tidings of great joy." To this audience I need not enlarge upon the advantages and pleasures that have come to our sisters through the Grange. I saw the first few timid sisters take their seats in the National Grange abashed by the novelty of their position. But, after all, the future hopes of the Order rest upon the present farmers' sons and daughters. From them must its ranks be recruited, and through them must it be maintained and made "est<sup>o</sup> perpetua." To this end everything should be done to make membership therein desirable to them. The home life should be made enjoyable, and they should have frequent merry-makings and holidays. As soon as they are of sufficient age, they should be brought into the Grange and encouraged to take active part in its management.

Let no one be alarmed if perchance some young brother who has escorted his sister to the Grange hall should, in the confusion of leaving, find that he has somehow swapped sisters with some other brother, or on the way home the same old, old story first told in Eden:

"If Heaven one draught of heavenly pleasure spare,  
One cordial in this melancholy vale,  
'Tis when a youthful, loving, modest pair  
In others' arms breathe out the tender tale  
Beneath the milk-white thorn that scents the  
evening gale."

5. The Grange should be made a school. Perhaps no member of the Order has done more in advocacy of, or given intelligent shape and connection to, the work of education in the Grange than its Worthy Secretary, Bro. R. H. Thomas, the value of whose earnest and persistent efforts cannot be overestimated. His plan of establishing in every Grange a course of reading, extending over a term of years and including within its scope a knowledge of all the practical arts and sciences, history, biography and general literature, is, perhaps, the best that can be devised without withdrawing the student from the practical duties of the farm. No one can pursue such a course without becoming learned. One's education depends upon, and can only be rightly measured by, the extent, variety and accuracy of his knowledge. It matters not how this knowledge is acquired, whether through the training or curriculum of the schools or by self-application to the sources of information.

A reading circle, under careful supervision and direction as to its course, should be maintained and established in every Subordinate Grange. Its maintenance will be easy and impressive. Once the fires are lighted, the desire to learn will grow with what it feeds on, and in a few years the world will feel the effects of Grange education.

In conclusion, allow me to say and to assure you that occupying a position that brings me into immediate and direct communication with the whole Order throughout the United States and Canada, I can give you words of cheer for the present condition, and of faith and hope and confidence in the future progress and prosperity of the Order. I believe that it has come to stay, and that it will not only answer all the expectations of its ardent and most hopeful friends, but that, with its progressive spirit, it will hereafter develop capacities for usefulness now undreamed of.

"Knowing this, that never yet  
Share of truth in vain was set  
In the world's wide fallow;  
Other hands may sow the seed,  
After hands o'er hill and mead  
Reap the harvest, yellow."

### The National Grange.

Through the courtesy of W. M. and Sister Johnston, we have received the Philadelphia *Inquirer's* report of proceedings at the first day's session of the National Grange, which gives some details beyond the telegraphic account. Musical Fund Hall was neatly decorated with flags and bunting, and a profusion of flowers and growing plants. The morning was devoted principally to receiving the credentials of delegates and appointing the various committees. Gen. Putnam Darden, Master of the National Grange, presided. The Committee on Credentials reported representatives present from 24 States. Hon. M. Whitehead, of N. J., who was chosen Grand Lecturer at last year's session, but was not then present, appeared and was duly installed.

A committee of merchants, composed of John Garitee and representatives of the firms of Sharpless & Bros., Thornton Barnes, Sharpless & Carpenter, Simons Bros., Shannon & Sone, George Smith and Titus Bros., having been admitted to the meeting, Mr. Garitee addressed the Grange and heartily welcomed the delegates to the city. Invitations were given to attend various places of amusement, and participate in an excursion to Atlantic City.

Governor-elect Luco, of Michigan, replied on behalf of the members, assuring the merchants of the appreciation of the Grange for the courtesies extended. The thanks of the body were tendered the committee.

At the afternoon session W. M., Put Darden read his annual report, which Bro. Johnston has sent us in full and which we may print hereafter. In the evening the delegates attended the Walnut-street Theater and witnessed Miss Minnie Maddern in *Caprice*.

### For Our Needy Brothers in S. C.

Some weeks ago we received a circular ostensibly issued by the W. M. of the National Grange, concerning aid to members of the Order who suffered by the earthquakes in South Carolina. As the circular did not have the proper certification, we withheld it from publication, and wrote to Bro. Put. Darden concerning it. He replied that the appeal was genuine, and that its lack of official certification was because of the haste in which it was issued. In his letter Bro. Darden assures us that much distress exists among the farmers living along the coast of South Carolina, owing to the recent earthquake, and desires us to call the attention of the Patrons and farmers of California thereto, in such manner as we may deem best to secure the sufferers relief. He also transmits a copy of a letter from E. L. Roche, P. M. of Ashley Grange, to Hon. J. N. Lipscomb, Master of the State Grange of S. C., presenting the case as follows:

WORTHY MASTER:—My personal attention has been drawn to the condition of a number of farmers in the lower portion of this State, within the range of the recent earthquake shocks. They have suffered very severely from that calamity, their dwelling-houses and other buildings having been seriously injured. The chimneys and foundations are thrown down and demolished, and the houses in such a state as to render them uninhabitable and exposed to the weather. There are numbers of such instances in all parts of the coast belt of this State.

The near approach of fall and winter necessitates immediate attention to these matters, and in nearly every one of these cases the farmers are unable to make the needed repairs. Unless some outside aid can be obtained, these deserving and industrious people will suffer still more severely than they already have.

Not living inside of any incorporated city or town, these sufferers cannot obtain relief from the generous contributions sent already by our fellow-citizens. It is almost impracticable for this fund to reach the secluded country spots where they dwell, and indeed it is doubtful if the contributions, already sent, can do more than aid the needy in the city and its suburbs.

It has therefore suggested itself to my mind that an appeal made to the farmers of the country, through the National and State Granges, might not only result in the relief of their destitute brethren of this State, but would also give the opportunity to the agricultural interest to show their generous and kindly impulses. Their charity would go directly to farmers and grangers.

The first Grange in this part of the Union was the one established in this very vicinity, and the Order has always been popular with the farmers of this section. Very many of the present sufferers have been good members and supporters of the Grange.

What more desirable and grateful act than to open the way for the farmers of the country to aid those of their own calling, in this time of earthquake and distress?

To this feeling and fraternal appeal we need add but a reminder that Eastern winters, even in the "Sunny South," are fraught with frosty rigors such as California valleys seldom know. Any Granges or individuals who feel able and willing to extend somewhat of the asked-for aid should remit their offerings directly to Bros. E. L. Roche and A. B. Rose, of Charleston, S. C., who have probably ere this organized a board of relief.

### A High School for Yuba City.

At a late meeting of Yuba City Grange, Mrs. M. C. Smith offered the following:

WHEREAS, We possess a portion of the fairest and most productive of our State, which we expect to leave to our children as a goodly heritage; and

Whereas, Our citizens are a public-spirited, liberal-minded class of persons who have the good of our locality at heart, and desire our children to be fit inheritors of the aforesaid goodly heritage; therefore be it

Resolved, That we, the members of Yuba City Grange, devote our best energies and exert our influence by giving of our means, our time and our talents, to the furthering of some high-school project which will place in our midst an institution of learning that will meet all our requirements, thereby preventing all necessity of sending our children away from home influence to acquire what is styled an education. And be it further

Resolved, That a committee of seven be appointed to take this matter into consideration and to agitate it until we at least know the public mind.

In favorable notice of this movement, the *Farmer* says that the matter was brought up at the close of the meeting and no action had thereon, but it will be taken up at an early day and a committee appointed. Our county is second to no county in the State in wealth, according to population; in enterprise, as measured by the record and accomplishments of our people; in rate of taxation there is but one lower; in pleasant homes and surroundings we are not excelled. In one thing, however, we are sadly deficient. We run ferries, build bridges, construct roads and patronize railroads to get out of the county to purchase our supplies, including our advanced education. The money spent abroad by our people for educational purposes would easily build and maintain such an institution as would meet the requirements of our county for many years.

ST. HELENA GRANGE.—Worthy Lecturer Flint made St. Helena Grange a visit on the afternoon of the 6th, and writes the *Patron* that he found a neat, orderly room, its walls decorated with pictures of some prominent members who have received a demit to join a higher Order above. This Grange is not large in numbers, but compares favorably with any in

the State in point of intelligence; perhaps because the majority consists of sisters. Two sisters were instructed in the third and fourth degrees, and a fine harvest-feast was spread on the side-tables. In place of literary exercises, most of the members were called upon for quotations, which were well given with the author's name. The singing was very good, and under the head of the Good of the Order, several of the members made entertaining remarks. With the favorable surroundings, the W. L. does not see why this should not be one of the largest and foremost Granges in the State.

### State Grange—Session of 1886.

We continue the reports from Subordinate Granges as presented to the Secretary:

#### San Jose Grange.

San Jose Grange is still living, in fact it is a live Grange. The quarterly report contains all the statistical information of our condition and standing. I will simply remark here that, although we have not increased much in numbers, we have increased in activity, in fact we developed an energy that resulted in our expelling all drones. Those who did not attend nor take sufficient interest in the Order to pay their dues regularly were, in our opinion, better dropped from our rolls, consequently the number expelled may appear large, but those remaining are active working members.

We succeeded this year in erecting a fine horticultural hall for purposes of exhibition. It is 166x80 feet and without a pillar or pole or obstruction of any kind on the whole length or breadth of the building. It is furnished with galleries 10 feet wide on both sides of the whole length. We held a very successful exhibition of fruits and flowers on the 9th of August last, on the advent of the G. A. R. to San Jose, and I believe we gave our Eastern friends ocular evidence that all that is said in regard to the productiveness of California is not romance. To return to the inception of this enterprise, one year ago the Horticultural Society passed a resolution to hold a horticultural fair, appointed committees, met and adjourned, and repeated every week for three months. As several Grangers were members of those committees, they transferred the work to the Grange, and this transfer was made for the express purpose of securing the assistance of our sister to our enterprise, and subsequent events proved the correctness of our judgment in making the transfer. In less than a month we had a building rented and committees at work preparing for exhibits. Our Worthy Overseer visited us while it was in progress, and I think he will certify to its effectiveness.

The success of this exposition stimulated the Grange to attempt the erection of a building of their own, to be used for this purpose for all time. We have a board of directors, two of which are sisters, and those two develop more executive ability than the other seven. No reflection on the seven; it is simply in the nature of things.

FRANK DUNN.

#### South Sutter Grange.

I, as alternate representative of South Sutter Grange, beg leave to submit the following report:

South Sutter Grange, No. 207, P. of H., is situated in the town of Pleasant Grove, in the southern part of Sutter county. We are not near any railroad, and those members desirous of visiting us would necessarily have to come by way of stage or carriage. We have 62 members in good standing and most of them are staunch and true Grangers. We own a hall, which is well furnished, and also a Grangers' cemetery, which is in very good condition. We are out of debt and have money in the treasury for all current expenses. We have taken in no members lately, but had some names proposed at our last meeting. We meet the fourth Saturday in each month, but at our last session we talked of meeting in the future every two weeks. Death occasionally enters our ranks, and sometimes we find it necessary to suspend members for the non-payment of dues.

We had an average attendance of about 10 members at each session during the past year. We have our trials and disadvantages as well as our sister Granges, but if we will all have courage and "put our shoulder to the wheel," all will be well with us.

Our District Lecturer visits us occasionally, and we enjoy the companionship of himself and wife very much. The State Lecturer did not visit us during the past year, but hope to see him before long. We welcome any and all Grangers to visit as whenever convenient. Respectfully submitted,

ELLA M. JONES, Alternate.

#### Santa Rosa Grange.

Santa Rosa Grange, No. 17, P. of H., meets regularly on the 2d and 4th Saturdays of each month, at 2 P. M. Since the last session of the State Grange, the brothers and sisters of Santa Rosa Grange have been faithful to obligations, hopeful for the future of their Grange and the welfare of their Order, charitable to the needy and erring, and full of that fidelity which marks the career of worthy Patrons. The membership has increased but little during the past year, but that increase is of the most influential and valuable farmers in the vicinity. Those who are now members of Santa Rosa Grange have joined the good work for a worthy purpose, and intend to battle for the cause. There are enrolled as members 44 brothers and 45 sisters, making a total membership of 89, as



shown by the last quarterly report of the Secretary. Santa Rosa Grange has always taken a lively interest in all that tends, in any way, to develop the resources of Sonoma county, believing that therein much good is done for the Order, and that agriculture is thus made more honorable and more profitable.

The officers are generally prompt in the discharge of official work, and confer the degrees in an impressive and dignified manner. The harvest-feast is always celebrated when the fourth degree is conferred. Pomona Grange of Sonoma county gets some of its best material from the membership of Santa Rosa Grange.

During the past year the messenger of death has invaded the farm, and deprived Santa Rosa Grange of one of its laborers and faithful Patrons, Bro. John Peterson. During his prolonged sickness he was daily visited by the Relief Committee, who did much to console and comfort their now departed brother.

As long as the grand old Grange ship sails, there will be found among the membership of Santa Rosa Grange able and willing Patrons, who will be ever ready to man the helm, protect every spar and keep the colors flying from the masthead. No enemy will be permitted to tamper with the cargo, to endanger the lives or honor of any of the Patron Company, or to disgrace or hinder the progress of the ship, so long as the members of Santa Rosa Grange can prevent it. To the mystic word and well-known rap our Grange doors always swing open, and the weary but honest husbandman, or the modest Matron, is sure to find with the Patrons of Santa Rosa Grange a hearty and honest welcome.

E. W. DAVIS, Master.

#### Stockton Grange.

Number of members in good standing, 108; number of meetings in a year, 51; number of volumes in the library (of standard works), nearly 200; amount of money in the treasury, \$650; average attendance, 30.

The Mortuary Benefit is a decided success, and the assessments therefore generally promptly paid. Only two members have received the benefit, but those two show conclusively its beneficiary effect. Four members have been received this year and 16 have dropped or withdrawn, while death has removed two. Stockton Grange is out of debt. H. BOWMAN.

SISTER ASHLY, Alternate.

#### Yuba City Grange.

Yuba City Grange, No. 65, P. of H., meets at Masonic hall in Yuba City regularly on the first Saturday of each month, with such called meetings as the work demands. We have held 17 meetings during this Grange year, with an average attendance of 25 members. Members in good standing, 75; brothers 38, sisters 37. We have gained nine members by initiation, five brothers and four sisters, and lost one by death. Have held one very successful public meeting. We have a literary committee that furnishes us entertainment whenever an opportunity presents itself, at any session of the Grange; also a Musical Union, whose purpose is to drill our members in music, and furnish music on all occasions. The condition of Yuba City Grange, as compared with one or two years ago, shows a gradual improvement and healthy growth, largely due to the energy and determination of the worthy sisters. There are still many worthy persons within our jurisdiction that ought to become members of our Grange, and some means must be devised to induce them to unite with us, as we need them to make our society all-powerful for good, and they cannot afford to remain outside the gates when they once thoroughly understand the objects for which we are banded together, and the great advantage to be gained by organized effort. Personal effort on the part of each member of the Grange will accomplish all that is desired, if persistently and properly applied. And some general and systematic plan must be put in operation, and cannot be applied too soon for the Good of the Order, in our vicinity.

B. F. WALTON, Master.

TWO ROCK ON ROADMASTERS.—"H. A. X." writes the Petaluma Courier that Two Rock Grange discussed at its last meeting the subject of "Roads." The question was suggested by the number of petitions in circulation for the appointment of roadmaster. The general opinion was that the present road law was not the best by any means; but as we have it, the next best thing is to work for a suitable person for roadmaster—one who wants, and knows how to make, good roads, instead of working to get a good income out of a year's work. It was thought that the roadmaster should not only be held responsible to the people for a proper discharge of duty, but should be under the direct oversight of the supervisor of his district; consequently one should be appointed in every township. There seemed to be a general feeling that the next roadmaster should see that the money is "spent to the best possible advantage and not squandered in useless extravagance." These are some of the ideas expressed in speeches, and the following resolutions were adopted:

That we are in favor of the appointment of under roadmaster in different sections and neighborhoods to keep the roads passable and in repair, particularly in the rainy season.

That we believe that the least expenditures necessary should be made to keep up the roads, and the bulk of the money be spent for graveling or macadamizing the same.

We think the macadamizing (or graveling) should be done in the fall of the year, when farmers' teams are at leisure, so that the work can be done at the least possible expense.

## AGRICULTURAL NOTES.

### CALIFORNIA.

#### Alameda.

CHOKED WHILE CHURNING.—Haywards Journal: Wednesday morning, Miss Emma Dobbie met with an accident that nearly cost her life. She was engaged in driving a horse, which was hitched to a power, attached to the churn, when she had occasion to fix a bolt in the tumbling-rod, and as she was about to resume her position, the cape which she wore became entangled around the rod, at once tightened about her throat, and choked her until she became unconscious. Her mother soon after found her insensible, and she was soon rescued from her perilous position. It was at first thought she was beyond recovery, but energetic efforts, after awhile, brought her to life.

THE PUMPKIN CROP on the Meek ranch, Geo. Gray informs us, amounted to nearly 800 tons. The average amount raised per acre was fully 30 tons. The boss pumpkin on the ranch weighs 225 pounds, and takes three men to put it into the wagon. It is not so much the weight that floors the muscular chaps, but the shape, as a man cannot get a good grip on it. Lots of the other pumpkins required two men to handle them. A dairyman from S. F. purchased 400 tons at \$3 per ton, delivered at Roberts' landing. Nine wagons are now engaged in hauling them to the landing.

#### Butte.

NICE RAISINS.—Oroville Register, Nov. 18: For the past ten years, C. L. Durban, of Mesilla Valley, has been putting up raisins, and each year they seem better than ever before. They are made from the finest raisin grapes, are cured in the best manner, and are large, luscious, and of fine flavor. We have tested them for several years past and know that in keeping qualities they equal the finest imported raisins.

#### Inyo.

WANTS.—Independent: We want a dairy near Independence; there is not butter enough made here to supply the local market. Fresh butter supplied to regular customers the year round sells for 60 cents a roll. We want more oats, barley and corn raised here; there is not enough for the local market. These grains are now worth at least \$1.75 per 100 pounds. We want more potatoes, more apples, pears, peaches, grapes. In a word, there is not enough of any kind of farm produce raised to supply the home market, though the soil has no superior in the State and there are thousands of acres of uncultivated lands.

#### Los Angeles.

FRUIT MARKET.—Express, Nov. 20: Fruit of all kinds is a scarcity in the Los Angeles market. Grapes are rapidly disappearing. Apples, outside of Missouri importations, which have been but light, are following suit, and the smaller fruits—berries, etc.—have gone for the year. Fruiterers throughout the city report a most successful year, and say the demand for their stock has increased 100-fold in the past two years. The second blossom crop of oranges are already coming into market, 350 boxes of the delicious fruit having been sent to town by raisers yesterday. The outlook for a bountiful yield of oranges was never better, and growers in consequence are jubilant over the prospect.

RAISIN SHIPMENTS.—Telegram, Nov. 21: Seventeen more carloads of raisins were sent from Santa Ana last week, making the total sent out so far this season 39,000 boxes. Their estimated value is \$75,000.

#### Napa.

PYRIFORM PRODIGY.—Calistogan: G. W. Logan, of Montecito, on Mt. St. Helena, has exhibited in this office a pear that weighed a little more than four pounds. The tree did not bear well this year, though there were several very fine pears on it, and all were blown off and bruised during the recent high winds. The tree bore 2200 pounds of fruit last year.

#### Placer.

NEW CROP ORANGES IN MARKET.—Record-Union, Nov. 17: Gerson & Co. received yesterday several boxes of oranges of the new crop from the Newcastle Fruit Co. The fruit was large, well packed, of very inviting appearance, and attracted a great deal of attention. Naturally, there was much comment relative to the adaptability of this section of the State to the growth of citrus fruits, and an undercurrent of gratulation that the crop is so early.

RAISINS.—A gentleman just returned from a trip through the foothill region brings back a sample of raisins from the vineyard of Hayford & Lobner, at Colfax, which are of a very choice quality, and will rank high in the market. The prospects are that raisin-making will become a lively industry in that vicinity, and orchards, too, are being rapidly put out in all directions. The raisin samples are from grapes grown upon vines three years old, from cuttings.

#### Sonoma.

HOPS.—Healdsburg Enterprise: A gentleman of much experience in hop-growing and hop commission business, who visited Healdsburg last week, informs us that Russian river hops are the choicest in this State, and command the best price. They retain their strength and flavor, during hot weather, better than any other hops grown in this State.

LIVE-STOCK FOR THE ISLANDS.—Petaluma Courier, Nov. 17: James Carty has, within the

last few days, purchased here for the Sandwich Islands 17 horses and eight graded bulls. All of them are valuable animals. Up to this date, Mr. Carty has shipped 40 horses, including the above, from Sonoma county, besides other stock that we have had no inventory of. Our farmers can feed their surplus products to stock that will in the end pay them better than grain or potato farming.

CUTE COLT.—Democrat: J. B. Rue has a four-months-old colt, with its mother, at the Anteeo stables. It is not tied up, but is allowed the free range of the barn. During its wanderings Thursday, it came across a sack about half filled with barley. Unable to get away with it all, the little animal picked up the sack, carried it across the barn, a distance of at least 50 feet, and laid it down before its mother. As the latter was enjoying the barley, Mr. Sanborn chanced along, removed the sack to a distant portion of the stable and hid it. It was not long before the little horse found where it was covered up with several empty sacks, and carried it back to its mother. The colt's last feat was witnessed by Mr. Sanborn, who was so pleased with its shrewdness that he allowed the mother to finish the barley unmolested.

#### Sacramento.

COTTON.—Galt Gazette: An experiment in cotton-raising was made this year in Buckeye valley, Sacramento county. The seed was planted on the 29th day of May by Mrs. Dr. Nistscke, the daughter of a Southern planter, who is well posted in the cotton industry. The result of the experiment was gratifying, and samples of the cotton are now on exhibition in the real estate office of I. M. Smith, of this place. The pods are large, and the cotton is as fine as we ever saw raised anywhere. No irrigation was used. All the plants are strong and healthy and bear a large crop.

#### Santa Clara.

COTTON.—Mountain View Cor. Mercury, Nov. 12: I send you to-day a stalk of cotton. Not on account of its superior excellence, but to show the wonderful possibilities of our soil and climate. The plot of ground on which this, with perhaps 50 other plants, grew, is a dry, gravelly soil, 80 feet to surface water, and situated very unfavorably for the growth of anything, shaded as it is on the south by a large fig and cherry tree, and on the east by tall pine and spruce. But in spite of these unfavorable surroundings, this cotton has grown without any irrigation, and no cultivation save the two plowings in preparing the land for planting. We shall continue to plant a few seed in our flower-garden for ornament, for it is a plant of considerable beauty when it begins to open its fleecy bolls, and at the same time continues to put forth its blooms.

ACREAGE AND YIELD OF CEREALS.—San Jose Times: During the past year the farmers of this county sowed to wheat for grain 44,528 acres; for hay, 37,046—an increased acreage of nearly 4000 acres over the previous year. There were sowed to barley for grain 40,147 acres; for hay, 31,924—an increased acreage of 13,660. To oats there were sowed for grain 475 acres, and 19,476 for hay—an increase of nearly 1000 acres. The results of this year's crop as ascertained from the dealers and producers are flattering. The amount of wheat produced has not been up to that of former years, neither has the quality been up to our previous standard; still, the crop has been good. A great deal that was sowed for grain was cut for hay. Careful estimates place the yield at about 8000 to 10,000 tons. The prices obtained by our farmers have not been satisfactory, \$1.25 per cental being about the highest realized. The yield of barley has been very good. Estimates place the crop at about 20,000 tons. The quality is unsurpassed. The chevalier was unexceptionally good, while the common was much above the standard, and some reached as high as 51 pounds to the bushel. Nearly all of the last crop of chevalier was engaged early in the season by English firms. The common barley, being so fine, has been in considerable demand for the same market. This is the first shipment of common barley to England. As to oats, very little has been produced except for hay. As a grain it does not yield so profitable a crop as barley. The same may be said of rye. As to hay, this season has been very favorable, and the yield is up to the average. The prices are fair. There is very little old hay left over, and the local dealers are feeling confident of a rise in prices.

#### San Joaquin.

LEEVEE ON FIRE.—Stockton Independent, Nov. 17: A gang of Chinamen are remodeling a levee on the farm of J. M. Learned, on the Sacramento lower road. Yesterday afternoon a fire broke out in the dry grass surrounding their camp, and the flames spread to the levee, igniting the peat blocks used in the construction. The Chinamen were fighting the fire several hours before it was brought under control. It is supposed to have been caused by the careless dropping of a cigarette in the dry grass.

#### Santa Barbara.

A CURIOUS EXOTIC.—Independent, Nov. 13: Dr. L. G. Yates has a curious plant in bloom for the first time in Santa Barbara. It was sent from Panama under the name of the "Panama Lily," and had somewhat the appearance of a large scaly bulb. Mr. Tebbetts gave the doctor one of them to see what it would do. It was grown in a flower-pot, changed into various sized boxes to accommodate its growth, and was

supposed to belong to the genus *Foucroyia* until some weeks ago, when it began to throw up from its center a shoot which attained a height of some 15 or 20 feet, somewhat resembling the flower stalk of the century plant. It now has a large number of green and white bell-shaped flowers, which are very fragrant, having a peculiar, spicy odor. The doctor has some of the flowers at his office. The plant is probably allied to the Agaves.

#### Siskiyou.

GLANDERS.—Yreka Union, Nov. 10: It is reported that several horses at the railroad front afflicted with glanders are turned loose to run at large. The Board of Supervisors talk of sending Dr. Turlinger down to investigate and see whether it is glanders or not, that it may not get scattered among the horses of Siskiyou. It would be very damaging to stockmen if it once gets spread. Persons knowing horses to have glanders and not killing them are laying themselves liable to a severe penalty, as there is a strict law against allowing horses to live afflicted with glanders.

#### Tulare.

MAIZE AMAZING.—Times, Nov. 18: There is on exhibition at the office of G. A. Botsford, three stalks of corn, grown in one hill, that are 18 feet in length. They were raised on the ranch of Joseph H. Thomas, one and a half miles east of Visalia. Each stalk bears two ears of corn of uncommon size for this section of country, of the variety known as "Big White." This same variety has been known to produce 100 bushels per acre, and Mr. Thomas gathered from the 40 or 45 acres he had an average of 70 bushels per acre. He planted the crop May 1st.

#### Yolo.

HUGE FRUIT-DRIER.—Mail: Glenn & White have completed a raisin drier of 160 tons capacity for the famous Briggs vineyard near Woodland. This is the largest raisin or fruit drier on earth. It is a substantial frame structure, two stories high, and 46x136 feet upon the ground, built according to plans tested by Byron Jackson, and the design of it was made by him. He also, we believe, put in its engine, piping and machinery. The fruit is placed on trays, which are loaded on cars, which run on a track extending into the long hot-air chambers. By means of an immense blower, operated by steam, a young African sirocco is kept passing over the grapes for seven or eight days. At the end of this period the cars are drawn out and the raisins are ready for the processes preliminary to packing. The heating of the air is effected by steam. This drier will hold 36 cars or trucks, and as we said, cure 160 tons of grapes per week. It is declared to be a grand success.

GRAPE MANURE.—Democrat, Nov. 18: The farmers of Yolo county are using the refuse of the wineries for a fertilizer with good results. After the grapes have been crushed, the seeds, stems and skins are gathered up and carried off by the farmers, who dump them on their lands and plow them under. It would seem as if there was no waste to the grape, and no limit to its resources.

MUSCATELLE RAISINS.—Henry Bros., Blacks Station, have presented the Democrat office with a box of cluster raisins of the Muscatelle variety, which they have just put up, as fine as we have seen in this county. They have 75 acres of Muscates, Muscatelles and Sultanias, all in good bearing condition. They have had fine success in curing the raisins and will finish packing this year's crop of 3000 boxes in about three weeks.

#### NEVADA.

CATTLE IN MASON VALLEY.—Lyon Co. Times: N. H. A. Mason has driven from his King river ranch a herd of 800 head of steers to his Mason Valley place on Walker river, to feed during the winter months. He also drove 950 head from the Malheur country, in Oregon, to the Humboldt House, and from that place he shipped them by rail to Wadsworth, thence drove to Mason Valley. The extreme low price of hay in the Walker river country induced Mr. Mason to try the experiment of moving his steers from his northern ranges to its lower and milder valleys, for the purpose of winter feeding. He has now on his Mason Valley ranch some fine shorthorn Durham bulls, and a few days since purchased the herd of imported Hereford bulls recently on exhibition at the State Fair at Reno.

WASHOE CO. APPLES.—Virginia Chronicle: A box of apples from Smith's ranch, in Pleasant valley, was received here as a sample of the product of that locality. The apples are dark red, of medium size, and are pronounced by all who have sampled them the most deliciously flavored ever brought to this market. Mr. Smith realized \$1000 from the sale of his apple crop this season.

FAIR AT PHOENIX.—The Arizona Association has just held its third annual exhibition at Phoenix. Hon. De Forest Porter made the opening address. There were hall displays of horticultural and other products; an aquarium of Arizona fish, including carp; a stock-show, embracing Shorthorns, Devons, Ayrshires, Holsteins and Galloways—in all, a hundred head or more—and numerous races.

THE hotels in Fresno county are all reaping a rich harvest. They have not accommodation for all of their guests. This is the case in all of the counties south of Merced.





### Higher Ground.

[Written for the RURAL PRESS by MALLIE STAFFORD.]

We who live true and just,  
With aim set high,  
And feet that spurn earth's sordid dust,  
Face toward the sky,  
Who render what is due  
To God and man,  
Live Christian-like and true  
Thro' life's brief span,  
Will climb to higher ground  
As we grow old;  
Catch glimpses of heights far beyond,  
Illumined with gold.  
The love of wealth and power  
We cast away,  
And aim but for the brighter dower  
Of an eternal day.  
Passion and pride subdued  
Beneath our feet,  
Life's grandest lessons understood,  
At last we greet  
The close of this eventful stage  
That we call life.  
Is it not grand? A good old age  
With wisdom rife?  
So climb we steadfastly  
To higher ground,  
What tho' our brows serene  
Are silver crowned?  
Is it not splendor shed  
Thro' gates of gold,  
With faint reflections on our head,  
As we grow old?  
But the full flood of that sublime  
Light far away  
Is not revealed in earthly time;  
But endless day  
Breaks grandly, gloriously,  
On Beulah's crests  
As, journeying upward, we  
Find perfect rest.  
And tho' stern sorrow sends  
Trials to the soul,  
Life's darkest clouds are often gemmed  
With gleams of gold.  
Be ours forever upward!  
With longing sight,  
Until our wand'ring feet shall press  
Eternal heights.

Arcadian Heights, Napa Co.

### Miss Elizabeth.

[Written for the RURAL PRESS by ALICE DENISON.]

Not a very wonderful woman was she—any one would have told you that; only a dress-maker, and a busy one, too, ever since she had come to the bustling, practical town of Atwood, a score of years ago, and nailed the modest sign, "Elizabeth Elton, Dress and Mantua-maker," to the one broad oak that shaded her modest dwelling. People liked her, there was no question about that; her charges were moderate and her fits perfect, and there was much that was attractive in her cozy little home with its clinging vines and blossoming roses; but as to Miss Elizabeth herself, the most romantic schoolgirl would never have dared to suggest the word "sentiment" in connection with her, even had she thought it, which was not likely. Not that she was morose or haggard. Quite the contrary; there was nothing in the trim little figure in the clinging gown of gray, which had a certain style and grace of its own, to suggest that.

The soft brown eyes might have spoken volumes, but they never did, nor allowed others to. When she first came to the place, a few busy-bodies decided that she had a history and determined to learn it; but a blind mule trying to burrow in solid rock would have made greater headway. She met all their advances with sweet but impenetrable reserve, and finally they ceased to speculate about this princess in disguise, and she became simply "Miss Elizabeth, the dressmaker." She attended to her business strictly, seldom went out except to church and for a walk on the beach with her little sister Aline, who had grown in their 12 years' life at Atwood from a tiny slip of a child, with blue lakes of eyes, into a tall girl who looked as near like a briar rose as a girl well could. There was the same bloom and freshness and swaying grace. She was a girl who with an heiress' dowry would have had throngs at her feet, but who as simple Aline Elton, with no protector or fortune but Miss Elizabeth, might be charming but could never be dangerous. So thought the girls of the village who petted and patronized her by turns, or would have done so, but somehow a look from

Aline's blue eyes was sufficient to check the most supercilious. She exacted respect, and she received it. Studious at school, though roguish and laughter-loving elsewhere, she was a general favorite. The affection between the two sisters amounted almost to adoration.

Elizabeth's one thought in life was Aline, and Aline's intense desire was to become a teacher that she might loosen the bonds of the "poor slave of the wheel," as she sometimes laughingly called her sister. This was not to be wondered at, for Elizabeth had worked, thought, planned, dreamed of this one wee lamb as the only link which bound her to life, and loved her sister with a passionate intensity of which even Aline herself never dreamed. For her the small parlor was kept bright and cheery, decorated with flowers and beautified by a few fine engravings. For her, too, was the small piano, with its exquisite tone; and in the hours of dusk, when Elizabeth allowed the poor, needled-pricked fingers a few moments' rest, it was keen joy to her to listen to Aline's touch upon the ivory keys and her rich and powerful voice floating out upon the silence of night.

"Now there remaineth a rest—a rest for the people of God." How often the words of that tender chant had filled Elizabeth's soul and lifted her far above the wearisome toil of her daily life.

Ah! what a salt sea is the rolling tide of music; what pleasure it brings and what an undertow of pain. Did there come to her at these times visions of a life that had not been toil, but luxury and joy? If there did, she made no sign, and the days were filled with the dreary minutiae of cutting, fitting and planning styles for capacious patrons, who, destitute of taste themselves, were not content to accept hers without proper deliberation. Truly, a life little calculated to satisfy the higher longings of the soul, and if the patient brown eyes sometimes cast longing glances toward the Emerson and Shakespeare that lay untouched upon the small shelf surrounded by various other congenial book comrades, who could blame her? None except those who thought such books and a piano beyond "a dressmaker."

If Elizabeth dreamed that such unkind thoughts were given voice, no one ever knew it. Her real self was hidden as completely as were the actors of ancient Greece by their masks. She did her humble duties quietly and faithfully, and if the years speeding by stole some of her bloom and elasticity, no one, not even Aline, marked the change; it was so gradual. Then, too, these self-repressed natures, who constantly shrink into shadow, are easily overlooked. The flowers of such a soul must be sought. Like the wildwood fern, they are content to hide beneath blooms of ranker growth.

"Sister," said Aline, coming in one evening flushed from her walk, "here is a letter for you. I think it is from Miss Prime. Open it quickly and see."

Elizabeth opened the letter quietly. It was from her old teacher—the one correspondent she had permitted herself to retain in her changed life. What the closely-written pages contained it is not our business to inquire; one paragraph alone concerns us:

"Who do you think I met yesterday? A ghost of the past—your old friend Arthur Hanum. He asked many questions about you, and you must not be surprised to see him soon. He is changed, of course, more mature and a little gray, but to my mind handsomer than ever and very rich. Not that that changes any personality, but you and I, who have lost wealth, know what large opportunities it gives for mental culture, and Arthur Hanum, never a dunce, has naturally improved. 'A decade of years and more since he saw you last,' he said, and he has never married. Now I have no desire to meddle; I never knew what passed between you before he left; but, my dear, there comes an Indian summer into every one's life, and I think the glow of yours is approaching."

"What is it, sister? What does she say?" asked Aline, who had been waiting anxiously.

"Only that an old friend, dear—one who knew us both long ago when you were a wee girl—is in New York and will probably find his way to see us," answered Elizabeth, vexed that she could not keep the crimson flush from brow and forehead.

Aline, shrewd little puss, made no outward comment upon her sister's evident confusion, but out among the morning-glories she wove a charming little romance with her sister as heroine and this strange unknown friend hero in as fair a castle in the air as ever girl of 17 built.

I do not like to go on. I would like to leave these two sisters happy in their innocent love and wholesome toil; but if I am to tell the story at all it must be truthfully. If only one could pause when things are pleasant and not pass on to the shadows which always come!

"Why should I expect? why should I care?" said Elizabeth to herself in the solitude of her chamber that night. "He never spoke; it was only a summer's flirtation that he has doubtless forgotten. And I—am I a woman so lost to womanly dignity as to care for a man who has never thought of me save as a friend? He admired me then, but the belle of a gay circle, the beauty of 18, is a vastly different person from a faded woman of 30 and—the village dressmaker."

She pronounced the words with lingering, stinging emphasis, and going to the mirror pushed back the heavy masses of black hair

and gazed long and earnestly into it, marking every line and token of years with unrelenting sternness.

"Why, he will scarcely recognize me as Bessie Elton. I wish—I wish he wouldn't come. My past life is dead; why should its ghost arise to haunt me?"

Then, obeying some sudden womanly impulse, she took a necklace of rubies and laid them on her shining hair.

"I remember when he said these became me as a rose's crimson petals its golden heart, and then he said— But why should I recall those words of love? That was carrying our flirtation too far, too far; and he left me without one word of farewell afterward. My woman's pride shall make me spurn him, or at least treat him with cold indifference. A stranger he is and must be. Why does he come to view the wreck of my life? Was not my burden hard enough before?"

So she resolutely tried to banish him from her mind and go on with her daily tasks, and when he was announced, one evening, she made no change in her simple dress—no ribbon or flower should bring a false bloom to her faded cheek—but went into the small parlor calmly and quietly. Their meeting would have excited no comment from a stranger. A pleasant greeting between old acquaintances—that was all. But at last the inward feelings of his heart burst forth:

"Bessie—Miss Elton—is this your life? You—how can you stand it? Why have you come here?"

"To support and educate my little sister, sir," she said, with grave dignity, though her voice trembled. "Do you not know? Have you not heard of my loss of fortune, parents, and consequently of friends? I came here because I was not likely to meet those I had known. I had to work, and the taste in dress that had once been envied by a gay circle of butterfly friends now became my own support and Aline's. I had accomplishments, it is true, but so common are they that we must have starved had not my genius for dress come to the rescue. It is the bright little needle so frequently despised that has been chiefly my friend."

"Yes, and the brave soul that kept it going. Poor little hands! Brave little hands! Oh, Miss Elton, how different both our lives might have been had your answer been different in the long ago."

"I do not understand," and the brown eyes looked out questioningly from a very pale face.

"Do not—can it be? Did you not get my flowers, with their concealed note, asking you to be my wife, and wear the white roses I sent?"

"No."

"Can it be that a boy's romantic fancy has blighted two lives? Why did I not ask you instead of writing? Because I did not feel myself strong enough to hear the word 'no' from Bessie Elton's lips, and—would it have been otherwise? O Bessie! we have lost the best part of our lives, perhaps. I am but a middle-aged man, with all the fancy and fire of early life deadened, but will you not come to me and let me make up to you a part of what you have suffered? I have never forgotten you, Bessie—I never dared to hope; when I left I could not say farewell, but all these years your bonny brown eyes have been a beacon light in my memory. Let us forget the past and begin a new life in the present."

Elizabeth's face was very white, but her voice was firm when, after a moment's pause, she answered:

"No, Mr. Hanum; the tide of 13 years cannot roll by without leaving its trace. Your life has been one thing, mine another. You have spent the time in the accumulation of knowledge, the improvement of your intellect. The few locks of white upon your brow were not caused by agony of soul. You stand today in the prime of your manhood, while I—well, I," she said wearily, "am old. Women age so much more quickly than men, and my life has been one of constant toil. There has been no time for mental growth or expansion, and so you see, Mr. Hanum, that it cannot be. I thank you for the offer, but I am no fit wife for you now. Besides, think what would be the world's verdict upon your nuptials with a dressmaker. Nay, I know what you would say; but wait. If, after we have had a little time to grow into a knowledge of each other, you still desire it, I may consent; but not now. I would wed no man to lower his pride by my presence, and I am sure that you will agree with me after a time."

This was Elizabeth's answer which his earnest entreaties could not change. He was a friend, and was received on that footing alone.

The days passed swiftly and pleasantly away, and the dainty work grew under Elizabeth's swift fingers. The strange new influence that had come into her life was bringing light to her eyes and bloom to her cheeks. What a wonderful beautifier is love! It was never spoken of, but it brightened Elizabeth's life in a thousand ways. Dainty baskets of fruit and flowers found their way to her home, and some way there seemed more time for the writers she so loved. Read aloud by his pleasant voice, they gained a new meaning, and through the chain of their lives wound Aline in and out like a shining thread. Mr. Hanum seemed charmed with her, and nothing pleased Elizabeth so much as to watch the growing friendship between the two.

One night she sent them away for a walk and remained behind to finish a piece of work.

Completing it, she thought to give them a pleasant surprise, and walked out to meet them.

She saw them sitting on the sand watching the sunset on the sea; and walking softly, so as to startle them into merriment, some words caught her ear, and she paused, unable to stir from the spot.

"O Aline! will you not be my wife? I love you so! Can you not love me a little? Only say yes, and your life shall be one dream of delight."

The listener swayed as if about to fall, but by a strong effort controlled herself.

Aline's voice broke the stillness.

"But, Mr. Hanum, I thought you were engaged to my sister. She loves you, I am sure."

Then he told her, in low, eager tones, what the reader already knows, pleading with her to become his wife.

"And your sister shall never be separated from you, dear. She shall be my care as well as yours, for she is noble and true."

Elizabeth heard no more. Back to the house she went, fast, lest she fall by the way.

"O my Father!" she prayed—"my mother's God! Help me never to let them know. Yes, it is best so. My sweet Aline! She will be happy. I have not toiled in vain. She will make him happy, too, and be a far more suitable wife than I could ever be."

Did the tempter whisper, "She in her fresh young beauty could win any love and be happy—why should your love be sacrificed?" If so, she fought him back.

"For Aline's sake," she whispered. That had been her watchword through all the toilsome years, and she murmured it still over and over through the martyrdom of her rejoicing with the happy pair.

For Aline's sake the dainty laces grew into a robe of beauty, a wedding garment fit for the lovely girl. Elizabeth did as she had always done—she threw her whole heart into her work, and at last it was finished and the time had come. Aline looked like a spirit in her cloud-like dress, and she kept tight hold of her sister's hand until led to the altar.

"Stay by me, dear. You always have, and I am frightened," she said.

Elizabeth was very calm, very quiet, and she encouraged her sister by a few sweet words that sent the color back to the flower-like face. I think I have never seen such a look of perfect peace on any face as that which Elizabeth's wore as she waved the bridal pair good-by from the little porch.

They found her next morning, with the same sweetness of expression still on her face, dead, in the little room which the sisters had occupied together.

"Heart disease," the doctor said. Perhaps it was.

### The Horsewoman.

At the Ladies' Tournament during the late Ventura Fair, Mr. C. L. Woods, of San Luis Obispo, one of the judges, recited the following verses of his own composing:

FAIR LADIES: Since it is a pleasant duty Of man to worship at the shrine of beauty, Since all we gain by argument or arms We count as dross compared to woman's charms, You will perhaps the better understand The task your humble servants have in hand.

The horse—that beautiful servitor of man— Bearing his rider in the battle's van, Proudly advances through the smoke and flame To victory, to glory and to fame; Or, if upon the turf he goes for meed Of proud pre-eminence in point of speed, He nobly strives to win fair honor's place, And be the first and foremost in the race.

But though upon the turf or on the field, Our admiration to the horse we yield; Yet still some charm he ever seems to need— 'Tis woman's grace that beautifies the steed.

The broad Pacific, with its ceaseless roar, Sends wave on wave upon Ventura's shore; Yet though each wave be powerful and grand, Moving majestically toward the land, Something each lacks, until before our eyes A crest of silver flashes to the skies, Making of it the ocean's mighty swell— Grand in itself, and beautiful as well.

So we admire the horse, whose strength and pride In various ways so often have been tried; But when fair woman lends her charming grace To guide his course, to regulate his pace, Ah, then, where we admired so much before, To tell the truth, fair ladies, we adore.

PROPAGATION OF FLIES.—Their particular office appears to be the consumption of those dead and minute animals whose decaying myriads would otherwise poison the air. It was a remark of Linnaeus that three flies would consume a dead horse sooner than a lion could. He, doubtless, included the families of the three flies. A single fly, the *Naturalist* tells us, will sometimes produce 20,000 larvae, each of which, in a few days, may be the parent of another 20,000, and thus the descendants of three flies would soon devour an animal much larger than a horse.

A SCIENTIFIC CURIOSITY.—One of the curiosities of light and heat is the fact that rays of the sun should pass through a cake of ice without melting it at all, as is the case when the thermometer stands a little above zero. That the rays of heat actually penetrate the ice is shown by the fact that a lens of ice may be used for setting fire to inflammable substances.



## What I Saw at a Fair.

[Written for the RURAL PRESS by S. P. SNOW.]

I saw the races. I saw them all the afternoon. I went with the full determination that if there was good in them I would find and enjoy that good. But, alas! I saw it not. Of course, I must be wrong; for when so many of the best people find so much that is praiseworthy in them, the good must be there. I must have been born with a sense lacking—the sense of horse-racing—for I could find no sense in it.

"But we want to speed our horses; we want to breed from those of most wind, and bottom, and speed."

"Then run against time, and save all this costly track and soul-killing excitement, and loss of time."

"Pshaw! there would be no interest, no competition, no effort, and the whole fabric of your fair would dwindle to nonentity."

But about what I saw. The first thing I saw was a man being dragged over the sand, behind his broken cart and his foaming steed. A wild cry of excitement ran through the multitude, for we are a sympathetic people. There was hurrying to and fro; the immense crowd rolled like the heaving billows when the roaring winds of an eastern storm strike the waters. There was mounting in hot haste; the steed and horsemen flew to the scene of the mishap. There was silence for a brief moment; brave men and fair women speaking with bated breath, when word was passed along that "the man's back was broken—nearly;" then, "he is not much hurt, only badly bruised and barked;" then, "he is all right, and will soon take another cart and try again." Better luck next time.

Still I stayed on, hoping to see better things ere long. There was an auction—selling "pools;" whatever that may be I am sure I don't know. I asked a country friend, but he was ignorant as I about it. He seemed to think it some kind of a "sell," and a little boy cocked up his eye in a very funny manner, thrusting his tongue into his left cheek, and said: "You bet." But this I never do.

"Five, five, eight, ten, ten, ten dollars, and sold to Mr. A.; name your horse. First choice, two, three, three, five, five, five dollars—sold to Mr. B.; what horse?" and thus on at intervals all the afternoon. I hope there was no gambling or betting in all this; at least I didn't see any money put up or change hands. Somebody says: "He who is willing to take money for which he returns no honest equivalent is not on the road to the highest level of morality." But I dare say he was an old fogey anyway, and lived in the remote ages.

But soon other races were made up and run, and others and still others to the long, dismal, bitter end. I saw a couple of wires stretched across the track, which I at first thought were for the horses to jump over, as they have the "Flying Dutchman," I believe, and "Lightfoot" and so on, but I think they must have been for some other purpose, as none of them attempted the feat.

When the first racer swung round the circle there would come up an awful yell from the crowd, and I would look round to see what had broken loose, but I soon saw it was only because his horse outran the others by a length or two. Pshaw! I'll warrant Bonner's horse could do even better, and if he could I would care not a snap, nor yell like an idiot.

"Time, three hours and a quarter," says somebody they call Judge, in a high, airy building, and the rabble laugh. "Three minutes and a quarter," says the Judge, thinking he had made a mistake.

There were a great number of people to see this little bit of fun, fair women and brave men; I counted, I think, some 75 carriages, and there were likely 25 more that I didn't count. A few dirty oaths went hurtling through the otherwise pure air, but the assemblage was quite curt and polite. Some of the best citizens were there; I was there myself. I saw, or tried to see, all, but alas, in vain. I went away with my fingers in my mouth, and my spirit in the dust. I was disappointed, dejected, sad and despairing, without joy and without hope. For I know that the county must have race-horses; it is, in fact, her greatest need. The worthy president has made diligent inquiry (he must, unfortunately, have as little taste for horse-racing as I, or he would have gone himself) and hears of no fighting, no quarreling, no drunkenness, at the race-course. Would it be a work of supererogation to say the same of other portions of the fair grounds?

I left the race-course with thoughts too full for utterance, and returned to the pavilion. Here, indeed, was beauty, and the incubus was soon swept from my mind. Here was nature, here was art, here was culture and skill; here was wonderful advancement and progress, and my soul was satisfied. I said in the fullness of spirit, "Our fair is a grand success."

ANCIENT ENGINEERING.—One of the most extensive and remarkable works of the engineers of Ancient Rome is the Cloaca Maxima, well known as the great common sewer of that city. It is of Etruscan architecture, and still serving its original purpose, is as firm as when its foundations were laid. It was built at least 2400 years ago, and is one of the few monuments of Rome whose antiquity has never been assailed.

## YOUNG FOLKS' COLUMN.

## With All His Might.

Charlie Haines' short, curly hair stood almost upright about his young head as he clutched it in his endeavor to get some aid in mastering the long rule in division. He had been making this grand effort to study for about ten minutes, and as the day was bright and beautiful, and Saturday at that, the minutes seemed like so many hours. He sat on the porch outside the sitting-room door, so his eyes were much more frequently on the garden than on his book, and his thoughts were more than a mile away at a quiet little stream where he often went to catch fish, and where he was going this morning if the arithmetic lesson was ever learned.

"I can never get this, mother," he called into the window.

Mrs. Haines looked out.

"Are you trying with all your might?" she asked.

"I can't any way," he answered, evasively.

"I am afraid you have already forgotten the text you learned last Sunday."

"O mother! that said 'hand,' not head."

"Whatsoever thy hand findeth to do,"

"So you are willing to give the Lord your hands, but not your head?"

Charlie muttered something about doing just what the Bible said, and began repeating the rule like a parrot, without any sense of what the words meant. After awhile he could say a few lines stumbly, when not looking on the book; and he cried out:

"I know it now, mother."

"You do?"

"Yes, ma'am; I really do. May I go fishing now?"

"Yes, and when you come back I shall hear you say the lesson."

He bounded up with an "All right," rushed into the sitting-room, and tossed the book upon the table.

"Does not 'with thy might' mean doing it right?" Mrs. Haines asked.

Charlie put the book in its proper place on top of the other schoolbooks.

"You make so much of that rule," he almost complained.

"Isn't there much in it? When we talked about it last Sunday evening, we concluded that it was a most perfect guide to all our actions."

"Yes ma'am," Charlie's always-respectful lips answered; but he secretly wished he had not learned that verse last Sunday, or talked about it in the evening, for his mother had all the week tried to make him guide his life by it. "Is my lunch ready?"

"Dinah will give it to you."

He kissed her good-by, and went into the kitchen, where Dinah, the colored cook, gave him a very large lunch in a very large basket, which basket he was to bring home filled with the fish he was to catch. With this basket in one hand, the fishing-rod in the other, Snap, his pet dog, following, he set off, a very happy boy, the rule in division all forgotten. It was a long walk, but Charlie was doing it for his own pleasure, so he did it with all his might. The creek where he fished was not a deep one, so there was no danger of his drowning, even if he fell in. He baited his hook, and waited patiently for more than an hour, but no fish accepted this gracious invitation to dine. Snap played about, chasing the butterflies, then lay down to sleep. Long before noon Charlie was weary of fishing without catching anything, and very hungry; so Dinah's ample lunch was taken from the basket.

"I think Dinah put up this with her might," he said to himself, "and I'm glad she did. Somehow when people do things with their 'might' and just as they ought to it's nicer for me. I wonder if it's nicer for mother when I do, and if the Lord does like it better. Want more, Snap? You're glad Dinah did it with her might, aren't you?"

The lunch over, Charlie and Snap went to sleep, while the line lay in the water to catch the fish the best it could alone. Charlie slept an hour, and when he awoke, proceeded to give Snap a lesson in sitting up. Poor little Snap was very sleepy after his big dinner, and felt like anything but sitting upright on his haunches for Charlie's entertainment; but he made great efforts, and finally succeeded.

"There!" cried Charlie, lying face downward, resting on his elbows, his heels high in the air, "I knew you could do it if you tried with all your might. All your might. That's just the way mother says I must do my duties. There! Sit up. Don't go down. Sit up! You're got to learn this lesson well before I let you go."

Snap gave a feeble bark by way of protest, and sunk on his forepaws, but Charlie set him up again, and made him sit there until he was not only able to sit up well, but to raise himself up. It was a tired little dog that was at last permitted to lie down.

"You've learned your lesson, any way, if you are tired," Charlie said to him. "I wonder if you hated it as much as I hate that rule in division; because if you do, why, you've done better than I have, that's all. I say, Snap, you did it with all your might, didn't you? If I had studied with all my might this morning, that rule would be learned now."

Charlie lay on the grass looking up to the blue sky, thinking for some time, while Snap rested beside him. He bounded up at last,

and suddenly drew his fish rod in with a jerk. "Come on, Snap!" he called. "We'll go home, and I'll get that arithmetic lesson. You're not going to beat me, old fellow. You tried with all your might to learn your lesson, and you learned it. That's what I'm going to do."

Mrs. Haines was more surprised to see him home early than to hear that he had caught no fish.

"I've come to learn my lesson," he said. "Mother," he added gravely, "I've been thinking about the verse, 'Whatsoever thy hand findeth to do, do it with thy might,' and I'm going to try to do with my might everything I do."

And he kept his word.

## GOOD HEALTH.

## To Prevent Diphtheria.

The Ohio State Board of Health have published a pamphlet, which urges the strict observance of the following rules:

1. When a child has sore throat with fever, especially when diphtheria is present in the neighborhood, it should be kept apart from others until a competent physician has determined it is not diphtheria.

2. When a person is known to be sick with diphtheria, he should immediately be separated from all others, excepting his attendants, and removed to a room which should be specially prepared for his occupancy.

3. This room should be prepared by removing from it all superfluous furniture, carpets, books, window curtains, and all similar articles not needed in the room. It should be as remote as possible from the family rooms—preferably in the upper story—and care should be taken to secure an abundance of fresh air, without exposing the patient to direct drafts.

4. No one should be admitted to the sick-room, except the necessary nurses and attendants.

5. No food or drink which has been in the sick-room should be partaken of by the well. The dishes carried in should be washed separately.

6. Under no circumstances should the bed-clothes or the patient's body linen be mixed with the other soiled clothing, or be admitted to the general wash, without being first thoroughly disinfected.

7. All persons recovering from diphtheria are dangerous, and should not be permitted to attend school, church, or public assembly, until, in the judgment of a careful physician, they are no longer a source of contagion.

8. No public funeral should be held of any person dying of diphtheria. In no case should any child be permitted to attend.

Then follow general instructions on disinfection, with rules for prevention of the disease, etc.

IS THERE A TOOTHLESS TIME COMING?—The American tooth, the dentists tell us, is something fast disappearing. What is to take its place they leave to conjecture. Whether a toothless race is on its way, or whether a new animal is to be evolved from the present human creature on this continent, is perhaps an open question. Whatever it is that may come to pass, the fancy recoils before the prospect. Children of 12 years often have \$100 worth of gold in their mouths, others needing as much quite as badly, but unable to afford the outlay. Children of 16 often wear complete sets of false teeth and other children innumerable have teeth that are decayed before they penetrate the gums, and that have to be filled as soon as they are in sight, the crumbling material and thin enamel, even then, giving but little to work upon. At first it was thought all this resulted from ignorance, from candy eating, from want of care and cleanliness. But it is now understood that in most cases the fault is inherent in the quality of the tooth, and the only remedy so far suggested is a diet calculated with special reference to the making of sound bone. This is supposed to be found in the coarse grains and food of similar character, and the most confirmed beef-eater alive yields to the superiority at this point of the little kernel of grain that feeds his beef itself.—*Harper's Bazar*.

SIGNS OF THE TONGUE.—The tongue is the indicator of the system. A white-coated tongue indicates febrile disturbance; a brown, moist tongue indicates disordered digestion or overloaded *prima via*; a brown, dry tongue indicates depressed vitality, as in typhoid conditions and blood poisoning; a red, moist tongue indicates debility, as from exhausting discharges; a red, dry tongue indicates pyrexia, or an inflammatory fever; a "strawberry" tongue, with prominent papillae, indicates scarlet fever or rotheln; a red, glazed tongue indicates debility, with want of assimilative power of digestion; a tremulous, flabby tongue indicates delirium tremens; hesitancy in protruding the tongue indicates concussion of the brain; protrusion at one side indicates paralysis of the muscles on that side.

STOPPING HICCUGH.—A Brazilian physician states that refrigeration of the lobe of the ear will stop hiccough, whatever its cause may be. Very slight refrigeration will answer, the application of cold water, or even saliva, being sufficient.

## DOMESTIC ECONOMY.

HOW TO KEEP CIDER SWEET.—Pure sweet cider that is arrested in the process of fermentation before it becomes acetic acid or even alcohol, and with carbonic acid worked out, is a most delightful beverage. The following scientific method of treating the cider to preserve its sweetness is recommended: When the saccharine matters, by fermentation, are being converted to alcohol, if a bent tube be inserted air-tight into the bung, with the other end in a pail of water, to allow the carbonic acid evolved to pass off without admitting any air into the barrel, a beverage will be obtained that is a "fit nectar for the gods." A handy way is to fill your cask nearly up to the faucet, when the cask is rolled so that the bung is down. Get a common rubber tube and slip it over the end of the plug in the faucet, with the other end in the pail. Then turn the plug so the cider can have communication with the pail. After the water ceases to bubble, bottle or store away.

WHY ENDURE STARCH-SCRATCHING?—"I was once riding in the cars through Kansas," remarked a gentleman, "and suffering excruciating misery from a pricking, irritating little point of starched stuff, such as a careless laundress will sometimes leave on a shirt band. I pulled, and rubbed, and tried to smooth it down; but the plaguey thing hung there, and I was fast losing all interest in life. At Topeka a gentleman got on board having on a fresh shirt. I saw him rub his sleeve once or twice with an air of annoyance. Ah! thought I, a fellow-sufferer. And I felt somewhat comforted. But suddenly he walked to the water tank, wet his fingers, ran them up his shirt sleeve, and returned to his seat with the air of a wise man made perfectly happy. It was a revelation to me! He had wet down the starch prickler. Years of happiness have been added to my life by that man."—*Exchange*.

RAGOUT OF BEEF.—Cut cold underdone beef into neat dice, lay in a pot with minced onion, parsley and enough gravy or broth to cover it. Cook very slowly at the side of the range until tender, stir in a lump of butter the size of a walnut, rolled into a tablespoonful of browned flour, the juice of half a lemon, a teaspoonful of Worcestershire sauce and half a glass of wine; simmer one minute and turn out on squares of fried bread. If you have no gravy ready made, make it out of the refuse bits of skin, gristly pieces, etc.

APPLE MERINGUE.—Two cups of strained applesauce, four eggs, four tablespoonfuls of sugar for the sauce, one for the meringue; one tablespoonful of butter stirred in the sauce while hot; some good pie crust; grated lemon peel for seasoning; beat four yolks and two whites light with the sugar, and whip with the sauce; have ready a pie plate lined with nice crust, baked; fill with the mixture, spread with the meringue made of the remaining whites and sugar; brown lightly and quickly in a hot oven; eat cold.

LITTLE DUMPLINGS.—This recipe for little dumplings for stew requires sour cream and sour milk or buttermilk. Half a pint of buttermilk or sour milk, half a pint of sour cream, one teaspoonful of soda in the milk, two well-beaten eggs, a little salt, and flour enough, with which is sifted one teaspoonful of cream of tartar, to make a stiff batter. Drop the batter by the spoonful into boiling water, boil for 20 minutes until the outside is done, and put in the dish with the stew.

FRESH VEGETABLES SALTED DOWN.—Sweet corn can be salted in brine for winter use, first boiling and skimming the brine and then immersing the corn in it after it is cold; a flat stone should be used to keep the corn under the brine, and before it is used it should be freshened to a palatable degree by soaking in fresh water; the brine should contain all the salt it will absorb. String-beans, asparagus and egg plant may be similarly kept in brine for winter use.

DANISH PUDDING.—One cup of pearl tapioca, one pint cold water, one pint boiling water, one-half cup sugar, one-half teaspoonful salt, one cupful of currant or some acid jelly. Soak the tapioca in the cold water over night; in the morning put it into a double kettle with the boiling water, and cook an hour, or until transparent; stir often, add the sugar, salt and jelly. Stir well and put into a mold to cool. Serve with cream and sugar.

DRIED APPLE CAKE.—Two cupfuls of sweet dried apples, soak over night and chop; two cupfuls of molasses, and let it simmer over two hours; when cold add one cupful of sugar, two eggs, one-half cupful of sour cream, sour milk and butter, two teaspoonfuls of soda, four cupfuls of flour, four teaspoonfuls of cinnamon, one teaspoonful of cloves and one nutmeg.

PANCAKES (WITHOUT MILK).—Make a batter of four eggs, three tablespoonfuls of flour, a little water, a pinch of salt, and a little very finely chopped lemon peel; put some good frying oil into a frying-pan, and when it boils, drop some of the mixture into it; fry on both sides, drain it, sprinkle with powdered sugar and lemon juice; roll it and serve very hot.





A. T. DEWEY.

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Published by DEWEY &amp; CO.

Office, 252 Market St., N. E. cor. Front St., S. F.  
Take the Elevator, No. 12 Front St.

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W. B. EWER.

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SAN FRANCISCO:

Saturday, November 27, 1886.

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## The Week.

We print the RURAL one day earlier than usual this week, so that our employees may have opportunity to enjoy the Thanksgiving holiday. The papers will not reach readers until after they have made their conquest of turkey, and we trust that naught will remain of the day but pleasant memories. The American people can generally be trusted to make quick work of the turkey problem, and American methods could be safely commended to the Czar.

Saturday of last week brought the widest-reaching storm of the season. It was quite a cold rain and brought from the north some of its normal temperature. Its extension south was at least as far as Los Angeles, where over an inch of water was precipitated. Heavy snows fell on the Sierras—in fact, snow was telegraphed as far eastward as Ogden. On the other side of the continent there was a complement to our storm, snow and rain being reported at prominent points all over the great west. Overland passengers arriving on Sunday dropped from the snows on the mountains into the bloom and verdure of the Sacramento valley—an experience which is becoming very

common, and yet one of which one never forgets his first impression.

The winter may now be considered fairly begun. The weather prophets announce heavy storms as forthcoming, and the working season in California is about to begin in good form.

## The Care of the Poor.

This is a problem that always presses upon the attention of the benevolent in our cities and large towns, especially during the winter. Even in this mild climate it gives much solicitude. In Cincinnati the question has received a solution, which, if not perfectly successful, is so generally satisfactory that a brief account of it may be of interest to our readers.

It was found there, as may be found in every city, that there were large numbers of persons securing aid from various sources, many from several churches or a number of individuals. Many of these habitual beggars were actually accumulating money in this way. Each church, of course, helped its own poor, as they do in all cities. But there were no facilities for knowing whether others were not aiding the same individual or families. Begging from door to door had become a positive nuisance, it was so extensive. There was much indiscriminate giving, and poverty and pauperism seemed to be fearfully on the increase. It was apparent that the money bestowed in this way was doing more harm than good. Under these circumstances, an organization was formed that is known as the "Associated Charities of Cincinnati." This article of the constitution describes its purpose:

Its object shall be the improvement of the condition of the poor. It will aim, first, to secure the proper relief of all deserving cases of destitution; second, to protect the community from imposture and fraudulent begging; third, to prevent indiscriminate and duplicate giving; fourth, to make employment the basis of relief when practicable; fifth, to reduce vagrancy and pauperism and ascertain their true causes.

There is a central office conveniently located, where a paid superintendent may be found who oversees the whole work under the direction of a board of managers. The city is geographically divided into 12 districts. Each district has a sub-board of directors who meet monthly in a centrally located office. This office is open about three hours every day, usually under the direction of a woman, who has a corps of volunteer visitors who carefully investigate every application for aid. Blanks are furnished each district superintendent on which to systematically report a full account of every person applying for aid to the central office. There a minute record is kept, so that any one in a few moments may learn all about the one applying, what aid he had or is receiving; what is his character, how long idle, etc. A circular, giving a list of all the districts with their boundaries, is freely distributed to all citizens. In that circular they are requested not to give to beggars, but to send them to the nearest office.

Now this system may seem a little bit formal, but according to the Cincinnati papers it works admirably. Street begging in that city has nearly disappeared, and the worthy poor are wisely aided, with clothes, food and work when possible. Duplicate charities, to the manifest injury of all concerned, are practically unknown. The churches generally heartily co-operate with the society, and are hence relieved of much responsibility. They are at least protected from professional frauds. The system, or one embodying its main features, is worthy of trial in all cities. This city is now infested with tramps and beggars; even little ragged children are sent out to solicit charity under various pretenses. They crowd around the rooms of the various benevolent associations, they flock around the station-houses at night begging for a place to sleep. An organization like that at work in Cincinnati might greatly reduce this amount of pauperism by weeding out the unworthy, and prove of benefit to the community by the judicious bestowal of its charities.

BULL BUTTER BULLETINS.—A bill passed both houses of the Vermont Legislature last week providing that all hotels or restaurants using oleomargarine shall put up large signs notifying the public of the fact.

The branch of the S. P. R. R. from Newhall is progressing rapidly toward Ventura.

## Hessian Fly-Proof Wheat.

EDITORS PRESS:—Mr. A. Y. Moore, of Tulare City, years ago a mill-owner and a merchant in Michigan, gave me an interesting statement regarding the introduction in that State of what was termed "Michigan Amber Wheat." In 1838 he obtained, from a distant friend, a pint of Mediterranean wheat, and after sowing it several years, and grinding it in their mill, he and his brother concluded it would be a disadvantage to have it grown by farmers in the vicinity, as the flour was not so white as some other kinds. But when it was finally found to be exempt from destruction by the Hessian fly, they sold it rapidly and profitably at double the price of ordinary seed wheat. A gradual but decidedly favorable change in its character and productiveness came with its repeated reproduction, and so far as Mr. Moore is informed, it remained uninjured by the destructive fly.

The leaves of this wheat, where they joined the stalk, possessed a flange so bent, it is said, that when the eggs of the maternal insect dropped, they were caught in a rounded recess and prevented from falling into the V-shaped recess formed by the leaf and stalk of other varieties of wheat, and where the eggs are usually hatched.

Mr. Moore was for years president of the State Agricultural Society in Michigan, and one of the organizers and directors of the State Agricultural College or University. We hope he will soon write for the RURAL, giving information on some of the important topics mentioned during our brief interview, and also add to the hasty notes taken as above.

These statements by Mr. Moore are certainly of interest, and we shall be glad to hear more from him. The facts he recites about his experience with fly-proof wheat being known as long ago as 1836, are corroborative of statements on record in Eastern publications. The Bulletin No. 4 of the U. S. Entomological Commission is a comprehensive compilation by Dr. Packard of all that has been observed of the insect since its introduction by the Hessian mercenaries during the Revolutionary war. It is shown that the "Underhill variety has for nearly a century been highly recommended." Dr. Fitch, State Entomologist of New York, stated that its fly-proof qualities were supposed to be due to the hardness or solidity of its straw. The fly laid its eggs freely upon the leaves, but it was seldom, if ever, materially injured by it. Throughout the Middle States a so-called "Mediterranean wheat" has long been in high repute for its fly-proof and hardy nature. In this district the "Lancaster," also a red variety, has been claimed for years to have been exempt from the fly. In Michigan, in much later time than that cited by Mr. Moore, the "Clawson" has become famous as a fly-proof wheat, and red varieties generally have done well in this direction.

The experiments at the University described in Bulletin No. 53 of the University Agricultural Experiment Station, and published in the RURAL in October, were undertaken to show how far varieties would prove resistant in this State. The records of these experiments will be published in the report of the College of Agriculture for 1886, and they will show that some varieties claimed to be resistant east of the Mississippi were so badly infested here as to be a failure. Such varieties are the Fultz and Molds Red. The Clawson, which is so highly praised in Michigan, is looked upon as a failure in New York, and in the University experiment the Clawson is recorded as "badly infested." This would seem to indicate that there is something in local conditions of growth, etc., as well as in the characteristics of a variety.

We are inclined to think that the reason advanced by Mr. Moore for the exemption of certain varieties has not been approved by later investigations. The eggs are not literally dropped by the female fly, but are carefully placed upon the surface of the leaf with her ovipositor and are firmly held to the leaf by a gummy secretion which accompanies them. Thus the fly sometimes places the eggs on the under instead of the upper side of the leaf, and they remain where placed. It is after hatching that the maggot makes its way downward between the sheath and the main stem. It is doubtful whether a maggot hatched from an egg on the under side of the leaf would ever get to its desired location, but might reach the ground instead. As for the downward turn of the leaf in certain varieties being the reason of their safety, a rather more rational explanation is mentioned in a letter from William Strong, of Kalamazoo, Mich. (Bulletin No. 4, U. S. Entomological Commission, page 14), in which he says: "A reason given by some why the fly does not injure red wheat as much as white is because the leaf of the red grows so long and slants down from the shoot so that when the egg hatches the maggot works down the wrong way, falls to the ground, and so many fail to

harm the wheat." In our opinion the fly-proof qualities of certain varieties rests, as Dr. Fitch intimated, in the character of the stem of the plant rather than its acting as a pitfall for the larvae in any way; but the matter has not reached demonstration yet, although the problem is about as old as the nation. What Mr. Moore says of the improvement of the red wheats from the Mediterranean countries when grown in this country is especially true with reference to California. They rapidly become more starchy, and consequently whiter and more acceptable to the millers.

## Ex-President Arthur.

The death of ex-President Arthur takes the country by surprise. Though it was known he had been an invalid for a year, still, as no definite account had been given of his disease, the hope was generally indulged that his unusually robust constitution would pull him through.

He was born in Fairfield, Vt., in October, 1830, and was therefore 56 years old at the time of his death. He had received the advantages of a collegiate education, went through the usual transmigration of a school-teacher to the profession of the law. His legal attainments and abilities were respectable, but he was chiefly known as a shrewd and successful politician. Nature was kind to Arthur. He possessed a fine physique, an amiable temper, and his instinctive urbanity made him many steadfast friends. He first became known to the public as quartermaster-general during the administration of Governor Morgan, where he rendered good service. He was indefatigable in efforts to enlist troops in his State and furnish them with abundant supplies during the Civil War. He occupied a seat in the New York Legislature for one session, and under the administration of President Grant won that some of all New York politicians, the New York custom-house. We are not aware that his integrity in this position was ever suspected. He was removed by President Hayes because he was indisposed to sternly apply the doctrine of civil service reform. This removal so exasperated Senator Conkling that, as a rebuke, he pressed Arthur's nomination for the Vice-Presidency at the Chicago convention in 1880.

No man ever came to the executive chair under more trying circumstances. It was well known that he was an ardent friend of Senator Conkling, had warmly espoused his quarrel with President Garfield, and was even in the conspiracy to re-elect Conkling and Platt. In a few weeks Garfield was no more. Since the tragic death of Lincoln the heart of the nation had not been so sadly stricken. Death apotheosized him, and yet such were Arthur's amiable discretion during Garfield's long sickness when the Government was practically without a head, his prudence and eminent good sense on coming into power, that he soon won the confidence and esteem of the people. His great urbanity and courtly manners were the charm of Washington society. Never were the sociabilities of the White House more brilliant. He was an ardent Republican, true and loyal to his friends, and his record is one that the nation may remember with gratitude and pleasure.

THE PORK PRODUCT.—From statistics at hand it appears that the great Western pork product will be larger than usual this year, and that even in the face of increased production prices are better than last year. The Cincinnati Price Current shows that the total number of hogs packed, at eight leading packing centers, from March 1st, is 4,445,000 against 3,820,000 a year ago, making an increase of 625,000, and for the entire time since Nov. 1st, an increase of 465,000. The export movement is liberal, especially so of lard, exceeding the corresponding time of last year in both meats and lard.

THE project of the Santa Rosa & Benicia R. R. is being pushed with vigor. A meeting in its behalf, held at Santa Rosa on Monday, is reported large and enthusiastic. Forty-five thousand dollars had been subscribed in one week. Other meetings are announced elsewhere.

FIRES in woodland, brush and stubble occurred frequently in various quarters during the dry, windy time preceding last Saturday's rain. In some cases the losses of wood, hay and fencing were quite serious.



## The Convention and the Shipping Problem.

### Earnest Consideration and Promising Accomplishment.

Perhaps the most important direction in which the effort of last week's Fruit-growers' Convention in Sacramento was put forth was the attempt to improve the arrangements for shipment and sale of California fruit at the East. Very satisfactory work was also done in other important matters, as will appear in due time in our columns, but as we look upon the perfection of methods for the disposal of our surplus product at the East as the safety-valve of our high-pressure orchard extension, we select this branch of the convention's work for special consideration in this issue. And in introducing this matter we find it impossible for the RURAL PRESS to refrain from expressing its satisfaction at the result (as shown by the discussion and action of the convention) which has followed our enlistment of Capt. H. Weinstock, of Sacramento, as a special correspondent and commissioner for the careful investigation of the existing state of marketing California fruit at the East. The discussions showed that his letters had been carefully studied by the fruit-growers and his conclusions approved, and the leading part which Capt. Weinstock took in shaping the expression of opinion by the convention, and his forcible exposition of important considerations involved, was assurance to all of his mastery of the problem which he took upon himself to advance toward solution. These facts were apparent all through the meetings, and hardly needed the formal approval of a vote of thanks which was unanimously extended upon motion of Mr. Gray, of Chico—although such a vote was a graceful and appreciated act.

The management of the convention set apart the afternoon of Wednesday for this subject: "How the fruit-growers are to dispose of their fruits without coming in competition with each other as to prices for the same quality and kinds of fruits." The discussion was opened by the presentation of a preamble and resolutions by Capt. Weinstock, of which we give in this paragraph those parts which were adopted at that session:

WHEREAS, This season's experience has demonstrated that the following serious evils exist in our methods of marketing green fruits in the East:

First. The provision exacted by transportation companies that 15 carloads of fruit must be shipped at a time to obtain a \$300-rate from California to Chicago.

Second. The excessive freight rate from Chicago to such Eastern points as New York, Philadelphia or Boston.

Third. The precarious and uncertain time on which fruit trains are run between here and the East, frequently causing delays of from 12 to 36 hours, and thus seriously depreciating the value of the fruit before arriving at its destination.

Fourth. The lack of a sufficient number of cars adapted to the fruit-carrying trade.

Fifth. The lack of regulated distribution, the want of which has, during the past season, caused as many as 20 or more carloads of perishable fruit to reach the city of Chicago within 24 hours, many of these carloads becoming rotten and worthless before they could be sold, while, on the other hand, cities like Brooklyn, Baltimore and Washington have received only from 50 to 75 crates from the middle of August to the end of September, and cities like Boston and Philadelphia have received only from a quarter to half a carload each per week, and the city of New York, with its population of nearly 1,500,000, has, during the same period, received not over a carload a week.

Sixth. The need of proper inspection at this end of the line, vast quantities of inferior and imperfectly packed fruit having been permitted to go East, thus not alone causing its owners serious losses but also greatly depressing the price of such good California fruits as happen at such times to be in the same market.

Seventh. The need of a speedier method for the disposal of our fruits on arrival at their points of destination, the present method being such that perishable fruits often remain in the hands of Eastern agents an entire week before being closed out; and, lastly, the need of a system whereby our fruits will be thoroughly distributed, and placed in the hands of the largest possible number of Eastern retail dealers, so that the competition among retailers may reduce the fancy prices they now demand in many cities, and so that our fruits may be as completely popularized, and placed within the reach of the millions, in all the cities of the Union, as they this year have been in the city of Chicago, where they were retailed at ten cents a pound, and where the consumption was increased in one year from an average of three carloads to an average of 18 carloads per week; and

Whereas, We know of no good reason why the California grape-grower, whose products are universally pronounced among the finest in the world, should be obliged to accept for his magnificent fruits much less than half the returns realized by Mediterranean growers for inferior fruits, sent here by them and sold in our own country, and in a territory that rightfully belongs to us; and

Whereas, We fully realize that unless the evils herein set forth are promptly remedied, fruit-growing and shipping must, as a rule, prove as unprofitable in the future as it has during the past two seasons; and

Whereas, We fully realize the very great influence the success or failure of fruit-culture must have on the future of our State; be it therefore

Resolved, That the fruit-growers of California, assembled in State Convention, do hereby call the attention of the California railroad authorities to the present serious condition of affairs in the fruit industry, and express the hope that the action of this convention may awaken a deeper interest on their part in the crisis at hand. It is to be trusted that they realize as fully as we do that fruit-growing, so far as it lies in the power of transportation companies, should be made a profitable industry. It is useless to look for much desirable emigration so long as fruit-culture, which has now become one of our chief industries, does not, with the closest attention, yield a living. Fruit-carrying should be looked upon by California transportation companies as nails are regarded by the hardware merchant, calico by the dry-goods trade, and flour and sugar by the grocer. In other words, fruit should be treated by the railroads of this coast not as a fancy article, to be made to bear a fancy tariff, but as a leading staple, worthy to be transported at the least possible cost.

Resolved, That a committee of ten growers and shippers be appointed by this convention, to lay a copy of these resolutions before the railroad authorities, and ask:

First. That the present restrictions be so modified that ten carloads, or less, shall constitute a \$300-rate fruit train. That the rate upon cars by passenger trains be \$400 per car, and that the slow freight rate be \$200 per car.

Second. That the rate to such Eastern points as New York, Philadelphia, and Boston, be made not to exceed \$400 per car.

Third. That passenger time be guaranteed to special fruit trains; and

Fourth. That a sufficient number of cars suitable for the fruit-carrying trade be provided.

The adoption of the last resolution was preceded by discussion which was, however, rather explanatory than in controversy. It was agreed by all speakers that the rates of the last season were much too high, and that the \$300-rate for trains of 15 cars did not make the reduction available; that the railroad companies had secured far more than their share of the sales value of the fruit; and that if the business of shipping fruit is to be successful, there must be considerable reduction in transportation charges. It was stated that the Directors of the Fruit Union had conferred with the railroad managers on this subject, but had received no satisfactory assurance from them. The resolution as adopted and given above embodies the rates which the Fruit Union asked for with reference to cars on passenger trains to Atlantic points, and for slow freight, and were engrafted upon the original resolution by the adoption of an amendment by Mr. Hatch. The committee appointed under the resolution was as follows: H. Weinstock, of Sacramento; L. W. Buck, of Vacaville; I. A. Wilcox, of Santa Clara; W. M. Williams, of Fresno; P. W. Butler, of Penryn; S. J. Stabler, of Yuba City; C. W. Reed, P. E. Platt, E. J. Gregory and Edward Curtis, of Sacramento. This committee met and organized, and has begun its work—a conference with the Southern Pacific Company having been held on Saturday, Nov. 20th. Another act of the convention was to authorize Mr. D. Lubin, of Sacramento, who is at the East, to appear before the convention of railroad managers in Chicago and request the rates indicated in the resolution above.

A few words will suffice us to sketch a discussion into which the convention was led, and which, from the disposition manifested by some of the disputants, was rather unpleasant to contemplate. The issue was naturally brought up by the linking of the words "growers and shippers" in the resolution. This served as a scarlet fabric to rouse the combative spirit, and the discussion for a time was as hot and pointed as we have ever beheld in California agricultural circles. Even this served a useful purpose, because it brought out points which were of value in showing to all the unsatisfactory character of this season's shipment and distribution. Even those who would be supposed to be naturally enlisted on the side of existing arrangements, frankly declared the need of radical changes to bring the business upon a satisfactory basis. Advocates of the California Fruit Union and the California Fruit-growers' Association were sharply pitted against each other, and each displayed the other's weakness. The session closed with nothing accomplished except in regard to rates of transportation.

The resolution which served to precipitate this discussion was one providing for the formation of a new organization, in which both growers and shippers should participate. There was apparent throughout the convention a disposition to enlist all agencies which seemed to promise aid in disposing of the fruit. The attempt at concentration made this year was so defective in the matter of distribution, as shown

by the preamble of Mr. Weinstock above, that it seemed to be the general opinion of the convention that it was a failure. Even some of those who have taken a leading part in the direction of the Fruit Union admitted this, and argued that as all who took part in the first day's debate were stockholders in the Fruit Union, the proper procedure would be to refer the issues to the annual meeting of that organization in January, and if the majority of the stockholders approved the whole policy then if need be the name itself could be changed to embody the new ideas advanced. This course was silently agreed to by most parties in interest, as the effort to start a new organization after abandonment of the old was seen to be fraught with particular difficulties. As this decision was announced a quieter feeling was spread abroad, and the despondency which was engendered by the lack of accomplishment at the first day's session gave place to expectancy for the second.

The afternoon of Thursday brought full benches, the interest in the previous discussion having evidently propagated itself. Mr. Weinstock was again the leader of the discussion, not so much by his own choice as by vote of the convention, which was that he speak first in explanation of each section of the following resolution which he introduced:

Resolved, That the fruit-growers assembled in State Convention do hereby recommend to the California Fruit Union, that at its next annual meeting, to take place January 19, 1887, the by-laws of that association be modified so as to embrace the following resolutions, namely:

First, That all persons raising or shipping fruits for Eastern markets be eligible to membership.

Second, That such association, through its management, appoint a commissioned agent in every Eastern city that can use a carload or more of California fruits at a time, and that the management, by compiling such facts and statistics as may be at their command, arrange a table of distribution, subject to such changes and modifications as the market may from time to time demand; and it shall become the duty of the General Manager of such fruit to regulate the distribution of all fruits strictly in accordance with such provisions.

Third, That said management also establish regulations to control the quality, the weight and the manner of packing all fruits offered for Eastern shipment, and that its inspectors reject such fruits submitted for shipment as do not come up to the established requirements.

Fourth, That the Eastern agent be instructed to sell all fruits which may be consigned to them by the Exchange, by auction, at public trade sales, and in no other way, the auctioneer's charges to be paid out of the commissions allowed these agents.

Fifth, That it is the sense of this convention that all subscribers to the stock of the California Fruit Union should contract with the other subscribers that they will not sell any fruits for Eastern shipment to any one except to members of said Union (Eastern shipment meaning east of Ogden), reserving the privilege to sell any and all fruits for any other purpose.

Sixth, That members of the Exchange shall be allowed the privilege of naming points of destination for their fruits, and the further privilege of naming their own consignees; and it shall be the duty of the general manager to faithfully observe such wishes, provided the space allotted to such points of destination be not all taken; and provided such members also instruct their consignees to sell their fruits by public auction, and at the same time and place at which the fruits consigned to the agents of the Exchange are sold; and, finally,

Seventh, That the management of said Exchange shall make such rules as will place all members on a level, and will make it impossible for any member or members to permanently monopolize any special market, to the exclusion of other members.

The discussion of these resolutions occupied the afternoon session and ended in their adoption, *seriatim*, by large majorities, and then as a whole, unanimously. Any one who studies them carefully can see in what respects they would change the rules and policies which guided the Fruit Union this year. It will be understood that they are, however, but advisory, and the final disposition of them will rest with the stockholders of the Fruit Union at their annual meeting in January.

One of the features of the afternoon was the full opportunity given the Sacramento shippers to express their views of the situation. The statements made by them were very interesting. It was shown that this year's arrangements had advantaged no one at the California end of the line. The shippers undertook their vigorous opposition to the Fruit Union because they did not propose to let go a business which they had labored years to build up. Mr. Platt took the ground that growers should give attention to the many things involved in producing good fruit and should leave dealings to the merchants. Others held the advantage which would result from a flock of buyers eager to buy. The objections which were fatal to these views were that the eagerness of buyers could not always be counted upon and that the merchants' interest

alone could not be trusted to move eastward the vast quantity of fruit which must be disposed of. The general sentiment of the convention evidently was that dealers should be used to the extent of their ability and disposition, but that growers must have an outlet of their own in good order, so that the merchants' instinct, to buy low and sell high, could not restrict Eastern shipments to whatever amount can be sold at a high rate and large profit. The proposition to sell all fruit, at large receiving points at least, by the auction method was received with even greater favor than might be expected for such an innovation; there were but two or three speakers against it, and they admitted that further reflection might lead them at least to a trial of the plan. We have called it an innovation, and such it certainly is, so far as California fruits are concerned; though, as Mr. Weinstock has shown by his letters in the RURAL, it is not new, but is well tried in the disposal of some other fruits in Eastern markets. There were also in the convention a number who had become familiar with fruit auctions in the East and abroad, and their evidence carried weight to the inexperienced. Even those who had no positive convictions of the success of the auction method were sure that something new must be done, and were ready to believe that the auctioneer might prove the deliverer. The result was the approval of the section providing for auctions with marked unanimity. We do not remember to have seen a body of men so well agreed on a matter involving so much. Section fifth of the resolution was offered by Mr. Hatch, with the intention of restricting outside competition to the fruit sold at auction, by fruit which might be bought here and shipped East to win buyers away from the auction, with the idea of giving the method a bad name, or from other motives. It is evident that there must not be much California fruit outside of the auction if the plan is to yield good results.

Such were the results of the two half-days' deliberation on the fruit-shipping problem by the convention. We have omitted the clashing of interests and ambitions which called forth many words and did not touch the real merits of the question. We have tried to present the matter succinctly, that the reader may clearly see what was accomplished. As we have said, the stockholders of the Fruit Union were made the court of last resort and the trial will come on in January next. There are, of course, many things to be determined, and radical changes in the by-laws of the Fruit Union will be required if the membership and methods are to be changed as contemplated by the resolution. In the mean time it is very desirable that the matter be fully discussed and every effort made by the stockholders to prepare to act intelligently. We shall be glad to aid in this direction as far as possible, and therefore invite the use of our columns for discussion by all who can give good reasons for their opinions.

**COTTON MANUFACTURING.**—It is a commercial anomaly, says the *Mobile Register*, that this country, which is the greatest cotton-producer of the world, should import \$30,000,000 worth of cotton manufactured goods. There must be something essentially wrong in a system of laws and trade that renders such a thing possible. Every pound of cotton raised in this country ought to be manufactured here and the product sent to the four quarters of the globe. Yet American consumption is hardly one-third of American production, and foreign countries which buy our raw material send it back to us in a manufactured state. There is a possibility that the seat of cotton manufacture will yet be in the United States. Reason dictates that it should be.

**AN IMMENSE COLUMN OF FLAME.**—We have had several immense displays of flame in this country, produced by burning petroleum, but nothing compared to the following: "In the last volume issued by the Geological Survey of India is an account of a fiery eruption from one of the mud volcanoes on Cheduba island. A body of flame 600 feet in circumference is said to have at one time reached an elevation of 2400 feet, petroleum being the cause." Such an outburst of flame can be compared to nothing but some of the outbursts which astronomers tell us are of constant occurrence in the sun. To describe one of those outbursts, however, we must read miles instead of feet.



## Some of the Latest Fashions.

## Ladies' Toilette.

FIG. 1.—The combination here achieved illustrates Salambo-blue satin Rhadames and velvet, and is exceedingly rich. The mode has a dressy and *distingue* air without conspicuous elaboration, and its skirt is so shaped that the fashionable *bouffant* effect may be produced with a long or a short bustle and reeds, or without either. About the foot of the skirt is a narrow side-plaiting, over which the draperies fall. The front-gore is hidden by a handsome fan that reaches to the belt, the plaits all turning to the center of the fan and flaring prettily. Joining the fan at each side is a plain panel that reaches to the side-back seams, and an invisibly sewed hem is the only finish at the edge. A *bouffant* effect is achieved on the hips by short

varied and attractive. The plastron reaches to where the fronts separate, and is permanently attached at one side and secured with hooks and loops at the other side. The standing collar is fashionably high, and the coat sleeves are trimmed with *passementerie*. In adjustment the basque is perfect, the fashionable number of darts and seams being introduced.

The liking for velvet bodices with contrasting skirts is here shown, and the finish of the basque may be entirely plain if desired. Such combinations permit a costume that is "good as new" in the skirt, but much worn in the body, to be revived in a handsome-looking toilette; and such economies in dress cannot fail to elicit the approbation of all ladies of good taste.

When the skirt is made of silken textures or of soft woollens, the plain panel will usually be lined with thin crinoline. Cloths and heavy

ever, the deepest. The skirt is formed of two front sections, two side sections and two back sections, all joined in seams that are turned to one side and stitched in welt fashion. The back sections are gathered at the top, which is finished with a binding and is tacked to the body underneath. A row of stitching is made down the front edges of the skirt, and the closing may be visibly or invisibly made, or the edges may be left open, as preferred. The collar is in the high standing style, and its edges are stitched.

Over any style of costume this coat may be suitably worn, and its skirt is ample enough to accommodate the most *bouffant* draperies. All kinds of cloths and coatings will be made up into such coats, and the tailor mode of completion will be generally adopted. Bindings of any preferred braid, stitching at a severely plain finish, may be visible at the edges. The body may be warmly lined if the material be not sufficiently heavy, and nice coats will frequently have the skirt lined with thin silk or satin. Fur will be used for trimming winter coats with handsome effect, all varieties being in vogue.

The hat has its brim smoothly faced with velvet, and is trimmed with velvet and fancy-edged ribbon.

looped under the chin in a simple way. A bonnet of this style developed in steel beads and gray would be effective, but the black is certain to harmonize with any costume.

## INTERESTING ARCHEOLOGICAL DISCOVERY.

An interesting discovery has recently been made in Mexico. The rocks which form part of the foundation of the promontory on which the Castle of Chapultepec rests, Mr. Batres says, are covered with hieroglyphic characters, which will prove interesting for the study of Mexican antiquities and history. Hitherto the surface of the rocks has been hidden by a dense growth of moss and shrubs, but they are now being cleared off and the hieroglyphic inscriptions have come to light. Mr. Batres has commenced to decipher the characters, which he confidently expects to be able to finish by spring.

A HEALTH HINT FOR TEACHERS.—Dr. Holbrook, writing of memory culture in schools, says: The teacher should remember that the memory cannot be disciplined to advantage when the mind of his pupil is distracted by feelings, sensations and thoughts foreign to the subject of study. It may also be said that if a child is badly fed, insufficiently clothed, or suffering from some inward complaint; if the



Fig. 1.—LADIES' TOILETTE.



Fig. 3.—LADIES' VELVET HAT.



Fig. 4.—LADIES' BONNET.



Fig. 2.—MISSES' COAT.

paniers that do not extend quite to the center of the front, and are draped in a wonderfully pretty arrangement of intercepting folds by plaits at the belt and in the back edge. Two ornamental pieces suggesting Turkish sash ends of different lengths are tacked to the top of the paniers at each side over the side-back seams and are plaited at both ends, the lower ends being finished with *passementerie* ornaments. The simple draping of the back-drapery is achieved by two seamed *bournois* loops at the top and deep, downward-turning plaits in the side edges.

The basque is handsomely shaped, and is trimmed down the middle of the back to accord with a plastron applied to the fronts. The plastron is in V-shape and side-plaited, and joined to its sides are lapels that taper to points at their lower ends. The lapels are overlaid with *passementerie*, and the simulation on the back is produced by a V-shaped plaiting of silk, bordered at each side with *passementerie* that is tapered to a point at the waist-line. Below the waist-line the back is arranged in two short loops, which are underlaid with pointed tabs that deepen the back ornamentally. The side-backs fall in points at their back edges, and the sides of the basque are curved very high, while the fronts shape double points below the closing, thus rendering the outline

fabrics do not require a lining. All varieties of dress goods may be made up into such toilettes, and a contrast may be developed in the fan or panels, with stylish effect.

The straw hat is trimmed with lace, velvet and plumage, and has a smooth facing of velvet on its brim.

## Misses' Coat.

FIG. 2.—The coat combines a close-fitting, double-breasted body with an ample skirt that is made separate and then is made secure by tappings to the body underneath. Mixed cloth was here chosen for the garment. The adjustment of the body is made with single bust darts; wide side-back gores and a curving center seam; and the closing is made with buttons and button-holes in regular double-breasted fashion, knotted cord loops being fastened over the buttons with decorative effect. The center seam is turned to the right, and all the other seams are turned to one side and stitched in welt fashion. A row of stitching is also made close to the edges of the body, and three rows of stitching are made at the wrists of the coat and sleeves. The lower outline of the body is pleasingly varied, being square across the double-breasted portion, curved over the hips and shaping three not very sharply defined points at the back, the center point being, how-

## Ladies' Velvet Hat.

FIG. 3.—This hat is very artistic in its outline, and is of dark-blue velvet; the material is smoothly put on over the frame, and the broad brim is underfaced exactly as the outer side is covered. Drawn over the high crown is dark-blue net having dots of the same color upon it; the velvet shows quite plainly through this, giving the lace an air of greater sheerness and bringing out the pile of the velvet in an effective way. At the left side of the front are arranged a number of small mode tips curled until they seem like balls of fluff.

## Ladies' Bonnet.

FIG. 4.—The outline of the becoming Marie Stuart bonnet is achieved in this pretty *chapeau*. Over the light frame is laid at each side a jetted piece simulating a leaf and reaching quite to the top. From the very center of the edge in front where it is fastened is drawn back a folded scarf of black grosgrain silk that is laid in soft plaits and terminated at the back, giving the effect of a puffed crown. Against this crown in front are ladder loops of fancy ribbon that are caught by a jet ornament. A fold of silk covers the very narrow brim, which is outlined with large jet beads. The ribbon ties are of black grosgrain with a fancy edge, and they are

lungs and circulatory system be oppressed by the foul atmosphere of a crowded schoolroom; if the nervous energy be suppressed by imperfect oxidation of the blood; if the eye be deprived of the natural stimulus of a good light, the nostrils assailed by disagreeable odors, and the ears confused with an incessant tumult of noises; if one set of muscles be kept in a state of constant tension and others in a state of abnormal relaxation by sitting in a constrained position hour after hour, a condition must be induced very unfavorable to the culture of memory.

## Complimentary Samples.

Persons receiving this paper marked are requested to examine its contents, terms of subscription, and give it their own patronage, and, as far as practicable, aid in circulating the journal, and making its value more widely known to others, and extending its influence in the cause it faithfully serves. Subscription rate, \$3 a year. Extra copies mailed for 10 cents, if ordered soon enough. If already a subscriber, please show the paper to others.

OIL GLASSES will not get clogged up with oil if first filled with glycerine.



## THE VINEYARD.

## Raisin Curing and Packing.

We have given descriptions of a number of the methods of raisin-curing used in this State, both by sun heat and artificial heat. Each year brings out something new, either in methods or appliances. The Fresno Republican recently gave an account of operations at the Forsyth vineyard in that vicinity, from which we take the following:

Artificial drying has ever been a question of interest to raisin-growers. Men have schemed and improved. The idea is to let the sun do the work, as the raisins are better thus dried. The trouble with this at this time of the season is, the nights are too cool and the days too short to dry fast enough. To a certain extent the nights undo the work of the day. Col. Forsyth has thoroughly studied this question of successfully drying raisins, and in his drier has, by improving on Mr. Goodman's drier, which has been described before, reached perfection. He has reduced it to a certainty.

Two hundred feet long, 12 feet high and 14 feet wide, facing the south, with the entire front of glass, stands his new drier. In front of it he has had placed a bed of white sand, which reflects the sun's rays. Above the glass doors, on an angle, so as to better catch the sun's rays, is a glass transom. The rear is composed of wooden doors so when the hot north wind is blowing the entire drier can be thrown open, giving the hot air full sway. There is at each end a brick furnace in which a fire is kept burning all night. Running from them are eight-inch galvanized iron pipes, laid at an incline to insure suction, and thus keep up

## The Heat at Night.

The trays of drying grapes are placed so as to give the air full access between them. In drying grapes a moisture must necessarily arise which retards the drying more or less, and the getting rid of this has been a vexed question with raisin-growers. Here they have overcome this difficulty. On the top of the drier, a few feet apart, have been built 20 flumes, 16 feet long and a foot square. They are made high, so they will have draught enough to carry away all the dampness arising from the drying grapes. These flumes are regulated with a lever at one end which works a slide at the bottom of the flumes, opening and closing all at will; also regulating the extent of the opening. In building this drier Col. Forsyth

## Has Solved the Problem

Of successful artificial drying. The difference in the temperature inside the dryer and outside is very marked. Although when we tested it the dryer was not complete, being open in a number of places, the thermometer indicated an increased temperature in five minutes' time of 22 degrees. When completed, the temperature inside will be fully 30 or 35 degrees warmer than in the open air.

From the drier the raisins are taken to the packing-house, which presents a scene of activity. Here, 1200 20-pound boxes of raisins are prepared for shipping each day.

On reaching the packers the raisins are again sorted; bunches in any way defective are taken to the stemmer and cleaner for stemming and grading. There are two grades of these loose raisins—the former grade is packed in 50-pound boxes and shipped as loose Muscatelles.

## The Spanish System

Of packing raisins, showing the stems, is followed in this establishment. It is considered by good judges the best system. The large bunches of raisins are sorted and laid out in boxes after being first weighed. The stems are exposed, showing immense bunches of the finest raisins to be found in any market; bunches in size and lusciousness that surpass anything ever seen, even in Spain. They are not pressed out to make them large. They are laid in boxes neatly packed, and are as delicate to the touch as the softest of velvet. They are in layers, but each layer is the same. A buyer for one of the largest San Francisco firms said, on examining one of these boxes: "This is the finest I have ever seen, but they are not the same all the way through. It is impossible." A box was opened and the raisins dumped out before him, showing that each layer was the same. Being fixed in every way for putting up the best of raisins, they are at this establishment putting up grades that will successfully compete with the best Spanish brands. Here they do not press the raisins very much, believing, and very wisely too, that the life is often crushed out of them by pressing. They merely press them so they fit into the boxes neatly. All the native sweetness and perfection is left with them. Of the fine raisins they

## Put up Three Brands.

The "Tehesia Cluster," the finest raisins ever sent from any country, are the choicest. They are the biggest bunches carefully selected and are packed in layers across the boxes, each bunch separated by wax paper. They are put up in five-pound boxes. The other brands are in London layers, and are all packed in Spanish style, showing the stems.

About 30,000 boxes will be packed here this season, and at Mrs. Austin-Blatchley's place—which Col. Forsyth is running this season in connection with his place—13,000.

The object now is to save the second crop which is on the vines. If the weather keeps clear and warm for two weeks longer they will at this vineyard pack this season about 45,000 boxes of the finest raisins ever sent to the Eastern market. Here they have reduced the art of raisin growing and packing to a certainty, and it is through the efforts, skill and progressiveness of such men as Col. Forsyth, that has placed Fresno raisins at the top of the Eastern market. The result of packing raisins so carefully and understandingly is, the supply does not now equal the demand.

Every day sees carloads of these raisins leaving Fresno for the Eastern cities, where they command the highest prices.

## SERICULTURE.

## The Silk Board and Its Doings.

The Board of Directors of the California State Board of Silk Culture held its annual meeting Saturday afternoon, Nov. 20th, and elected the following officers for the ensuing year: President, Isaac Trumbull; vice-president, G. W. T. Carter; treasurer, R. H. McDonald, Jr.; secretary, Mrs. Louise Renzi.

The treasurer's report showed that of the \$5000 appropriated for the fiscal year \$3971.40 had been expended and \$1028.60 remained to be covered back into the State Treasury. The sum of \$208.13, held to pay for mulberry trees which are on the way from Milan, Italy, is included in the year's expenditures. The principal items in the account are as follows:

Salaries of teachers.....	\$394 66
Salaries of pupils.....	336 30
Reeling machines.....	444 85
Cocoons bought.....	729 36
Rent.....	385 00
Mulberry trees.....	238 50
State Fair exhibit.....	117 15
Traveling expenses of members attending meetings.....	309 85

The Chronicle says: One teacher and an assistant are employed, who instruct gratis those who desire to learn to reel silk from the cocoons or to tend the worms at spinning time. The practice of paying pupils anything has been abandoned, and the filature devotes its attention to the free teaching of those who desire to learn. There is at present room for a few more pupils, and when the new machines are received there will be still more vacancies. The pupils are each assigned certain hours of the day, so that, though no one reels all day, the school is never idle.

The present reeling machines, of which there are three, though only two are operated, are single—that is to say, but one thread is reeled at a time—the number of cocoons reeled from, and consequently the number of strands in the thread, varying with the quality of the cocoon and the fineness of product desired. Three new automatic Batteneuse reeling machines, purchased in Milan, Italy, have arrived at this port and are held by the Custom-house, which demands \$135 duty before they may be removed. The association claims that the law exempts from duties articles imported for use in incorporated free schools, and has appealed to the Treasury Department for the release of its machines. Each of these machines will reel four threads at a time, and one expert reeler can tend a four-thread machine as readily as the single-thread machines now in use.

The \$729.36 paid for cocoons was in sums varying from a few dollars to about \$100, and went to a large number of persons in various parts of this State. It is the special mission of the board to encourage the production of these cocoons, which are grown at farmhouses by women and children, the mulberry leaves upon which the spinners feed being the product of the mulberry plant, which is indigenous to California. The worms require very little care except in the six or eight weeks in the spring when they are spinning, and they are regarded as a petty source of income by members of farmers' families, as poultry and eggs are regarded on the farms in the Eastern States. To profitably raise silkworms requires some technical knowledge, to impart which worms are cultivated by the board at the filature, 21 Montgomery avenue, and in the spinning season pupils are given free instruction in handling them. The board pays from \$1 to \$1.45 a pound for cocoons, according to quality; so the number of pounds purchased can be approximately estimated from the figures.

The item for mulberry trees is principally for those of an improved variety, brought from Milan, Italy, which produces abundant foliage, but no flowers nor seeds.

The secretary read a letter from Dexter, Lambert & Co., manufacturers of silk goods at Paterson, N. J., to whom she had sent a sample of silk reeled at the filature in this city, in which they say: "The silk appears to be of extra quality, clean, elastic and strong." There are on hand about 100 pounds of silk reeled at the filature, besides a large stock of cocoons. This reeled silk is valued at from \$6 to \$7 a pound, whereas the Chinese and Japanese reeled silk is worth but from \$3.75 to \$4.45 a pound.

The meeting was adjourned to Saturday, December 4th.

## Farmers and Travelers

Sojourners in Marysville will find the Western Hotel the best in the city, being clean, quiet, comfortable and reasonable in prices. Geo. Wappel, proprietor.

## THE FIELD.

## Government Report of California Crops.

WASHINGTON, Nov. 20.—The Agricultural Bureau has received the following report from its agent in California as to the condition of the crops in that State: The conditions for the growth of corn have been favorable this season and a fair crop was made, with the quality a full average. Grapes are a fair average crop throughout the State as compared with a full crop. They have been favored with fine weather, and the quality is very good. A few sections were visited by a light frost early in October, but no serious damage was done. Apples are not an average crop. Serious damage was done in some sections by the codlin moth, and stringent measures are needed for its extermination. Pears are a fair crop. They also were considerably damaged by the codlin moth. County correspondents in California, Oregon and Washington Territory report as follows respecting the corn crop in the counties named:

California—San Luis Obispo—Corn is grown to some extent, but mostly as mere fodder. Placer—An average crop. Butte—A poor yield, but good quality. San Benito—Very little raised, and that on low lands bordering the streams. San Mateo—Very little raised, except for green feed for milch cows. Tehama—Very little raised. Kern—Crop not yet gathered.

In Oregon, Lane county reports an average crop. Douglass—Yield reduced, owing to drought. Linn—Short crop, owing to drought. Columbia—Crop somewhat affected by drought. Coos—Above an average crop. Yamhill—Average crop.

Washington Territory reports as follows: Skamania—The yellow dent corn "Pride of the North," received from the department, was planted the 2d of June, and grew rapidly and formed fine large ears and matured before the rains set in this fall. Garfield—Very little corn is raised, but it is of fine quality. Skagit—A good crop.

Returns have been received from the following counties in California as to the apple crop: Amador—Badly damaged by the codlin moth. Contra Costa—Injured by the codlin moth. San Mateo—Good on the coast, but in the valleys damaged by the codlin moth. El Dorado—The fruit was badly worm-eaten and fell off before ripe.

On the subject of sorghum a correspondent in Skamania county, W. T., says: "Seed sent by the department was planted on June 2d, and it grew finely and matured, so we shall succeed in saving seed to plant another year."

Hay is thus spoken of by the county correspondents in California, Oregon and Washington Territory: California—San Luis Obispo—The crop is much larger than usual, and the quality is above the average. Placer—There was a good crop, owing to the late rains in the spring, and it was cut and housed in fine condition. Fresno—The crop was of average quality, mainly alfalfa, and yielded from four to eight tons per acre in from three to five cuttings. Grain has yielded from one to two and one-half tons per acre. Humboldt—There was a lighter crop than was expected, but it was of fair quality. Alpine—The crop was damaged by too much rain in July. Butte—Good yield. Contra Costa—There was an unusual quantity secured and in good condition by converting inferior patches of grain into hay. Kern—Alfalfa is the principal crop for hay.

## You Can Learn How to Get Rich

By sending your address to Hallett & Co., Portland, Maine; they will send you full information about work that you can do and live at home wherever you are located. Work adapted to all ages and both sexes; \$5 to \$25 a day and upwards easily earned. Some have earned over \$50 in a day. All succeed grandly. All is new. You are started free. Capital not required. Delay not. All of the above will be proved to you, and you will find yourself on the road to a handsome fortune, with a large and absolutely sure income from the very start.

## Cheap Money for Farmers.

Farmers in this State will be glad to learn that they can borrow on mortgage any amount, from \$5000 to \$500,000, from S. D. Hovey, 330 Pine St., San Francisco, at 6 to 7 per cent and taxes. \*\*

## THE GREAT REGULATOR!



No medicine is so universally used as Simmons' Liver Regulator. It won its way into every home by pure, sterling merit. It takes the place of a doctor and costly prescriptions. It is a family medicine containing no dangerous qualities, but purely vegetable; gentle in its action and can be safely given to any person, no matter what age.

## WORKING PEOPLE

Can take Simmons' Liver Regulator without loss of time or danger from exposure, and the system will be built up and invigorated by it. It promotes digestion, dissipates sick headache, and gives a strong, full tone to the system. It has no equal as a preparatory medicine, and can be safely used in any sickness. It acts gently on the bowels and kidneys and corrects the action of the liver. Indorsed by persons of the highest character and eminence as

## The BEST Family Medicine.

If a child has the colic it is a sure and safe remedy. It will restore strength to the over-worked father and relieve the wife from low spirits, headache, dyspepsia, constipation and like ills. Genuine has our Z stamp in red on front of wrapper, prepared only by

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**Burglars**  
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a revolver—Then don't  
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a bottle of PERRY DAVIS'

**RAIN**  
**KILLER**  
you may  
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in the night  
for Diphtheria—Cold—  
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Buy a bottle  
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All Druggists sell it.

HALL'S  
SARSAPARILLA

Cures all Diseases originating from a disordered state of the BLOOD or LIVER. Rheumatism, Neuralgia, Boils, Blotches, Pimples, Scrofula, Tumors, Salt Rheum and Mercurial Pains readily yield to its purifying properties. It leaves the Blood pure, the Liver and Kidneys healthy and the Complexion bright and clear.

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the Merry Days of December, or  
for Any Festival Occasion.

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ANTHEMS OF PRAISE, a new collection, is filled with brilliant Anthems and Choruses. \$1, \$9 per doz.

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SONGS OF PROMISE (for Sunday Schools) provide liberally for festive occasions in Sunday School or social life. 35 cents, \$3.50 per dozen.

KING WINTER (30 cents, \$3 per dozen), by L. O. Emerson, and

CAUGHT NAPPING (30 cents, \$3 per dozen) by Leo Lewis, are the nicest kind of Xmas Cantatas, and quite new; and the

BIRTHDAY OF OUR LORD (12 cents) by Rosa-bel, is a new and well-arranged Christmas Service.

Buy these books in time for thorough practice!

Among Ditson's Octavo Music (about 3000 different pieces, costing but 5 to 10 cents per copy) there are very many beautiful Carols, and the general selection embraces a great deal of the most popular choral music in the world. Send for lists. Send retail price of any book, and receive it by mail.

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Bone, Meat,  
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100 per cent. more made  
in keeping Poultry. Also POWER MILLS and  
FARM FEED MILLS. Circulars and testimonials  
sent on application. WILSON BROS. Easton, Pa.



## Lands For Sale and To Let.

### SMALL TRACTS OF LAND FOR HOMES

Are offered for sale in 5 to 20-acre tracts, one mile from Tulare, the most rapidly growing town in the State, at prices ranging from \$15 to \$40 per acre, to those who will make homes on them.

The land lies in the northerly limit of the Artesian Belt, and is also easily supplied with ditch water. Soil, sandy loam. Good surface water at 10 to 12 feet.

#### ALSO LARGER TRACTS

Of 20 to 80 acres, on my home place, 7 miles S. W. of Tulare, 3 miles from Tokay Switch, S. P. R. R., centrally in the

#### ARTESIAN BELT,

Lying on north side of Elk Bayou. Smooth, clean, alfalfa land; \$15 to \$30 per acre.

A good flowing well, capable of irrigating 80 to 160 acres, is obtainable here at a cost of about \$500. The soil is dark, ancient lake bottom sediment. The land is fenced and mostly in cultivation; one flowing well on the place and others near by, with growing orchard, vines, grain, alfalfa, etc., showing adaptability of soil. The best of surface water is obtained at 10 feet from surface. Perfectly healthy locality. Plenty of oak timber near by.

This land, in whole or part, is bound to be sold soon, and rare chances are offered. Address, E. M. DEWEY, Box 27, Tulare, Cal., or call at the home premises.

### A NEW COLONY

On the new extension of Southern Pacific Railroad, on the lands belonging to R. T. BUELL, Esq., near Los Alamos, Santa Barbara county, Cal. Parties desiring to visit the property now, can go via San Luis Obispo and take the cars from thence to Los Alamos, thence by stage to the Colony. 20,000 acres of the best lands in California, subdivided into 20, 40 and 80-acre farms; \$20 to \$30 per acre. INTERNATIONAL IMMIGRANT UNION, 401 California St., San Francisco.

#### \$10.00 PER ACRE.

On the C. P. R. R., in Placer county; one half mile from Applegate; one-half hour from Auburn; fine climate; plenty of water; school, postoffice and telegraph near; easy terms; title perfect. Apply to

S. C. OSBORN,  
Applegate, Placer Co., Cal.

#### FOR SALE—33 ACRES

Of very choice Land. All within the corporate limits of the lovely town of St. Helena, Napa county. Seventeen acres vines, fine varieties, five acres choice fruit. Cottage of eight rooms, beautifully situated, with shade and ornamental trees, including seven large Oaks. "St. Helena Nurseries" on the premises. A fine chance for a nurseryman. Address for further information,

Box 313, St. Helena, Napa Co., Cal.

## WEST COAST LAND CO.

SAN LUIS OBISPO, CAL.

Incorporated March 27, 1886.

CAPITAL,

\$500,000.

#### DIRECTORS.

GEO. C. PERKINS,  
JOHN L. HOWARD,  
ISAAC GOLDTREN,  
R. E. JACK,  
C. H. PHILLIPS.

#### OFFICERS.

JOHN L. HOWARD, President.  
ISAAC GOLDTREN, Vice-Pres't.  
R. E. JACK, Treasurer.  
C. H. PHILLIPS,  
Secretary and Manager.

### THE PASO ROBLES, SANTA YSABEL, and EUREKA RANCHES,

Recently purchased by the West Coast Land Company, are now offered for sale in subdivisions.

This immense body of land, including 12,000 acres unsold of the Huer Huero ranch, belonging to C. H. Phillips, comprises 64,000 acres of rich, virgin soil. It lies in a compact body, in the center of San Luis Obispo county, and is within from 9 to 20 miles of the sea coast. It is covered with white and live oak timber, is one of the most picturesque bodies of land in the State, and requires

#### NO IRRIGATION.

It has an abundance of living water, and where not sufficient for domestic use, good water can be had at a depth of from 10 to 40 feet. It has an average annual rainfall of 21 inches, exceeding by six inches that of Santa Clara county, one of the most prosperous counties in the State.

The extension of the Southern Pacific Railway from Soledad southward traverses these lands for 15 miles throughout their entire length, placing the property within eight hours of San Francisco.

These lands are offered at from \$10 to \$30 an acre, and are all susceptible of the highest cultivation. In salubrity of climate, productiveness of soil and location as to market, they are equal to lands in Los Angeles and other counties, which readily bring from \$100 to \$200 and upward; and as to price and terms, offer the best inducements to those seeking homes on any part of the Pacific Coast. The survey of the

#### PASO ROBLES RANCH

Has been completed. The maps and catalogues are now ready, and will be sent free on application.

This ranch, containing 20,400 acres, has been subdivided into 230 lots. It is 12 miles from the sea coast, and is 20 miles north and west from San Luis Obispo city.

This ranch was one of the earliest granted by the Mexican Government and having been held by the same party for over 30 years, has never before been offered for sale. It consists exclusively of land of the choicest character, and is second to none in the State for the production of wheat, wine, fruits, raisins and olives.

#### TITLE, U. S. PATENT.

#### TERMS OF SALE.

One-third cash; balance in 4 equal payments at 2, 3, 4 and 5 years; interest, 6 per cent per annum. The mortgage tax paid by the mortgagee makes the interest about 4 per cent net to the purchaser. A deposit of \$25 will be required in all cases to cover expenses of sale.

C. H. PHILLIPS, Manager,

West Coast Land Co., San Luis Obispo, Cal.

Send for Catalogue and Map.

## FRESNO COUNTY.

### BRIGGS' SELMA TRACT.

This most desirable tract, comprising 1280 acres of first-class gray ash and sandy loam land (situated one and one-half miles from the fast-growing town of Selma, the second in the county, and two miles from Fowler, both being S. P. R. R. towns), has been subdivided and will be sold in 20, 40, 60 or 80-acre farms. The distributing ditches are now being constructed, and convenient roads are laid off. The main canal is 60 feet in the bottom.

#### THE WATER RIGHTS,

Consist of stock in the canals and entitle the owner to one-eighth of 2 feet 6 inches of water, being 2½ times the usual amount supplied to colonies. The owner of the water stock has a pro rata vote in the management of the canal, and the expense per year is about \$3.50 on a 20-acre lot.

A school-house is to be erected on the land this year, and it has two within two miles of it at present. Fresno, Selma, Fowler and Kingsburg are good local markets for produce. Opportunities to labor with or without terms are abundant, and land can be rented for wheat-growing in the neighborhood. The health of this region is perfection, and, in common with the plains generally, is an excellent sanitarium for persons affected with pulmonary and rheumatic complaints.

The best raisins in the world, wines unsurpassed, the finest grapes, the best peaches, apricots, plums, prunes, nectarines, figs and olives, and in fact all the choicest fruits and vegetables of the world are grown in this favored region. Raisin vines three to six years old yield per acre from four to seven tons, and increase to eleven. Wine grapes three to six years old yield from four to eleven tons per acre. Alfalfa is cut from four to six times a year, and yields from one to two tons per acre at each cutting.

Two good cows and 100 hens furnish more than half the living for a family, and can be kept, with a team, on three acres of alfalfa, the growth of which is incredible in this favorable combination of soil and climate.

A comfortable house for a small family can be built for \$150.

The low price, taking into consideration water and transport facilities, should especially recommend this to seekers of homesteads.

Price, \$25 to \$37.50 per acre, on very easy terms to actual settlers.

For further particulars call on or address

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We buy for cash and sell for cash. The old credit system has been abandoned. We will not be undersold. We guarantee all goods as represented. We will give good value for your money. Our motto is quick sales and small profits and speedy returns.

Farmers and consumers will find it to their interest to call and see us and be convinced.

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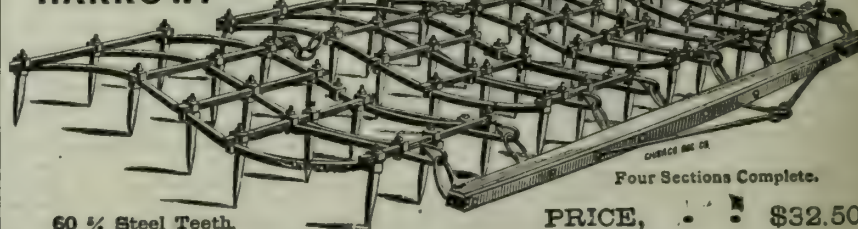
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Cheapest and Best

#### HARROW.



60 % Steel Teeth.

Four Sections Complete.

PRICE, \$32.50

This Harrow was introduced to the farmers of the Pacific Coast, during the season of 1881. Since then, hundreds have been sold, giving entire satisfaction. I have made the malleable iron clamps heavier, and strengthened them, making this the **Best Iron Harrow**. The frame is indestructible, made entirely of iron and locked firmly together by the teeth passing through malleable iron clamps, and having screw-threaded shanks on their upper ends, which bolt the frame-work securely together. This mode of constructing a harrow frame dispenses with drilling or punching holes, thereby securing much greater strength and durability. **It is indestructible.** No shrinking, swelling and rotting of frame-work. It is constructed in narrow sections, each acting independently; will adapt itself to any uneven surface of the ground, and will cut the soil better and more evenly than any other Harrow. Constructed on correct mechanical principles; each section has a center draft, and each tooth cuts a separate track. No one tooth in line with another. The safety-hook prevents unhooking when turning round. Four different sizes to suit customers. **STRONGEST AND BEST HARROW MADE!**

#### PRICE LIST.

No.	Description	Weight	Price
No. 1	has three sections, 45 % steel teeth; cuts 9 feet wide. This is a light size for two horses.	168 pounds	\$25 00
No. 2	(represented in the cut) has four sections, 60 % steel teeth; cuts 12 feet wide. This is my standard style for two horses (generally used).	Weight, 230 pounds	\$32 50
No. 3	has five sections, 75 % steel teeth; cuts 15 feet wide. This is my 3-horse harrow; can leave off one section and use two horses with the same draft-bar.	Weight, 291 pounds	\$7 50
No. 4	has six sections, 90 % steel teeth; cuts 18 feet. For this size I use four horses abreast, with two draft-bars coupled together at the ends; adapted for large farms.	Weight, 336 pounds	48 00

"Your harrow is a good one."—M. MADDEN.

"They give perfect satisfaction."—JAS. CARR & CO.

"Your Iron Harrow is a good one and fully met my expectations."—DR. L. F. MOULTON.

"I like your Iron Harrow very well."—MILTON CARPENTER.

"I tried your Iron Harrow the other day, and it beats them all. My manager says 'it is the boss.'"—D. FARRMAN.

"We like your Iron Harrow very much."—STEELE BROS.

ADDRESS,

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625 to 631 Sixth St. { SAN FRANCISCO. } 149 to 169 Bluxome St.



# California Nursery Company.

[By J. C. H.]

It has become a settled fact that the paramount interest of the Pacific Coast is fruit-raising. During the last decade we have demonstrated the adaptability of California in soil and climate, in growing not only the general fruits of the temperate zone, but we are now furnishing a large proportion of semi-tropical fruits used in the Northern States, and sagacious men anticipate and predict that we shall be a dangerous competitor with France, Italy and Sicily, in growing the olive and fig as we now are in the vine. Anticipating a demand for young trees, an incorporated company was formed by men of large means and experienced nurserymen, to establish a plant that could supply nursery stock in unlimited amount. After a careful and full investigation, they selected 460 acres of land lying between Alameda creek and the C. P. R. R., one mile north of Niles, Alameda county. The writer recently made a visit to this nursery and a flying trip in and around Niles. From his notes and memoranda he gives a succinct description:

The California Nursery Company was started three years ago in a stubble field with new and clean stock of every sort, importing roots and scions from reliable firms in Europe and the Eastern States. Their location is next to the foothills in the "warm belt," and adjacent to the wide-spreading fields of the Beet Sugar Manufacturing Company of Alvarado. The soil is composed of alluvium and a light sandy loam. Its productiveness is attested in the marvelous growth of every variety of vegetation. From actual measurement whole rows of cherry trees had grown six feet and eight feet from the graft or bud in one season, and pear, peach and apple stock from five to seven feet. This thrifty growth was attained without irrigation, although this company have facilities for running water over their land if desired. Two large windmills and a steam pump on the high ground next to the Alameda creek could flood their present nursery which is now planted (200 acres) in case of a severe drought.

It is a picturesque sight to ride through this nursery. On the north and west are undulating hills, some of which are planted with vineyards, while to the south and east there is a great stretch of valley land. This nursery is divided into 5 and 10-acre lots, the main avenues to which are graveled from an ample stock that is procured from the Alameda creek. The buildings erected are arranged with a view to perspective and convenience, having the appearance of a villa.

It is a subject that gives food for thought when we contemplate the wonderful change wrought by the managers of this company. Within 300 yards of the main office stands the old adobe building where 20 years ago the vaquero rested from his labors in herding wild cattle and horses.

Three years ago the husbandman was raising grain to feed the overworked population of Europe. At this time the California Nursery Company has changed the whole aspect of this lovely valley and converted this spot into an Eden. Their plans were laid on a broad gauge and grand scale to fill the requirements of our market, extending from British Columbia to the Tropics, and from the Pacific ocean to the Atlantic seaboard. No insect pest has been found in this nursery, and there are no adjacent orchards from which they could be propagated. The managers in selecting this locality took the precaution of isolating themselves from old orchards.

As an evidence of the fertility of this section we learned from Mr. H. H. Hunting, foreman, that from 17½ acres, 244 tons of sugar beets were raised this year. In our rambles we saw four large beds to propagate the olive, containing over 40,000 tiny trees, and fig trees of the best known varieties, including the "fig of commerce," and orange and lemon trees had found in this place soil, climate and conditions for their best development. In addition to a select and unusually complete assortment of fruit trees, small fruits, grapevines, semi-tropical and citrus species are to be had at this nursery. The managers have planted an experimental orchard to which will be added all new varieties of apparent worth.

Their descriptive catalogue for the season of 1886-87 is before us. It has 48 pages, 24 of which contain the lists of the different kinds of fruits and 24 cuts showing the latest and favorite varieties. One page has hints on transplanting in which is announced: "A work on Horticulture in California, issued by the publishers of the PACIFIC RURAL PRESS, will be found very useful." This catalogue should be in the hands of every fruit-grower, or any person who is about to become one. On the title page they say: Our object shall be to make this the nursery of the Pacific Coast. To this end, the observations of life-long experience in the business, untiring energy, coupled with every convenience which such experience or necessity may suggest, shall be devoted.

As a matter of information to our readers as to the reliability of the California Nursery Company, we herewith give the names of the officers: Directors—John Rock, James Hutchinson, R. D. Fox, Thos. Meherin, Wm. J. Landers. John Rock, president; R. D. Fox, vice-president; J. H. Henna, secretary; Thomas Meherin, treasurer.

The promoters of this great enterprise intend to make it the model nursery of the Pacific Coast. With ample means, wide experience

## PACIFIC COAST WEATHER FOR THE WEEK.

[Furnished for publication in this paper by NELSON GOROM, Sergeant Signal Service Corps, U. S. A.]

DATE.	Portland.				Red Bluff.				Sacramento.				S. Francisco.				Los Angeles.				San Diego.			
	Rain.	Temp.	Wind.	Weather.	Rain.	Temp.	Wind.	Weather.	Rain.	Temp.	Wind.	Weather.	Rain.	Temp.	Wind.	Weather.	Rain.	Temp.	Wind.	Weather.	Rain.	Temp.	Wind.	Weather.
Nov. 17-23.																								
Thursday.....	.03	44	SE	Fr.	.00	53	NE	Cy.	.00	55	SW	Cy.	.00	54	NE	Cy.	.00	64	SE	Cl.	.00	63	Nw	Cy.
Friday.....	.00	44	S	Cy.	.00	57	N	Fr.	.00	59	Nw	Cl.	.00	58	N	Fr.	.00	62	SE	Fr.	.00	57	Nw	Cy.
Saturday.....	.20	48	S	Th.	.00	55	N	Cy.	.00	56	S	Cy.	.00	61	Nw	Fr.	.00	64	W	Cl.	.00	57	Nw	Cy.
Sunday.....	.18	43	SW	Cy.	.10	46	S	Fy.	.21	46	SE	LR.	.53	55	W	LR.	.00	59	SE	Fr.	.00	59	SW	Fr.
Monday.....	.01	39	SE	LR.	.03	47	N	Cl.	—	49	N	Cl.	.24	53	W	Cl.	1.18	58	W	Cl.	—	—	—	—
Tuesday.....	.09	33	Nw	LR.	.00	47	S	Cy.	.00	51	E	Cl.	.00	51	N	Cl.	.00	56	NE	Cy.	—	—	—	—
Wednesday...	.03	38	S	Cy.	.00	56	N	Cl.	.00	55	Nw	Cl.	.00	57	N	Cl.	.00	61	S	Cl.	—	—	—	—
Total.....	.54				.13				.21				.77				1.18				.00			

EXPLANATION.—Cl, for clear; Cy., cloudy; Fr., fair; Fy., foggy; — indicates too small to measure. Temperature Wind and weather at 12:00 m. (Pacific Standard time), with amount of rainfall in the preceding 24 hours.

and the services of John Rock, the veteran nurseryman, as manager, it may be confidently expected that 1000 acres or more of this rich virgin soil will be devoted to propagating young trees, small fruits and vines, that shall be planted in valley and hillside to ornament and beautify our homes, promoting health, wealth and happiness. There has been a fair demand for their nursery stock this season, and one large order has just been filled for China. Any one interested in fruit is cordially invited to take the C. P. R. R. at the foot of Market street, and a two hours' ride will give him a chance to inspect this great plant, by which four trains pass daily, the latest at 4 o'clock P. M. The length of our article precludes us from giving a detailed description of the orchards and berry farms adjacent to Niles, reserving this for a future issue. We will answer the question whether fruit-raising will pay by stating this fact: Mr. H. G. Ellsworth, from his orchard, situated two miles south of Niles, that was planted four years ago, trees placed 21 feet apart, has had such a luxuriant growth that the limbs touch each other, and from 18 acres there were shipped 80 tons of apricots this season.

If enterprises of this character have enlisted the best efforts of men of experience and large means to create a nucleus that shall make our sister States and the world pay a tribute to our own State, such men should receive the plaudits of a grateful people.

## List of U. S. Patents for Pacific Coast Inventors.

From the official report of U. S. Patents in Dewey & Co.'s Patent Office Library, 252 Market St., S. F.

- FOR WEEK ENDING NOVEMBER 16, 1886.
- 352,849.—PLOW—John A. Ball, Grass Valley, Cal.
- 352,674.—REIN-GUARD—C. L. Bard, San Buenaventura, Cal.
- 352,675.—VEHICLE SPRING—E. Bowman, Santa Cruz, Cal.
- 352,732.—HYDRAULIC NOZZLE—J. H. Byrne, Nevada City, Cal.
- 352,527.—SIGNAL BUOY—T. Duffy, S. F.
- 352,744.—CAR COUPLING—S. J. Ford, Placerville, Cal.
- 352,685.—JOURNAL BEARING—Frank & Wicks, Pinal, A. T.
- 352,686.—BALING-PRESS—J. L. Gilbert, Lebanon, Ogn.
- 352,825.—STEAM BOILER—C. N. Hitchcock, Stockton, Cal.
- 352,695.—APPARATUS FOR TRANSFERRING LIQUIDS—Kenworthy, Sexton & Thompson, Colton, Cal.
- 352,544.—PROTECTING FRAMEWORK FOR LEVES, ETC.—J. Kernaghan, S. F.
- 352,761.—CAR AXLE—E. E. Kregle, Buena Vista, Ogn.
- 352,891.—SKIRT-HOLDER AND RACK—F. M. Reynolds, Pinacate, Cal.
- 352,574.—STEAM ROAD-ROLLER—J. Scheerer, S. F.
- 352,578.—ORE CONCENTRATOR—S. W. Shaw, S. F.
- 352,719.—WINDOW-SASH HOLDER—H. W. R. Strong, Oakland, Cal.
- 352,896.—WATER HEATER—Swager & Fercher, Astoria, Or.

NOTE.—Copies of U. S. and Foreign patents furnished by Dewey & Co., in the shortest time possible (by mail or telegraphic order). American and Foreign patents obtained, and general patent business for Pacific Coast inventors transacted with perfect security, at reasonable rates, and in the shortest possible time.

YELLOW PINE AND BEDBUGS.—The American Architect and Building News says: "The southern pine seems to be the natural habitation in this country of the *cimex lectularius*, or bedbug, which is found in immense numbers under the bark of old trees of that species. If the wood contains natural clefts the insects and their eggs remain in these after sawing, and are often carried in that way in the seams of large timbers into buildings. It is worth noticing that living trees of yellow pine sometimes keep houses near them infested with the vermin, which stray in all directions from their home."

SEEDS, TREES AND NURSERY STOCK.—W. R. Strong & Co., the long-established and well-known nursery and seedsmen of Sacramento, have already issued their annual catalogue for 1887—a liberally illustrated pamphlet of more than 50 pages. It embraces descriptive and price lists of vegetable, flower, and tree seeds, plants and bulbs in great variety, with directions about planting and other information convenient and useful.

## Taking Agencies and Signing Contracts.

An old subscriber has lately written us as follows—excepting date and signature :

There came to Hollister, about three weeks ago, a couple of men representing themselves as agents of the Hydrocarbon Burner Co., of Chicago, with their branch office 118 Eddy street, S. F. They tried to get me to take the agency for this part of the State. They wanted me to sign four different papers; one I should keep, one for the company, one for the patentee, and the fourth for the agent in the city. I would not do anything of the kind. When they found they could not get me to bite at what I considered a swindle, they went to one of my neighbors, and got him to take the agency and sign the papers. The next day they went to the bank and got two of them cashed for \$300—which were two notes for value received. I am convinced that the whole is a perfect swindle, as they showed me papers that they had from different parts of the State. I asked them why they did not get some of the business men in the town to take the agency. They told me that they thought a farmer would take more interest in it, and at the same time they wanted us to make money out of it. The price of the burner is \$20, but the local agent was to get them for \$9. They claim for their burner that it costs worth of crude coal oil will keep up a steady fire for 10 hours in an ordinary cooking stove. I wish you would try and find out all you can about it, and let me know through your paper.

Soon after receiving the above we sent a representative of the PRESS to No. 118 Eddy street, where he found the company's sign out and one of the burners set up in a large cooking stove and in charge of an honest-seeming and genial-mannered old gentleman, who explained its construction fully and set it in operation.

Nevertheless, we find this in the Fresno Republican:

A HAYSEED CONTRACT.—A slick individual representing himself to be Thomas E. Hall, and as representing the Excelsior Hydrocarbon Company, has been over the country fleecing the innocent. He runs on them a hayseed contract, which is nothing more or less than a promissory note. Many times have farmers been warned to be careful what they sign or they will sign away more money than they intend to. The promise to pay is a bad thing for a man to do provided he can, and his credit is good. This fellow Hall caught several of the unsuspecting over this county. He gets their signature to his "hayseed contract," which is nothing more or less than a note, and then he shaves it at some bank.

And this in the Tulare Register:

HE'S AFTER YOU.—A nice young man, who sometimes answers to the name of Thomas E. Hall, is around the country wearing store clothes and with his mouth full of guile. He is representing some kind of an outfit called the Excelsior Hydrocarbon Company, and contracts signed turn up shortly in the form of promissory notes. This matter may be all right, but from the way our friends up north are coming out in the newspapers and declaring to be fraudulent the notes with their signatures which have been sold by this company, it has a suspicious appearance. It may be well to use care in tackling this business, unless you wish to pay double price for a small stock of inferior experience. If you want to get your eye-teeth cut it will be cheaper to wait and patronize the next soap man who happens along.

And we feel bound to caution our readers against signing documents without thoroughly studying and understanding their purport for themselves, if at all doubtful submitting them to the inspection of some keen and reliable legal friend, and then, finally, taking good care to scrutinize every copy (if the papers be in duplicate) before they affix their signatures.

If a man thoroughly understands and realizes the fact that he is giving his note for value received to the amount of say \$300 for the privilege of being allowed to try to sell on commission say 100 machines or devices of a given pattern in a certain neighborhood; and that he is taking all the risks—even that of the alleged "company" failing to fulfill their part of the contract in supplying the wares in case he succeeds in securing the orders—let him realize all this; and then, if he suffers a plausible "general agent" to talk him into "giving himself dead away," he may soon have cause to feel that he has been victimized in a heathenish and heartless fashion, but he can hardly hope for any legal redress.

So, beware what you sign!

If, in the case described by our correspondent and by the Fresno and Tulare papers, many should be found to have been swindled, it is to be hoped they will combine and see that parties to such a swindle receive their just deserts.

## Rural Seed Offering—1886.

Great Inducements for New Subscriptions.

To encourage gardening and further extend the circulation of the PACIFIC RURAL PRESS, we will offer, while this notice remains in our columns, to furnish to all old or new subscribers the following seeds on the favorable terms named below:

### VEGETABLE SEEDS.

83 Varieties.	34 Cactalia Coccinea (Tas-sal flower).....	95 Can panula Speculum (Venus's Looking Glass) 5
In Papers, postpaid. Cts.	96 Candytuft, white fragt 5	97 Centaurea Cynus (Bach-elor's Button)..... 5
1 Early Blood Turnip... 10	98 Clarkia, fine mixed..... 5	99 Convolvulus (Morning 5
2 Early Extra Bassano... 10	100 Foxglove, mixed..... 5	101 Gilia, mixed..... 5
3 White Sugar..... 10	102 Globe Amaranthus..... 5	103 Gypsophila Elegans..... 5
4 Yellow Sugar..... 10	104 Ice Plant..... 5	105 Larkspur, finest mixed 5
5 Early Long Dark Blo'd 10	106 Aster China, mixed..... 5	107 Love-in-a-mist..... 5
CABBAGE.....	108 Marigold, db (French) 5	109 Marigold, African, dbl. 5
6 Early York..... 5	110 Mignonette, Sweet..... 5	111 Nasturtium..... 5
7 Early Dutch..... 10	112 Nolana..... 5	113 Portulaca, mixed..... 5
8 Early Wakefield..... 10	114 Poppy, Double..... 5	115 Rocket, Sweet..... 5
9 Ex's Fine Large Dutch 10	116 Scabiosa, Dw't, mixed. 5	117 Sensitive Plant..... 5
10 Early French Ocheart..... 10	118 Sweet Pea, White..... 5	119 Sweet Pea, Crimson..... 5
11 Late Drumhead..... 10	120 Sweet Pea, Everlasting..... 10	121 Sweet Pea, Everlasting..... 10
12 Red Dutch (pickling)..... 10	122 Sunflower, Cal, Dble. 5	123 Adumia Cirrhosa (Mountain Fringe)..... 10
CELERY.....	124 Al Bea (Hollyhock) fine 10	125 Aster China, mixed..... 10
13 White Solid..... 10	126 Sweet Pea, White..... 10	127 Australian Vine..... 10
CALIFLOWER.....	128 Balm, Fine Paris, dbl 15	129 Balm, Splendid, dbl. 15
14 Early Paris..... 10	130 Balm, Dwarf, double 25	131 Balm, Rose Fl'd, dbl 15
CARROT.....	132 Balm, Rose Fl'd, dbl 15	133 Browallia Grandiflora..... 10
15 Extra Early Forcing..... 10	134 Canna (Indian Shot)..... 10	135 Canna, fine mixed var. 10
16 Long Orange..... 10	136 Celosia Cristata Varie'a 10	137 Celosia Cristata Pur-pura..... 10
17 Early Horn..... 10	138 Celosia Cristata, fine 10	139 Celosia Cristata, fine 10
18 White Belgian..... 5	140 Dianthus Chinensis (Indian Pink)..... 10	141 Dianthus Chinensis 10
CUCUMBER.....	142 Celosia Cristata, fine 10	143 Dianthus Chinensis 10
19 White Spine..... 10	144 Chrysanth. Albun..... 10	145 Chrysanth. Albun..... 10
20 Early Cluster..... 10	146 Datura, fine mixed..... 10	147 Evening Primrose..... 10
21 Early Farm..... 10	148 Forget-me-not..... 10	149 Geranium Zonale..... 10
22 Long Green..... 10	150 Geranium, fancy color-ed leaves..... 25	151 Godetia (The Bee)..... 10
23 Eng. Gherkin, Pickles..... 10	152 Gourds (Hercules Club) 10	153 Ipomoea (Cypress Vine) 10
24 Early Curled Silesia..... 10	154 Indian Pink, dbl, mxd 10	155 Lobelia, Crystal Palace 10
25 Ice Drumhead..... 10	156 Compacta..... 25	157 Golden Pheasant..... 10
26 Simpson's Early Cur'd 10	158 Musk Plant..... 10	159 Nierembergia Gracilis..... 10
27 Prize Head..... 10	160 Pansy, fine mixed..... 10	161 Petunia, mixed..... 10
28 White Paris Cas..... 10	162 Phlox Drummondii..... 10	163 Pyrethrum Aureum 10
29 Hanson..... 10	164 Salpiglossis mixed..... 10	165 Stock (Ten Week)..... 10
30 Boston Market..... 10	166 Wallflower, fine mixed 10	167 Wallflower, purple..... 10
MELONS.....	168 Zinnia, mixed, fine..... 19	169 Zinnia, Scarlet, dbl..... 10
31 Large Yel. Canteloupe..... 10	170 Beller Perennials (Daisy) 15	171 Single..... 15
32 Extra Fine Nutmeg..... 10	172 Campanula Medium (Canterbury Belle)..... 15	173 Canary Bird Flower..... 15
33 Canaba (new)..... 10	174 Thunbergia, mixed..... 45	175 Aquilegia Alpina (Col-umbine)..... 20
34 Cuban Queen Wincelon 10	176 Lobelia, dark, mxd 20	177 Verbena, choice, mxd. 20
35 Mt. Sweet Watermelon..... 10	178 Violet, Blue..... 20	179 Balm, Camelia, flower'd 20
36 Iron Clad Watermelon..... 10	180 Carnation, fine mixed. 25	181 Digitalis..... 5
37 Sealy Bark do..... 10	182 Gaillardia (Hyacinth Bean) 10	183 Hydrilla..... 10
38 Black Spanish do..... 10	184 Nemophila, fine mixed 10	185 Perilla Naekineusis..... 5
39 White Imp, or Lodi do..... 10	186 Saponaria Multiflora..... 5	187 Scabiosa Aporturpuria 10
ONION.....	188 Scabiosa Aporturpuria 10	189 Scarlet Runners (Climb-ing)..... 10
40 Early Red..... 10	189 Scabiosa Aporturpuria 10	190 Schizanthus (H..... 5
41 Red Winters..... 10	190 Schizanthus (H..... 5	191 Annals..... 5
42 Yellow Winters..... 10	191 Annals..... 5	192 Schizanthus, finest 5
43 White Dutch..... 10	192 Schizanthus, finest 5	193 Myrsiphyllum Aspara-goides (Smilax)..... 25
44 New Early Round..... 10	193 Myrsiphyllum Aspara-goides (Smilax)..... 25	
RADISH.....		
45 Mammoth California..... 10		
46 Olive Shape Radish..... 10		
47 Early Scarlet Turnip..... 10		
48 Bk Spanish or Wint'r Squash..... 10		
49 Early Scollap Bush..... 5		
50 Early Sum, Crk Neck..... 10		
51 California Field..... 10		
52 Marblehead..... 10		
53 Boston Marrow Wint'r 10		
54 New Hubbard Winter..... 10		
55 Large Yellow..... 10		
56 The Conqueror..... 10		
57 Early Red Smooth..... 10		
58 Trophy..... 10		
59 Canada Victor (earl's) 10		
60 Acme..... 10		
TURNIP.....		
61 Cow Horn..... 10		
62 Yel. Rutab' or Sw'd'h 10		
63 Early Wht Flat Dutch..... 5		
64 Long White French..... 10		
65 Imp. Late Rutabaga..... 10		
66 Round Leaf..... 10		
67 Large Flanders..... 10		
PEARS.....		
68 Extra Early..... 10		
69 Champion of England..... 10		
70 Yorkshire Hero..... 10		
71 Queen of Warts..... 10		
BEANS.....		
72 Black German Wax..... 10		
73 Refugee..... 10		
74 Red Valentine..... 10		
MISCELLANEOUS.....		
75 Kohlrabi..... 10		
76 Scotch Kale..... 10		
77 Curled Parsley..... 10		
78 Sage..... 10		
79 Thyme..... 10		
80 Tobacco..... 10		
81 Blue Gum..... 10		
82 Monterey Cypress..... 10		

### FLOWER SEEDS.

107 Varieties.	182 Nemophila, fine mixed 10	183 Perilla Naekineusis..... 5
85 Aconitum..... 5	184 Saponaria Multiflora..... 5	185 Scabiosa Aporturpuria 10
86 Alonosa, Grandiflora..... 5	186 Scabiosa Aporturpuria 10	187 Scarlet Runners (Climb-ing)..... 10
87 Alyssum, Sweet..... 10	188 Schizanthus (H..... 5	189 Annals..... 5
88 Amaranthus Abyssinis..... 15	190 Schizanthus, finest 5	191 Myrsiphyllum Aspara-goides (Smilax)..... 25
89 Agrostis..... 10		
90 Adumia Cirrhosa..... 10		
91 Ambronis Umbellata..... 10		
92 Amaranthus Caudatus (Love-lies-bleeding)..... 5		
93 Antirrhinum Majus, single mixed..... 5		

Refer to Nos. in latest issue when ordering.

For \$1.00 we will furnish new subscribers the PACIFIC RURAL PRESS for three months, and \$1.00 worth of the above seeds. For \$1.75 the RURAL six months and \$1.00 worth of seeds. For \$3.25 the RURAL one year, and \$1 worth of seeds. For \$4.50 the RURAL for eighteen months and \$1 in seeds. The seeds will be carefully forwarded, post paid, from some one or more of our leading and reliable seedsmen, whose name will accompany the package. In ordering, write on a separate sheet the number only of each article wanted as numbered, together with your address.

Old subscribers can advance payment so that their subscriptions will be paid the same length of time in advance and receive the same terms as above. Those who have remitted since this offer was made can send the additional amount which would have entitled them to a premium, and receive the same by stating which numbers they prefer.

For other kinds of seeds, or for seeds in larger packages, patrons are referred to reliable seedsmen advertising in this paper. We wish to aid in increasing the planting and cultivation of gardens.

We are not going to embark in the regular seed business, and have not time to investigate or answer many questions of private interest only, nor respond to orders received without remittances.

Subscribers will please notify neighbors who do not take this paper of this offer, and the merits of the RURAL. In writing correspondence, items of information, or on other business, please use a separate sheet.

SUNLIGHT ON THE FIRE.—It is a mooted question whether the sunlight falling upon an ordinary wood fire retards the process of combustion. This is a popular notion, and one writer says it looks as if the fire burned more feebly when the sun shines full upon it. It is now alleged by scientific men that there may be some influence produced by the action of the sun.



## Breeders' Directory.

Six lines or less in this Directory at 50c per line per month.

### POULTRY.

MRS. M. E. NEWHALL, San Jose. White and Brown Leghorns, Langshans, Plymouth Rocks, Light Brahmas, Pekin Ducks and Bronze Turkeys.

JAS. T. BROWN, 18 Georgia St., Los Angeles, Cal. Breeder of Thoroughbred Poultry of the leading varieties. Send for circular and price list.

CHOICE LAND AND WATER FOWLS for sale at all times of the most popular and profitable varieties. Please inclose stamp for new circular and price list to R. G. Head, Napa, Cal.

T. D. MORRIS, Sonoma, Cal. Tuolouse and Embden Geese, Bronze and W. Holland Turkeys, and all leading varieties of Thoroughbred Poultry.

D. H. EVERETT, 1616 Larkin St., S. F., Importer and breeder of Thoroughbred Langshans and Wyandottes.

AXFORD'S IMPROVED INCUBATOR.—400 eggs, \$50; 150 eggs, \$25. Guarantee satisfaction. For particulars address, I. P. Clark, Mayfield, Cal.

J. N. LUND, Box 116, Oakland, Cal. Wyandottes, Langshans, L. Brahmas, P. Rocks, B. Leghorns, B. R. Game Bantams, T. Guineas, Hom'g Antwerp Pigeons.

D. D. BRIGGS, Los Gatos, Cal. Fancy Poultry breeder O. J. ALBEE, Santa Clara. Thoroughbred poultry.

E. C. CLAPP, South Pasadena, Cal. Light Brahmas and Plymouth Rocks. No fowls for sale. Eggs from first-class stock, after Nov. 1st.

CALIFORNIA POULTRY FARM, Stockton, Cal. Send 2-cent stamp for Illustrated Catalogue.

W. C. DAMON, Napa, Wyandottes, W. and B. Leghorns, P. Rocks, L. Brahmas, Pekin Ducks.

### HORSES AND CATTLE.

E. W. STEELE, San Luis Obispo, Cal., breeder of Thoroughbred Holstein and Jersey Cattle.

SETH COOK, Danville, "Cook Farm," Contra Costa Co., breeder of Aberdeen Angus, Galloways and Devons (Registered). Young stock for sale.

PETER SAXE & SON, Lick House, San Francisco, Cal. Importers and breeders, for past 18 years, of every variety of Cattle, Horses, Sheep and Hogs.

WILLIAM NILES, Los Angeles, Cal. Thoroughbred Poultry, Cattle and Hogs. Write for circular.

J. R. ROSE, Lakeville, Sonoma Co., Cal., breeder of Thoroughbred Devons, Roadsters and Draft Horses.

THE BEST HERD OF JERSEYS, all A. J. C. C. registered, is owned by Henry Pierce, San Francisco.

P. H. MURPHY, Brighton, Perkins P. O., breeder of Shorthorn Durhams, and Poland-China Hogs.

ONTARE RANCH, three miles west of Santa Barbara, Santa Barbara county, California. Coach Horses, Draft Horses. Trotting bred Horses and pure Holstein-Friesian Cattle. Young cattle and matched teams always on hand. Francis T. Underhill, Proprietor. C. F. Swan, Manager.

COTATE RANCH BREEDING FARM, Pages Station, S. F. & N. P. M. R. P. O., Penn's Grove, Sonoma Co., Cal. Wilfred Page, Manager. Breeders of Short Horn Cattle, English Draft Horses, Spanish Merino Sheep and Berkshire Swine.

P. S. CHILES, Davisville, Yolo Co., importer and breeder of registered Shorthorns of the best families.

SINSON & MARSH, Dayton, Nevada. Registered Shorthorns of choice breeding strains.

T. P. A. WILLIAMS, Columbia, Boone Co., Mo., breeder and importer of Thoroughbred Herefords.

LEONARD BROS., Mt. Leonard, Mo., importers and breeders of Galloway, Aberdeen-Angus and Short-horn cattle.

M. D. HOPKINS, Petaluma, importer of Thoroughbred Shorthorns and Red Poll cattle for milking strains.

HYDE & MOORE, Visalia, importers and breeders of Shorthorn cattle. Young stock for sale.

J. A. BREWER, Centerville, Alameda County, Cal. Shorthorns and Grades. Young stock for sale.

R. J. MERKELEY, Sacramento, breeder of Norman, Percheron Horses and thoroughbred Shorthorn Cattle.

Estate of M. E. BRADLEY, San Jose, Cal., breeder of recorded thoroughbred Shorthorn Cattle and Berkshire Hogs. A choice lot of young stock for sale.

### SHEEP AND GOATS.

EASTON MILLS, Lakeville, Sonoma Co., thoroughbred Spanish Merino Sheep. Choice rams for sale.

J. B. HOYT, Bird's Landing, Cal., importer and breeder of Shropshire Sheep; also breeds cross-bred Merino and Shropshire Sheep. Rams for sale.

L. U. SHIPPEE, Stockton, Cal., importer and breeder of Spanish Merino Sheep, Durham Cattle, Red Duroc and Berkshire Swine. Bred graded rams for sale.

KIRKPATRICK & WHITTAKER, Knight's Ferry, Cal., breeders of Merino Sheep. Rams for sale.

G. N. WHITAKER, Santa Rosa, breeder of Shropshire Down Sheep; 10 fine bucks for sale.

T. H. HARLAN, Williams, Colusa Co., breeder pure blooded Angora goats, & Merinos; young stock for sale.

R. H. CRANE, Petaluma, Cal., breeder and importer. South Down of Long John Wentworth herd for sale.

E. W. WOOLSEY & SON, Fulton, Sonoma Co., imports & breeds Thoroughbred Merino, & Jersey Cattle.

### SWINE.

WILLIAM NILES, Los Angeles, Cal. Thoroughbred Poland-China and Berkshire Pigs. Circulars free.

JOHN RIDER, Sacramento, Cal. Breeder of Thoroughbred Berkshire Swine. My stock of Hogs are all recorded in the American Berkshire Record.

W. D. RUCKER, Santa Clara, breeder of registered improved Poland-China Swine. Pigs for sale.

I. L. DICKINSON, Lone Oak Farm, Sonoma, Tuolumne Co., Cal., breeder of thoroughbred Essex Hogs. Pigs now ready for sale. Prices reasonable.

TYLER BEACH, San Jose, Cal., breeder of thoroughbred Berkshire and Essex Hogs.

GEO. BEMENT & SON, Redwood City. Ayrshire Cattle, Southdown Sheep, Berkshire and Essex Swine.

## IMPORTANT!

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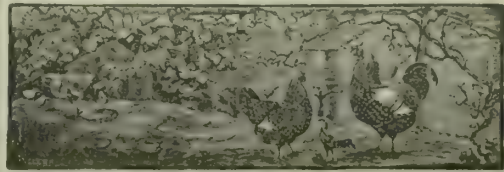
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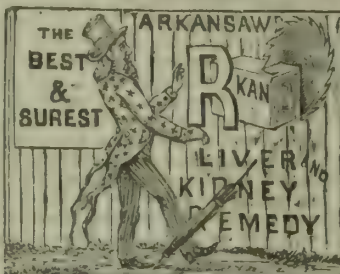
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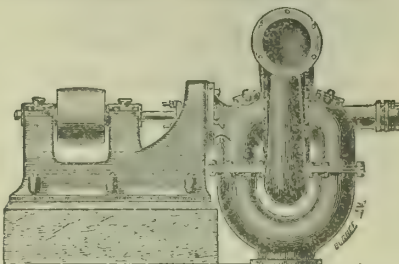
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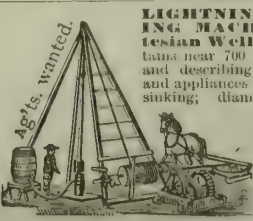
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## S. F. MARKET REPORT

NOTE: Our quotations are for Wednesday, not Saturday, the date the paper bears.

## Weekly Market Review.

## DOMESTIC PRODUCE, ETC.

SAN FRANCISCO, Nov. 23, 1886.

Changeable weather the past week has influenced the market on leading cereals from day to day, but with clearer skies at the close the tone of the market is more reassuring. In fruits, assortments are growing less and vegetables are also lessening, with only winter varieties to be freely seen. In wheat the English markets have been gradually advancing, with a strong closing to-day. The following is to-day's cable:

LIVERPOOL, Nov. 23.—WHEAT—Firmly held and buyers hold off California spot lots 6s 10½d, to 7s 1¼d; off coast, 35s 6d; just shipped, 36s; nearly due, 35s 6d; cargoes off coast, demand fair prices and a shade higher; on passage, buyers and sellers apart, with upward tendency; English country markets, firm; French, steady; wheat and flour in Paris, turn dearer.

## Foreign Review.

LONDON, Nov. 22.—The *Mark Lane Express*, in its review of the British grain trade during the past week, says: Wheat deliveries continue very restricted. In London, trade is slow, at an advance of 9d; in the provincial markets, values are very firm and slightly above the current rates in London. The sales of English wheat during the week were 48,464 quarters, at 31s 4d, against 58,097 quarters, at 30s 1½d during the corresponding period of last year. Flour is steady, barley inactive. The trade in foreign wheat is hardening; quotations are irregular and tending toward an advance. The heavy arrivals of foreign oats caused a fall in values of from 3d to 6d. Beans are 1d dearer. Eight cargoes of wheat arrived; two cargoes were withdrawn and five remained, four of which were California and one Oregon. To-day there was an increased inquiry for wheat. A shilling advance was asked on Indian, American, and Russian. Flour and corn were each 6d dearer. Barley was quiet. There were further large arrivals of oats, and prices were 3d lower. Beans and peas were firm. Linseed was 6d dearer.

## Eastern Wool Markets.

BOSTON, Nov. 20.—Notwithstanding the fact of a quiet trade at present, prices have held up firm, and manufacturers, when in need of supplies, have to pay full prices. There is little shading on prices of desirable wool. The virtual settlement of the labor troubles in New York State and Philadelphia removes what promised at one time to be a serious drawback to the trade. On the whole the situation of the market has improved this week. California wool has been in good demand. The sales include 407,000 pounds spring and fall. Of fall wool, 100,000 pounds were sold, all on private terms. In spring there have been sales of 50,000 pounds, at 19c to 25c; 80,000 pounds at 20c to 24c; 77,000 pounds on private terms.

NEW YORK, Nov. 21.—Holders do not offer goods with anxiety, but continue to expect to do better later in the season than at present. The demand has been slow for some time, and confined largely to small invoices wanted for some special necessity. Business last week was again only fair, but dealers in several cases report little more than looking around within the last day or two, with indications that consumers have commenced to exhaust supplies and feel like replenishing. Among the sales were 20,000 pounds Oregon, at 24½ cents. The Philadelphia market is very quiet, but holders show no signs of weakening. Manufacturers are showing more interest, and have been trying unsuccessfully to buy at 1 or 2 cents below the general asking prices. Among the sales were 5000 pounds Nevada fine, at 22 cents; 50,000 pounds Montana at 25½¢ to 26 cents; 5000 pounds medium territory at 24 cents; 25,000 pounds territory at 25¢ to 26½ cents; 2000 pounds California at 19½ cents. The Boston market is quiet, with an improved undertone and better interest shown by manufacturers.

## New York Hop Market.

NEW YORK, Nov. 21.—First-class goods still command a good premium over the ordinary run, and other than positively inferior goods are at least steady. Pacifics and States remain in about the same position that they have been for some time past, with the principal holders apparently indifferent sellers of fine qualities at current prices. Pacific coast crop of 1886, prime to choice, 28¢ to 30 cents; fair to good, 26¢ to 27 cents; 1885, good to choice, 13¢ to 16 cents; mix-d Germans, 24¢ to 25 cents; Altmars, 18¢ to 20 cents; Kents, 23¢ to 25 cents; Sussex, 20¢ to 22 cents. The Cooperstown Journal of Nov. 20 says: Lane, Avery & Co. have cleared out another grower's entire crop of 1886 hops, in bale, at 18 cents. They were of common quality. This firm has also bought during the past week about 15,000 bales of German and Pacific hops of 1886, at 30¢ to 33¢.

## New York Wheat Market.

NEW YORK, Nov. 21.—In wheat, the past week, pot has met with moderate inquiry, both for milling and shipment. Options have been fairly active, and dealings were larger than in the preceding week. During the latter part of the week the general market ruled higher, in sympathy with stronger reports from European markets. Spot closed ½¢ to 2¢ higher. Options, November, 85½¢; December, 86¢; January, 87½¢; February, 88½¢; and May, 93½¢.

## California Fruit at the East.

CHICAGO, Nov. 20.—The shipments of grapes to this market from California, for the past three or four days, have been of a somewhat more liberal character than during the three or four weeks previous to this. The market for all varieties of California fruit is about steady, with a moderately good demand. Tokays in choice condition sold for \$2.75 to \$3.40 per box, and Muscats at \$2.50 to \$2.75. Tokays of lower condition brought \$2.25 to \$2.50, and Muscats and Verdelis at \$2.25. The bad condition of the fruit that is shipped here shows that the season is very nearly over, and any further shipments here have been stopped by commission men. Pears are scarce and firm. There is not much of this fruit on the market,

nor is it thought there will be any more consignments received. The prices for pears range from \$3.50 to \$4.00 per box. There is a scarcity of quinces. There has been no change in dried fruits for some months.

NEW YORK, Nov. 20.—California pears are quoted at \$2.40 per box; quinces, \$1.50 per box; grapes, \$2.45 per case of 40 pounds.

## California Products at the East.

NEW YORK, Nov. 21.—Lima beans, \$1.80 to \$1.85. Seeds—Sales are reported of 300 bags of California yellow mustard, at 3¼¢ to 4¢. Quoted at 3¼¢ to 4¼¢. Canned goods of all kinds are moving with increased freedom at hardening prices. The tendency in corn and tomatoes is upward. California canned peaches are quoted at \$2.25 to \$2.50; pears, \$2.25 to \$2.50; plums, \$1.75 to \$2; grapes, \$1.75 to \$2; apricots, \$2.15 to \$2.25. Columbia river salmon, in this market, is working into a decidedly stronger position. The stock here, it appears, has been reduced. The supply, not exceeding 6000 cases, is all in jobbers' hands. Columbia river, \$1.57½¢ to \$1.60; outside rivers, \$1.40 to \$1.45.

## Local Markets.

BARLEY—The tendency, throughout the week, has been upward under strong buying. On Call transactions have been free, with an advance established. The following are to-day's sales: Morning Session: Buyer season—100 tons, \$1.09; 500, \$1.09½; 200, \$1.09½; 200, \$1.09½; 100, \$1.09½; 200, \$1.09½. Afternoon Session: Buyer season—500 tons, \$1.09; 200, \$1.09½; 200, \$1.09½; 100, \$1.06½; 100, \$1.06; 100, \$1.05½. Buyer 1886—200 tons, \$1.06½; 100, \$1.06; 100, \$1.05½.

BEANS—The market is dull and inactive, yet large holders express confidence in the future.

BUTTER—The market continues overstocked with both pickled and fresh, which favor buyers.

CHEESE—Supply lighter, demand light, market strong at full quotations.

EGGS—Continued receipts of Eastern and Californian from the lower counties have broken the market, with a weak closing at quotations.

WHEAT—There was a stronger and more marked inquiry to-day, with buyers quietly paying an advance for straight lots. On Call transactions have been free, at gradually hardening prices. The following are today's sales: Morning Session: Buyer season—400 tons, \$1.47; 1200, \$1.46½; 300, \$1.46½. Buyer 1886—100 tons, \$1.41½. Afternoon Session: Buyer season, 2400 tons, \$1.40½; 2600, \$1.46½.

[COMMUNICATED.]

## Market Information.

## Cereals.

The RURAL PRESS has been a firm and consistent believer in higher prices for wheat, not abating one iota even when, under manipulation, the market did not appear to justify the correctness of the assumed position. That the position has been proven correct is witnessed in the fact that an advance of fully 20 cents per cental (\$4 per ton) has been established since July 1st. Although this is a decided advance, yet the present statistics of the market justify the conclusion that still higher prices will rule before the end of the first quarter next year. By referring to issues of this paper running back from six or eight weeks, or, if convenient, to even up to July, a more thorough understanding of the situation can be arrived at, for in these back numbers statistical and other information of a valuable character, bearing on the market, is given, which will aid no little in proving the correctness of the position of the PRESS.

Throughout the past week wheat has ruled strong abroad, with several advances reported. These advances are due in the main to a decided falling off in the Indian shipments, owing to lessened supplies there, and also to the advance in silver operating against the exporting of wheat.

The stock of wheat in France is below an average. Late advices from France report that "millers are for to be turning their attention more to foreign wheat, owing to the defective condition of home-grown, and the scarcity of dry native wheat." French foreign requirements are placed at 55,000,000 bushels. St. Petersburg shipments are falling off. At Odessa, with a stock of 1,728,000 bushels, the market is steady. The London *Miller* states that in every English village where a mill is the center of local flour supplies, the local wheat delivery is below expectation. Foreign wheat or foreign flour has to be obtained to supplement the short local supplies. Deficient supplies thus early in the season indicate greater deficiencies in the future.

In the local wheat market there has been a fair degree of activity at gradual advancing prices, owing to holders' unwillingness to sell except at a slight advance every day or two. Sales, as usual, have been all of 1½ to 2½ cents per cental above the quotations of the daily press.

In barley there have been several advances, with a strong closing to-day. The advance is due to lessening supplies and a continued strong export and home demand. It is now conceded that the RURAL PRESS estimate of this year's crop, which was considerably below other estimates, was correct, and consequently the very heavy exports and home consumption have reduced the surplus to as low a point as last year at this time.

The oat market has ruled strong at steady prices throughout the week. Receipts have been fair and consumption good. Holders' views have been strengthened by the strong and higher barley market.

Throughout the week there has been more steadiness to the corn market, with the more choice grades fetching a slight advance. This is due to higher asking prices for Western corn to arrive, and also to less selling pressure by farmers in this State.

## Dried Fruits.

The firmness heretofore noted is continued for the more choice kinds, which have been well cured. It appears to be the prevailing opinion that prices not only keep well up, but advance later on. The high prices ruling for canned fruits help, very materially, dried fruits. The East continues to report a strong and good market.

## Feedstuffs.

Ground barley has been advanced under a good demand and also in sympathy with higher prices for barley.

Bran and middlings continue strong at unchanged prices. An advance is looked for.

Hay is held more firmly, owing to an absence of

heavy rainstorms, and also to a large demand and moderate receipts.

Feed carrots are in good supply at from \$5 to \$6 per ton.

## Fruits.

Although grapes come in more sparingly, yet the market does not respond, owing to the light demand. It takes very choice to fetch top quotations.

Under heavy receipts from Oregon, the market for apples is weak and in buyers' favor, notwithstanding an increase in the demand. It takes something very extra to fetch over \$1 a box. Lady apples are strong at from \$1.50 to \$1.75 as per quality.

Japanese persimmons are in the market, but they have slow sale at from 8 to 10 cts per pound.

Choice pears are very scarce and command good prices, but fair to good are in liberal supply.

In citrus fruits the market is easy, owing to freer receipts and only a moderate demand. The quality of the oranges was never better. On Thursday last, Messrs. Wittland & Fredrickson received a consignment of seedless lemons which are pronounced superior to any other lemon cultivated in this State. It is not only seedless but the skin is no thicker than the skin of a lime. The shape is oblong.

## Hops.

It seems quite impossible to obtain anything new or deserving of especial mention. Holders of choice do not exhibit any uneasiness, for they still assert that brewers must pay considerably higher before the end of the season.

## Honey.

The demand is light, but as the supply is light, values are steady and firm. The home trade is reported to be better.

## Live-stock.

Large holders of beef cattle are trying to obtain an advance, but as yet, unable. There is some inquiry for stall-fed. Mutton sheep have a strong tone. Hogs are in better demand, but buyers do not name an advance except for something very choice. In horses there are no changes to report.

The following are to-day's meat prices: Beef—Stall-fed, 7½¢ to 8¢ lb; grass-fed, extra, 7c; first quality, 6½c; second, 5½c; third, 4½c. Calves, small, 9¢ to 10c; larger, 7¢ to 8¢ lb. Mutton—Ewes, 5½¢ to 6c; wethers, 5c. Lamb—Spring, 6½¢ to 7c lb. Pork—Live hogs on foot, 2½¢ to 3½¢ for grain and dairy fed; 2½¢ to 3½¢ for soft; dressed, 5½¢ to 6c for hard, and 4½¢ to 5½¢ for soft. Grass-fed stock sell on foot, gross weight, at one-half the price they fetch dressed; stall-fed on foot, fetch one-third less than they sell at dressed.

## Nuts.

Nuts are in better demand for the holiday trade, with a very strong market ruling for Brazil walnuts, almonds and peanuts.

## Raisins.

Both home and Eastern orders are increasing, with a stronger holding of the more choice. Eastern advices continue to note the growing favor of Californian. This increasing popularity of Californian can be made more marked by great care exercised in the curing and packing.

## Vegetables.

Potatoes have ruled fairly steady throughout the week, at firmer prices for choice. Were it not for heavy receipts from Oregon, the market would be higher. The quality of those received from Oregon have not been up to the previous season, consequently they did not fetch as high prices as they otherwise would. The last received sold as follows: Burbank seedlings, \$1 to \$1.30, and Garnet Chilis, \$1 to \$1.15.

Onions have ruled fairly steady for hard sound keepers, but weak for the poorer qualities. Receipts have been fair and demand steady.

Sweet potatoes advanced slightly, under lighter receipts and a good demand.

String beans and sweet peas continue to come in a small way, and sell at fancy prices.

In cabbages and root vegetables the market is not strong, yet the feeling is firmer.

Pumpkins and Marrowfat squash are without change.

## Miscellaneous.

The tonnage movement compares with last year at this date as follows:

	1886.	1885.
On the way.....	193,727	169,718
In port, disengaged.....	93,392	122,266
In port, engaged.....	75,018	27,745
Totals.....	359,137	319,729

The above gives a carrying capacity as follows: 1886, 574,619 short tons; 1885, 551,666 short tons; increase over last year, 22,953.

Poultry has ruled fairly steady throughout the week. Turkeys advanced, but on Monday they shaded off, with a weak closing to-day.

Seeds are in better demand, but as yet the orders are not large.

San Francisco, Nov. 23, 1886.

## Fruits and Vegetables.

Extra choice in good packages fetch an advance on top quotations, while very poor grades sell less than the lower quotations.

WEDNESDAY, Nov. 23, 1886.	
Apples, bx com.	40 @ 65
do choice.....	75 @ 100
Bananas, bunch.	1 50 @ 3 00
Blackberries, ch.	— @ —
Cant. loupes, cr.	— @ —
Cherries blk.	— @ —
do Royal Ann.	— @ —
Cherry plums.	— @ —
Crabapples.....	1 50 @ 1 75
Cranberries.....	7 00 @ 9 00
Currants chest.	— @ —
Figs, bx.....	— @ —
Grapes.....	40 @ 55
do Rose Per.	45 @ 55
do Muscat.....	40 @ 60
do Tokays.....	40 @ 60
Indian le.....	75 @ 1 00
Wine, Zinfandel	12 @ 15 00
do Mission.....	10 @ 14 00
Limes, Mex.....	6 50 @ 7 50
do Cal box.....	— @ —
Lemons, Cal, bx	2 50 @ —
do Bliely, box.	9 00 @ 11 00
do Australian.	— @ —
Nectarines box.	— @ —
Oranges, Cal, bx	1 50 @ 3 00
do Tahiti, bx.	— @ —
do Mexican, M.	— @ —
do Panama.....	2 00 @ 3 00
Peaches, bx.....	— @ —
do basket.....	— @ —
Crawfords, bx	— @ —
do basket.....	— @ —
do choice.....	— @ —
Pears, bx.....	60 @ 1 00
do choice.....	1 00 @ 1 50

WEDNESDAY, Nov. 23, 1886.

Vegetables, doz.	8 @ 10
do evaporated.	5 @ —
Peanut butter.	18 @ 22
Pears, sliced.	5 @ —
do qtd.....	— @ 2½
do evaporated.	8 @ 10
Plums, pitted.	7½ @ 8
do unpitted.....	3 @ 4
Prunes.....	5 @ 6
do French.....	— @ —
Zante Currants.	8 @ —
RAISINS.	
Dehesa Clus, fcy	2 65 @ —
Imperial Cabin.	— @ —
et, fan y.....	1 90 @ —
Crown London.	— @ —
Layers, fcy.....	1 70 @ —
do Loose Mus.	— @ —
catela, fancy	1 60 @ —
do Loose Mus.	— @ —
cutels.....	1 50 @ —
Cal, Valencia.	1 50 @ —
do Layers.....	— @ —
do Sultanias.	1 50 @ —
Fractious come	25, 50 an 175
cents higher for halves,	quarters and eighths
VEGETABLES.	
Artichokes, doz.	— @ —
Asparagus box.	— @ —
Beets, sk.....	1 00 @ —
Cabbage, 100 lbs.	50 @ 75
Jarrot, sk.....	25 @ 35
Garlicflower, doz.	— @ —
Celery, doz.....	— @ —

do Bartlett, bx	— @ —
Persimmons, doz.	— @ —
Jap, bx.....	1 00 @ 1 50
Pineapples, doz.	4 00 @ 5 00
Pomegranates, b	— @ —
Plums, doz.....	2½ @ 4
Prunes, doz.....	— @ —
do Egg.....	— @ —
Quinces, bx.....	40 @ 60
Raspberries, ch.	— @ —
Strawberries, ch.	5 00 @ 6 00
Watermelons 100	— @ —
DRIED FRUIT.	
Apples, sliced, b	3 @ 3½
do evaporated.	8 @ 9
do quartered.....	1½ @ —
Apricots.....	12 @ 13
do evaporated.....	12 @ 13
Blackberries.....	9 @ 10
Orion.....	25 @ 30
Dates.....	8 @ 10
Figs, pressed.....	5 @ 6
Figs, loose.....	3 @ 4
Cucumbers box.	— @ —
Eggplants.....	— @ —
Garlic, b new.	— @ —
Green.....	— @ —
do small box.....	— @ —
do large box.....	— @ —
Green Peas, lb.	5 @ 6
Lettuces, doz.	10 @ 15
Lima Beans, lb.	— @ —
Mushrooms, bx.	— @ —
do cultivated.	— @ —
do dry, lb.....	10 @ 12½
do green box.....	— @ —
Parsnips, old.....	1 50 @ 2
Potatoes, b.....	10 @ 15
do green, bx.....	40 @ 60
Pumpkins, ptoul	10 @ 15 00
Squash, Marrow	— @ —
fat, too.....	7 00 @ 12 00
do Summer bz.	25 @ 40
String Beans, lb.	7 @ 8
Tomatoes box.	40 @ 50
Turnip, chl.....	75 @ 1 00

## Domestic Produce.

Extra choice in good packages fetch an advance on top quotations, while very poor grades sell less than the lower quotations.

WEDNESDAY, Nov. 23, 1886.

Pea.....	1 10 @	1 65	Burbank.....	75 @	1 15
Red.....	1 19 @	1 15	Early Rose.....	25 @	65
Pink.....	1 07½ @	1 15	Curry Cove.....	1 50 @	1 00
Large White.....	1 60 @	—	Jersey Blues.....	1 00 @	1 15
Small White.....	1 60 @	—	Tomatoes.....	1 00 @	1 10
Lima.....	2 00 @	2 35	River reds.....	25 @	65
Flat Peas, blk eye	—	1 60	Humboldt.....	—	—
do green.....	1 00 @	1 12½	do Kidney.....	—	—
do Niles.....	1 25 @	—	Chile.....	1 00 @	1 15
BROOM CORN.			do Oregon.....	90 @	1 15
Southern per ton	50 @	70	Peas.....	90 @	1 10
Northern.....	50 @	70	Salt Lake.....	—	—
CHICORY.			do Sweet.....	1 75 @	2 10
California.....	4 @	4½	POULTRY AND GAME.		
German.....	6½ @	7	Hens, doz.....	5 00 @	6 00
DAIRY PRODUCT, ETC.			Roosters.....	5 00 @	6 00
BUTTER.			Broilers.....	3 00 @	4 00
Cal. fresh.....	20 @	30	Ducks, tame.....	4 00 @	6 00
do Fancy brand.....	32½ @	—	do Mallard.....	2 00 @	3 50
Pickle roll.....	17 @	20	do Sprig.....	1 00 @	1 50
Firkin, new.....	15 @	18	Geese, pair.....	1 00 @	2 00
Eastern.....	—	—	do Goslings.....	—	—
CHEESE.			Wild Gray, doz	3 00 @	—
Chesse, Cal.....	12½ @	15	Turkeys, lb.....	14 @	15
do store.....	15 @	16	do Dressed.....	16 @	18
EGGS.			do Turkey Feathers,	—	—
Cal. ranch, doz.....	42½ @	—	tall and wing.....	10 @	30
do store.....	35 @	40	Sulpe, Eng. doz.	—	—
Ducks.....	—	—	do Common.....	—	—
Oregon.....	—	—	do.....	75 @	85
Eastern.....	25 @	30	quail.....	90 @	1 00
Utah.....	32½ @	37½	kabbie.....	1 00 @	1 25
FEED.			Hare.....	1 50 @	2 00
Bran, ton.....	15 50 @	16 25	do Venison.....	8 @	10
Cornmeal.....	26 00 @	27 00			



## ENTOMOLOGICAL.

## Home-Made Lye for Insect Pests.

EDITORS PRESS:—Within the last year I have read in the papers of the destruction of fruit by the scale bug and other insect pests that make their home in most kinds of fruit trees, and the treatment recommended for their expulsion by different parties, and D. W. Coquillett was directed by Professor C. V. Riley, U. S. Entomologist, to conduct some experiments in killing the cottony scale. Mr. Coquillett says, nearly all remedies experimented with were fatal to the young insects, but the adults, especially the females with egg-masses, were still more difficult to destroy on account of their being massed together in such large numbers and protected by the cottony matter secreted by the female. I am now in my eighty-fourth year and have planted three orchards, one in the State of New York and two in Michigan, and took care of each orchard till the trees were from four to six inches in diameter, and my practice was to set up a leach of house-ashes, pour hot water on the ashes in order to get the full strength of the ashes, so that the lye would be strong enough to bear up an egg, then take a broom handle or some suitable stick and tie some woolen rags on one end; with a pail of the lye, proceed to wash the trees and well up the limbs; the lye will penetrate all the crevices, if any, and run down to the root of the trees, killing the larva and every insect pest that are barrowed there, and is also a good fertilizer. I go through the above process every spring when the leaves are about the size of a mouse's ear; the lye causes the bark to grow very smooth and gives it a bright and shining appearance, and I never had a wormy apple in either of those orchards. I have treated my plum trees in the same way and it gave them a beautiful plum color. My trees, treated as above, beat my neighbors in growth and beauty, whose trees were whitewashed. Mr. Tibbets and his co-worshippers to the contrary, notwithstanding. I object to the whitewashing treatment, because it contracts the bark and retards the growth of the trees. In regard to old orchards that are not bearing well, and have a sickly and stunted appearance, I would recommend the scraping of the trees, and burn the scrapings, and prune the trees thoroughly, and in the absence of wood ashes lye, use concentrated lye reduced to the strength of wood ashes lye, and wash the trees with the lye, and on your individual enterprise you are sure to win a vigorous growth of the trees and an abundance of fine fruit.

LESTER CROSS.

Stockton, Nov. 22, 1886.

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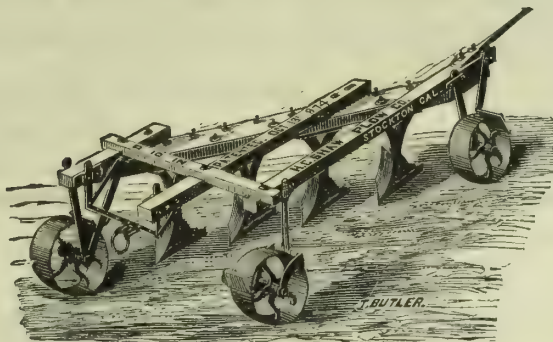
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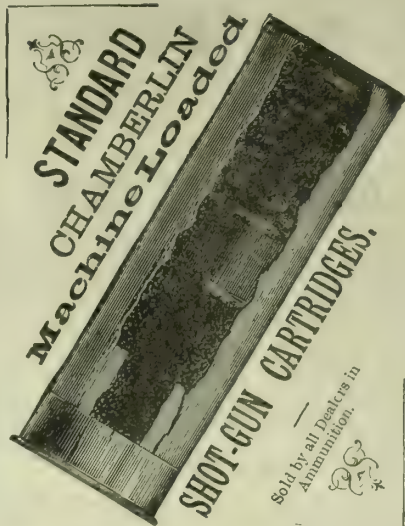
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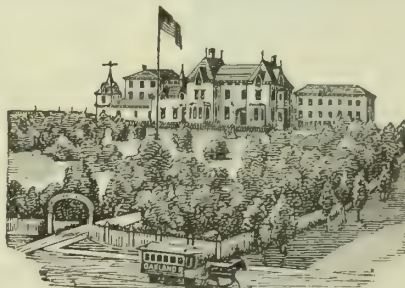
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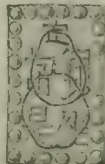
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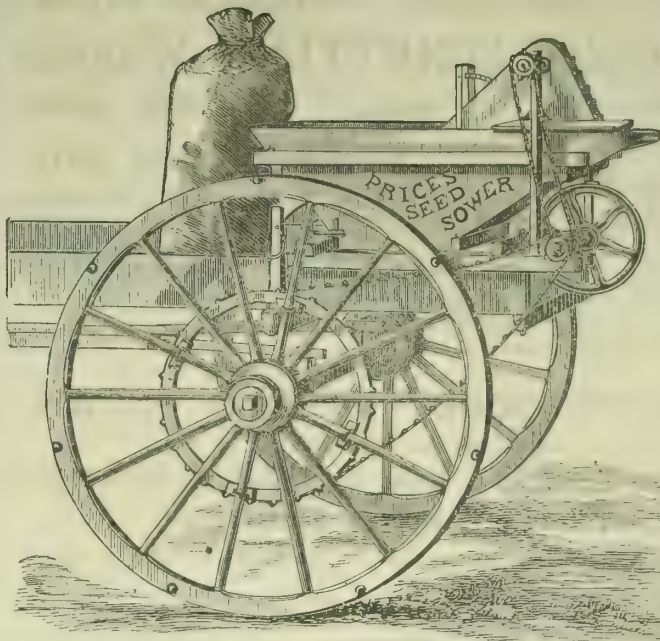
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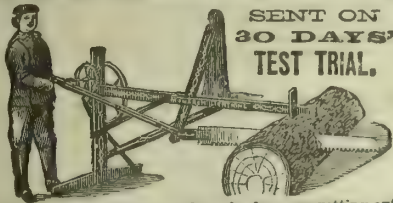
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| Prunes.     | Persimmons,       |
|             | Pomegranates,     |
|             | Mulberries,       |
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| Peaches,    | Rhubarb,          |
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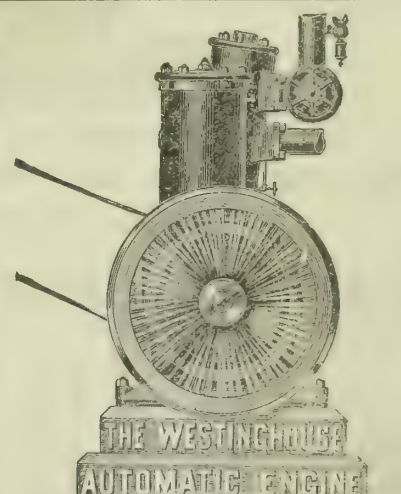
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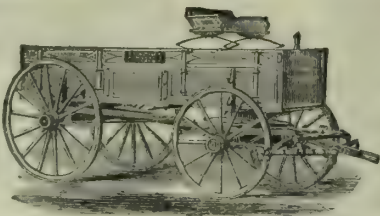
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THEY ARE THE PIONEER WAGONS of the Pacific Coast, and especially adapted for the hard usage to which wagons are subjected here.



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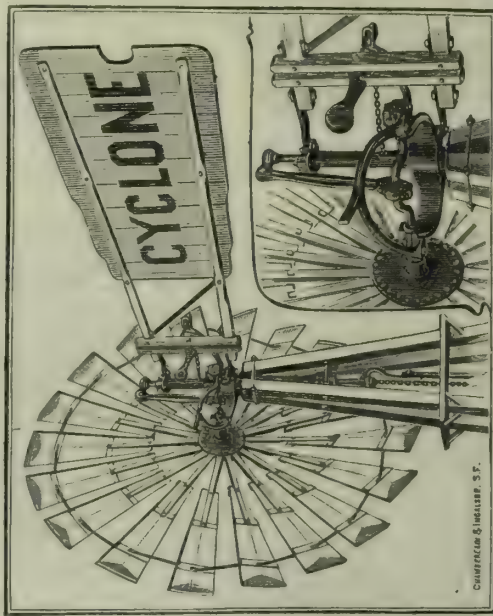
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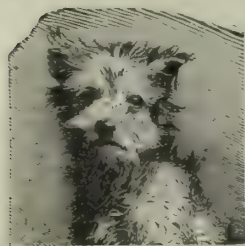
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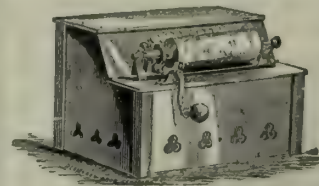
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# PACIFIC RURAL PRESS

TWENTY-PAGE EDITION.

Vol. XXXII.—No. 23.]

SAN FRANCISCO, SATURDAY, DECEMBER 4, 1886.

{ \$3 a Year, in Advance  
SINGLE COPIES, 10 CTS.

## The Herefords at Chicago.

Just a year ago, when the reports of awards at the Chicago fat-stock show came in, we gave the Hereford breed the honor of presentation on our first page, because of the prizes won at the fair in competition with other beef breeds. We have occasion to repeat the process in this issue because the Herefords again have come to the front at the exposition, though their prominence is not so marked as last year. This year the contest between the Herefords and the Polled Angus was quite sharp. It seems to have been an off-year with the Shorthorns, for the leading feeders of this breed and its grades kept their cattle at home.

The reports which have come thus far give the grand sweepstakes prize as judged in the ring to Rudolph Jr., a pure bred Hereford, coming 3 years old, owned by the Wyoming Hereford Cattle Company. There were other prizes, of course, in the live classes, of which we have not full record at present, but we know that an imported Angus steer won three first prizes, and pressed Rudolph Jr. closely on the sweepstakes. In the dead classes, the premium for the best 3-year-old carcass was awarded to "Jerry," a grade Hereford, owned by Fowler & McNatta, and for the 2-year-old carcass to "Plush," a Hereford grade owned by Swan & Bosler—the yearling carcass prize going to an Angus. In the sweepstakes for the best carcass of any age, the Hereford "Plush" was again the winner, and accounts say the award was universally approved.

The heaviest fat steer at the fair was "McGregor," a grade Hereford, of Fowler & McNatta, which weighed 2565 pounds alive, and the next heaviest steer was also a Hereford grade, at 2355 pounds. The next in weight was a Shorthorn grade, at 2300 pounds.

It is an interesting fact that the animals which gained the prizes in the ring did not win on the block. For example, Rudolph Jr., the grand sweepstakes animal, was displaced by other Herefords when the judges passed upon the carcasses. Rudolph Jr. had too much fat and lacked in quality. The premium for the greatest amount of eatable meat was given to a three-year-old grade Hereford, "Quality," owned by Adam Earl. The manifest disagreement between those who judged in the ring and

on the block would indicate the truth of the objection which is often made by stock-growers that judges know nothing of "handling," and that "touch" and "quality," which cut so great a figure among the early breeders, had better be revived and made use of in our cattle judging.

As pertinent to the success of the Herefords, we give on this page the portrait of a representative animal of that breed, the bull Diffidence 7695, owned by the Indiana Blooded Stock Co.

THE CITRUS FAIR.—Much interest is being taken in preparations for the Citrus Fair which

the fruit in firmly, makes his boxes extra-tight, and certainly such fruit as he gave us would seem to be fitted for long preservation from insects and fungi.

THE FRUIT-GROWERS' CONVENTION.—In presenting our reports of the recent Fruit-growers' Convention at Sacramento, we propose to follow our usual policy of making careful preparation of the various addresses and discussions. It will serve the reader better to have a subject treated accurately, even if such handling takes a little more time. Those who

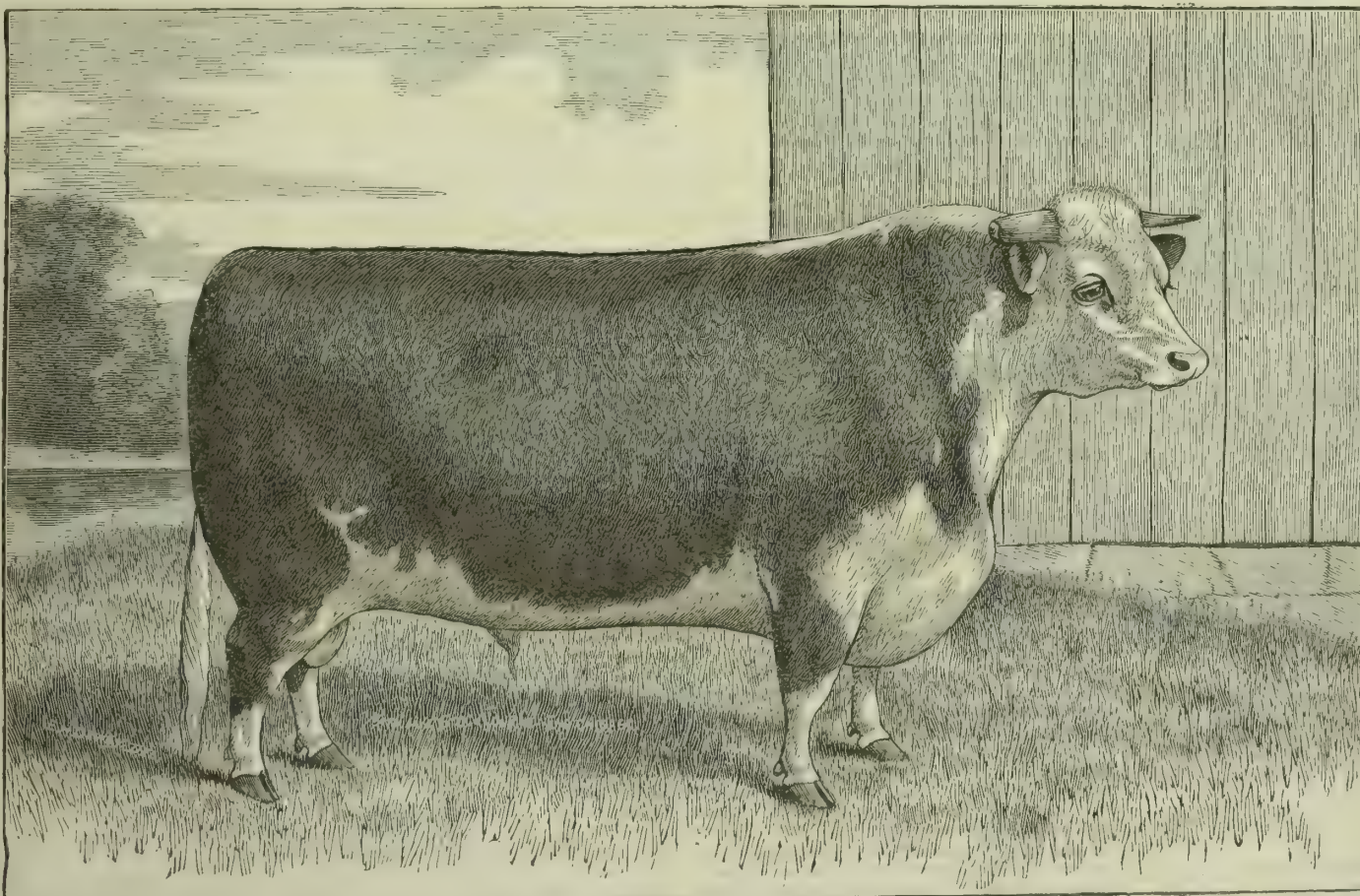
## Notes on Wheat.

Statistics show that the wheat production of the United States is something over 20% of the quantity produced in the whole of Europe. The wheat crop of this country for 1882 was 504,000,000 bushels, and for 1883 it was 421,000,000 bushels. The next largest wheat producer is France, which produced 346,600,000 bushels in 1882, which fell off to 285,600,000 bushels in 1883. France never furnishes the full demands for her own consumption, but imports more or less every year. Russia comes next to France. She produced 203,000,000 bushels in 1882, but only 160,000,000 in 1883. Russia, with a much larger population than France, produces less wheat and yet exports considerable. Her people use but little flour. The European countries next in order of production are as follows: Italy in 1883 produced 128,000,000 bushels; Spain, 120,000,000; Portugal, 77,000,000; Germany, 72,000,000; Great Britain, 69,000,000; Turkey, 41,000,000; Austria, 33,500,000; Belgium, 21,000,000; and Roumania, 20,000,000, etc.

Wheat in this country, 30 years ago, averaged nine bushels to the acre. Lately it has increased to 12 or 13; but it is still much below the average

yield in England, which, for many years, has averaged 29 bushels to the acre. This large yield is due to careful cultivation, more particularly in supplying the land with proper mineral food to supply the nutriment withdrawn by the annual cropping of the same growth. But little attention is paid to that important requisite in this country. The wheat-grower here, as a general thing, raises continual crops of that grain so long as the land will produce a crop; then he converts his land to some other use, and gives up wheat-growing to his neighbor "further west." It is thus that the once celebrated wheat lands of New York, Vermont and other Eastern States have been turned to other products.

A large portion of the wheat-producing lands of California will not now yield one-half of what they did originally, and the time is not far distant when such lands will have to be turned to other uses, unless special attention is given to a proper restoration of the soil by mineral or other forms of dressing.



PURE BRED HEREFORD BULL, "DIFFIDENCE," NO. 7695.

will open in Sacramento on the 13th of this month. A number of counties are working well in securing collective displays, and in others there are many individual efforts which will make good returns. Mr. Carrington, of the *Record-Union*, who made us a call last week, assured us that the outlook for the fair was most excellent, and that a display far surpassing last year's effort will result. Our readers who can spare a part of next week for an excursion will be profited and well treated if they visit the capital city.

FINE SULTANAS.—Mr. R. B. Blowers, of Woodland, gave us the other day a sample of his fine Sultanias. They are perfectly cured, cleaned of stems, and evidently carefully selected before packing, as the fruit was uniform and excellent. After selecting, stemming and winnowing, Mr. Blowers treats his Sultanias to a bath of glycerine solution (one pound of glycerine to 15 gallons of water), which freshens them up after the cleaning process, and acts also as an anti-ferment. Mr. Blowers presses

take part in the discussions are often unintentionally misrepresented and made to advise things they do not themselves approve. For this reason we deem it better to submit the matter to a careful revision rather than publish imperfect accounts.

SANTA BARBARA CENTENNIAL.—The people of Santa Barbara are getting ready to celebrate in high style the hundredth anniversary of the founding of the Old Mission, which they regard as the birthday of their charming city. The program covers four days, beginning Sunday, December 5th, with imposing church ceremonies at the Mission. On Monday the special feature is a parade, intended to reproduce the characteristic life and costumes of a century ago. On Tuesday a grand bazaar will open in the pavilion. Wednesday, beside the fair, there will be a grand Rodeo, riding of wild horses and feats of horsemanship, and at night a costume ball at the theater, with real Spanish dance by 15 couples in costume. Great interest has been taken in the preparations.



## CORRESPONDENCE.

Correspondents are alone responsible for their opinions.

## Tehama County Notes.

EDITORS PRESS:—Being a constant reader of your valuable journal, which leads any I have seen as a family paper, I beg leave to write you a few facts about Tehama county fruits. Oranges and lemons are now hanging in golden clusters from the bending boughs of Red Bluff trees—a beautiful and convincing proof that the northern Sacramento valley can raise the luscious fruits and ripen them early. A splendid exhibit will be made at Sacramento at the Citrus Fair. Olives, figs, prunes, plums, raisins, etc., will also be shown, all raised without irrigation. From 15 four-year-old French prune trees in Red Bluff, Wm. Duncan gathered 6000 pounds of fine fruit this year, selling at two cents per pound, on land which was worth \$50 per acre four years ago.

Thorough cultivation is needed, as is the case all over the world. Allowing liberally for all expenses of setting and cultivating, and there remains a fine balance-sheet on a 40-acre tract, and during this time vegetables and melons are raised in the spaces, affording a profit on the land. This is on river-bottom land, mellow and deep.

Fruits have been neglected in Tehama because, being abundantly blessed with a splendid rainfall, grain has been a sure and remunerative crop, and wool and stock took second place. Now, however, grain is low in price, and the future will see fruits go to the front. Oranges are a most beautiful and tasty fruit to raise, and strike the fancy of those who, like myself, were from the East; but other crops, such as prunes, peaches, pears, figs, and the raisin and wine grape, will bring quicker returns and equally large profits. Formerly an extensive fruit-grower and farmer in New Hampshire, I see here great possibilities in store for the careful and industrious grower of almost any fruit, and see that if he will put up only the best for market, and acquire a reputation for fine fruit, he will be abundantly repaid.

Please let me quote an instance in my own experience. Four years ago I sold my Baldwin apples, raised in New Hampshire, to Hiland, Chessman & Co., of Boston, Mass., for \$3.50 per barrel, that being much above the current price. I put my name and written warrant on every barrel, and told Mr. Hiland to keep them till the last and notify me of selling price. I received a card in May following, saying: "Selling some of your apples to-day. They are perfectly sound and sell for \$6 per barrel."

I saw him in Boston in July and he had just sold the last of the lot at \$7 per barrel, and told me he would always give me \$1 per barrel above market price for all my apples. The same care here will insure a market always, and fine fruit will sell at paying figures.

Mr. Duncan (above referred to) has 50 acres in fruit, but had not enough to supply home demands, and will put out 10 or 15 acres more this winter, an orange grove among the lot. He will exhibit largely at Sacramento. We need a thousand men in Tehama county like him—men who know how to raise and properly market fruits, and indications point to a large immigration this winter. Fortunes await all who will intelligently cultivate fruits here, and a new northern market is opening through the completion of the California & Oregon Railroad, which gives Tehama county the inside track. We are the nearest, and will thus save freight charges. Hundreds of acres will be set in fruit this winter near here.

Are barberries raised in California, and, if so, can they be raised here?

Red Bluff. H. S. DE ROCHEMONT.

## Vacaville Notes.

EDITORS PRESS:—The north wind blew very hard the most of last week, but let up Friday, and on Saturday morning rain began to fall and kept up the most of the day. About one-third of an inch fell.

The RURAL PRESS has evidently a wide circulation. A man in New Jersey a few weeks since wrote to Henry Bassford that he saw an account in the RURAL PRESS of some grapes that he had sold to Mr. Allegretti to preserve and ship East, and he wanted some further information, which Mr. Bassford gave him.

Four fruit-growers, T. Wilson, G. and J. M. Gates and Dr. Dobbins, have entered into a contract with the owner of the Benicia cannery to deliver all the merchantable fruit they raise for the next five years of the following kinds: peaches, pears, plums and apricots, the apricots to average 13 to the pound, and the peaches to measure 2½ inches. These gentlemen own about 700 acres of orchard. The fruit will be shipped in 60 pound boxes. These boxes cost 16 cents apiece, and can be used several years. Mr. Gates shipped, this year, 100 tons of fruit with 200 boxes, and has the most of the boxes for another year. By contracting fruit this way, each man knows just what his fruit is worth as soon as he has it boxed. There is a great deal of expense saved which is necessary when shipping East or to S. F. The parties to the contract have each entered into \$40,000 bonds to fulfill it.

In answer to your correspondent, who signs himself "Vacaville," I will say that he is part-

ly right and mostly wrong. The fruit crop here was not generally a full crop, although several had larger crops than ever before. It is always the case among producers of anything marketable, that some will raise poor stuff that will not pay expenses, and others will not put up their produce in a decent shape, thinking that anything is good enough to send to market. Perhaps your correspondent "Vacaville" is of the latter class, as he seems to be tender on the paying point. It is true that many who shipped East lost money, and some few who shipped to San Francisco did so also, as there are but few years when at some time in the season the market is not glutted, and perishable produce is sold at a loss. This season, F. Buck paid 1½ cents for apricots delivered at his packing-house; John Cory bought the peaches and grapes on about 20 acres, paying two cents per lb., taking them on the trees and vines; J. Gates had 50 tons of apricots on ten acres, which he sold to the cannery at 2½ cents per lb.; H. Bassford bought a great many peaches and grapes, paying from \$25 to \$50 per ton, he picking them. He paid \$25 per ton for second crop grapes. The first wine grapes that went from the valley brought \$30.10 per ton in San Francisco, but were lower the latter part of the season. There were other sales higher, as peaches sold for 4½ cents by the crop. Now though all the fruit did not bring as high prices as the ones I have named, the most of the good fruit sold at home paid well.

As to help, he is partly right about that. It is true that a great deal of the white help that comes here is of the genus tramp, and worthless, but the fruit-raisers are partly to blame for that, for they have refused to hire white help so long that but few come that are of any account to work. G.

Vacaville.

## Tolumne County.

EDITORS PRESS:—Tolumne county has not been represented in your paper for some time. We are rather under a horticultural cloud than otherwise, not having recovered from the raid of grasshoppers. They ate the young trees and buds of vines, so that orchards which produced 17 tons of grapes two years ago barely have one and a half tons this season. Next year promises to be an improvement, as the present has produced a good supply of bearing shoots. The young trees suffered more than vines; many were entirely destroyed. Hugh Quinn lost a young peach orchard which gave promise of fine fruit, being planted on rich soil, washed from Table mountain, distinguished for raising fine grapes and peaches. With all the drawbacks, Mr. Quinn got away with many of the prizes at the late Stockton fair.

To-day we witnessed a very beautiful growth of oranges in the garden of James Goodwin, of Mountain Pass. The oranges are now appearing in their golden yellow. Amid the green foliage, dotted all over with luscious and inviting fruit, they speak volumes as to the productiveness of our foothills, when conditions are only half attended to. But distance from market and cost of transportation will keep capital away and cripple enterprise.

The Arbor Day excitement has not reached our foothills, and we do not know that it is necessary, where the nut-pine flourishes. When one old tree falls or is cut down, a dozen rise in its place, and soon a dense thicket fills the level patches; and even upon barren, rocky hillsides, where nothing else can live except it be chapparal or manzanita, these nut-pines grow and thrive. The sugar-pine regions we are not capable of describing, not having knowledge from actual experience.

Arbor Day is tinged with romance, and if followed up, will benefit the future, as well as the present, generation. The young forester will visit his planting venture in after years with as much pleasure as his ancestral home. We remember, when only a schoolboy, planting two young willow trees, which grew into one. When we think of home, or long for a visit, that tree comes uppermost; and so it would be with our young foresters of San Francisco and the State if they follow out the program in the true spirit. "He that makes two blades of grass grow in place of one, is a benefactor." The producer should be honored above all other occupations. To work with nature is to work with God. How beautiful the creations which arise from combined manipulations! Nature is ever true to man's effort when conducted in wisdom. Many a smiling, happy home gives testimony to well-ordered industry. If Arbor Day becomes an institution and is yearly attended to, 20 years will so alter the face of Nature as scarcely to be recognized by pioneers or those inaugurating this great and grand movement. We will see to it that a tree is planted on the date of this attempt to start a pleasant and profitable observance. Let each planter make a record of the event; let time and place be noted, also what kind of a tree, by whom provided, etc. In future years all these facts will be gathered to make history and to keep alive a beautiful and wise law of spontaneous adoption.

Your last issue was exceptionally rich in literary gems. That essay of C. E. Mack was particularly good. My young lady hopeful thought that Mr. Mack made rural life too rainbow-hued; that the reality is not equal to the description, and that city life might be described to perfection by those living in the country yearning for the pleasures and glare of city life and city society. The country has its

advantages and its disadvantages. So has the city. A little of both is best for man and woman. The intellect requires the toning of the city, where talent is cultivated and refined. The country, carpeted by nature's flowers in spring, trees in bloom, gardens teeming with fruits and vegetables, rivers murmuring melody sweet and soothing to heart and brain, voices in the air and all around, speaking of peace and paradise, and much more of reality and romance which poets love to dwell upon, make the country a very heaven to lovers of nature; but there is a rough, practical side to this fanciful and real picture. The plodder in field or kitchen has little time for dreaming of the beauties around, or enjoying grand mountain scenery like the city dweller bent upon a tour of country pleasure. To him or them the comparison of city and country life gives preference to the latter so long as he is not compelled to grub a living from Nature's bosom. The first day's experience would send him back to the city, cured of country life and its romance, with sore back and blistered hands. The countryman sighs for city improvement and the many means to obtain it; while the smoke-choked, din-dazed citizen longs for the quiet of country seclusion and freedom from ledgers and wild speculation. If city and country could be entwined in one, an Eden could be enjoyed, and life lengthened from its present uncertain limit. But let us do justice to the essay by Mr. Mack. He must be possessed of a soul in accord with Nature and its grand manifestations, and nowhere is it made more manifest than among the rugged hills and grand Sierras, whose song is sung by rivers of pure, sparkling water, which the gods might delight to drink or bathe in.

JOHN TAYLOR.

## FLORICULTURE.

## Seed Exchange Proposed.

EDITORS PRESS:—The RURAL, Nov. 13, arrived last evening, and I read the article under heading "Floriculture," with much interest; also turned back to Oct. 30, and read the article referred to. Already I feel an impulse to be up and doing, ready to make the most of lessons in experience and encouragement to be found in "Floriculture Column." Your many readers will have cause to thank you more and more, if through your suggestions a State Society is formed to promote a knowledge we all need. There will, however, be many hundreds who, like myself, are too far from large centers to take an active part in such organizations, yet will benefit much thereby.

You refer to an "exchange of views and experiences," in addition to which, I am going to ask something. By way of preface let me tell something. Last winter I received a little package of flower seeds. Two or three seeds of each kind, and many varieties, indiscriminately mixed. It was a little mine of wealth. For although we have a large number of young roses from Dingee Conard & Co. (Father's flowers), it has not been my good fortune to find many cents to spare for flower seeds. I "sowed" the seeds, sent, in a box with southern exposure. And oh, the delight I did take in watching those little things sprout. Having slight knowledge of seeds and young plants, I could form little idea of what was coming. I transplanted, however, in good faith, and blossoming time couldn't come quick enough. Armed with flower catalogue I have discovered the names of most of the plants and flowers. One case, as instance: two little plants "grew in beauty" and bloomed early. All summer and autumn they have been rich and brilliant spots of color. A bright maroon coreopsis (named from catalogue) and a golden coreopsis with yellow center. I have saved seeds for all the neighborhood. I might have saved enough to furnish seeds to hundreds of RURAL readers.

Now this is what I would ask: Would a seed exchange be practicable? Suppose I have a few flowers from which I save seeds in quantity, and send you a little list, numbered thus:

1, bright maroon coreopsis; 2, golden coreopsis, maroon center; 3, pansies, mixed; 4, root of white Japanese chrysanthemum; 5, cutting of double scarlet geranium white eye; and so on—

Accompanied by my address, which list and address you published once in "Floriculture column;" and Miss A. sends a list, and Mrs. B. and so on, with understanding that any one wishing seeds from any of the lists is privileged to send to address accompanying lists, always inclosing three cents (.03) to pay for postage and envelope to inclose seeds. (Those sending you lists of seeds or cuttings to notify you when supply gives out.)

A great many might thus be furnished with seeds—for most of us can gather together a few cents occasionally—and all our beautiful State made to bloom, literally, like a flower garden.

Of course it may be some trouble to fold up little packages of half a dozen or more seeds, (and write number on packages), but it may encourage within us a spirit to think for others. Saticoy, Ventura Co. M. W. MASON.

[The best way to prove the advantage of such a plan is to try it. Exchanges of material is quite common among collectors of scientific specimens, etc. We will agree to make free announcements in our columns as long as the plan seems to work favorably for all concerned. —EDS. PRESS.]

## HORTICULTURE.

## Importance of Good Trees.

EDITORS PRESS:—The tree-planting season is at hand, and tree-peddlers and agents swarm in some parts of the State. Every year is this repeated, and every year the farmer encourages these conscienceless hucksters, and in a few years bitterly rues the purchases he innocently made.

The gullibility of human nature is surprising, and however badly a man is cheated one year, his neighbor is always ready to go through the same process the next.

These thoughts naturally suggest themselves at this time of the year, and, as an orchardist of considerable experience on this coast, I deem it not out of place to utter a timely warning to intending tree-planters, against dealing with "tree-peddlers," or being taken in by flash advertisements of cheap stock, auction sales, etc.

Any fruit-grower knows that trees cannot be raised to sell below a certain price, and when he sees nursery stock offered for sale at rates much below those of known responsible dealers, he naturally, and with reason, is suspicious of such stock, or, to quote his own words—often heard—he "would not take such trees as a gift."

The amateur, or novice in the business, if he be possessed of an ordinary amount of common sense, consults with some well-known fruit-grower or nurseryman, as to what he shall plant, and where he shall get his trees.

I have been referred to an association recently organized, called "The Pacific Coast Nurserymen's Association," formed somewhat after the plan of similar organizations existing in the East, and which result in much permanent good to horticulturists generally. In reading over the by-laws I note the following clause as being of peculiar interest to the fruit-grower, for past experience in California will be sufficient emphasis, and the many mixed-up orchards of unsuitable and worthless varieties will be proof enough of the need of some such organization:

The objects of the association shall be \* \* \* third, to aid in the protection of our patrons from fraudulent dealings, and the injurious results arising therefrom to members of the association.

As a fruit-grower I want to see orchards planted more intelligently, and that we encourage our nurserymen in their profession—the future success of this great industry depending largely upon them—by patronizing only members of this association, and keeping clear of all cheap stock or auction sales.

The expense of raising trees is much greater than formerly, as every one knows, owing to the extra care to be given in order to keep free of insect pests; and if we want intelligent, progressive nurserymen to remain in the business we must be willing to pay them fair prices for their trees. FRUIT-GROWER.

[We suppose the writer would make a distinction between authorized agents of established nurseries and men who buy refuse stock and hawk it through the country.—EDS. PRESS.]

## Prunes from France.

Mr. S. F. Leib, of San Jose, well known as a prune-grower, has recently returned from an Eastern visit. While at the East he took occasion to examine the condition of the prune market, and has given the San Jose Times some of his observations, among others the following:

There are serious obstacles to overcome as regards marketing our prunes. In portions of the country west of the Mississippi the population is too sparse to make any considerable market at present, while freights to those regions from here are actually higher than to the seaboard cities, in consequence of the present fight between the Pacific Mail steamship line and the railroads, which involves rates cut down probably to a small margin, if any, above the cost of service. The rates to Denver, for instance, are \$1.90 per 100 pounds for prunes in less than carload lots, while to New York they are \$1.16½, and for carloads 91½ cents. Including extras, this would not be less than 1½ cents per pound, and whenever the Pacific Mail and the railroads agree, that rate is liable to be nearly doubled.

On the other hand, a leading dealer in New York, a Frenchman by birth, having an experience of half a lifetime in the prune business, informed Mr. Leib that freights from French ports to New York were only \$5 per ton, or one-quarter of a cent per pound, to which is added a duty of one cent per pound. This places the California and the French prunes on an exact equality in the New York market, with the important exception of cost of production, and it is here the shoe pinches.

"I said to him," remarked Mr. Leib, "I understand that in France you only pay 30 cents a day." This he indignantly denied, claiming that they paid four cents an hour. "Very well," I replied, "we will concede you the extra dime."

This gentleman further informed Mr. Leib that until within four or five years, prunes in France had only been grown in odd corners, along hedges, etc., and not planted systematically.



ically in orchards as with us; but after large areas of vine land had been devastated by the phylloxera and efforts had been made, without success, to stop the pest by destroying the vines and replanting, the vines had been taken off the second time and the land planted with prunes. It was the first sprinklings from these orchards, the Frenchman claimed, from these phylloxera lands, and not—as Mr. Leib supposed—unusually large crops, that had for some years past overloaded the American market. "When these orchards come into full bearing, California prunes will go out of the market, and California prune orchards out of existence," remarked the Frenchman.

In Mr. Leib's opinion, the cheaper labor and extensive planting of prunes in France will drive California prunes out of the Eastern markets unless the duty is increased from one cent to three cents a pound. And in the event of that market being closed to us, it would affect not only that but all of the other industries of the county in a greater or less degree.

# THE VINEYARD.

## The University Experimental Vineyard at Cupertino.

University Experiment Station, Bulletin No. 59.

The experimental vineyard-plot at Cupertino, placed at the disposal of the University by Mr. John T. Doyle, two years ago, has this season borne its first available crop, and samples of most of the grape varieties have been shipped to the University Viticultural Laboratory for experimental vinification, to the number of 36. Of some of these, samples have been gathered and fermented at two different times, to determine the peculiarities at the several degrees of maturity, and the rate of increase of sugar. As is well known, the sugar percentages have generally been low this season, so that a good opportunity was afforded for observing those varieties which will yield a proper saccharine strength even under adverse circumstances.

The detailed record and discussion of these results will be found in the report of viticultural work for 1886, now in press at the State printing office. But it will be of general interest to give in advance, at this time, when the choice of vines to be newly planted or grafted is being made by grape-growers, the record of the actual product of the several varieties, which has been kept by Mr. John J. Doyle, the manager of the Cupertino vineyard, for all the more important varieties, his leisure not allowing the extension of the observation over the whole of the collection.

### Character of the Soil.

The University tract being practically level, and its soil of remarkable uniformity, it will show characteristically the differences between the grapes and wines of the several varieties, being in this respect parallel to the case of Mr. H. W. Crabb, a comparison of whose varied wines is given in the report of the work for 1885, page 70. Moreover, the soil being a very much generalized one for the west side of the Santa Clara valley, the points elicited will be applicable to a large region, from the neighborhood of Mountain View to that of New Almaden.

The land on which this tract is located forms part of the gently undulating valley slope that lies between the Santa Clara valley proper and the Coast Range, and into the higher part of which Cupertino creek and its branches have cut narrow and deep, abrupt valleys. The experimental plot assigned to the University lies immediately adjacent to the valley of the main Cupertino on the west and about 50 feet above it. The soil is a drab-tinted clay loam, largely intermixed with gravel and rock fragments, showing the whole to consist of the wash from the adjacent and other ranges lying toward New Almaden. In the bluff banks that fall off steeply into the creek bottom it can readily be seen that the same material, only with larger proportions of gravel, and yellow instead of a drab-colored loam, extends down nearly to the creek level. It is perfectly penetrable by both water and roots, the latter being seen in it at levels from 12 to even 20 feet below the trees and vines to which they belong. The land is therefore perfectly underdrained and thus fulfills one essential condition of first-class wine-grape land. It is, of course, easily workable soon after rains.

In order to obtain a full insight into the nature of the soil and subsoil, a trench 6 feet deep was dug in what might be considered a representative spot of the tract, and the soil material was sampled for each 12 inches from the surface, so as to obtain fair specimens. Three of these—viz.: 0 to 12 inches, 12 to 24 inches, and 5 to 6 feet—were fully analyzed chemically, as reported below; and as these analyses are sufficient to show both the general character and the rate and character of change downward, the samples representing the other intervals received only a physical examination. From about 30 to 36 inches below the surface there is usually a noticeable change of tint toward the yellow, and an obvious increase of the gravelly ingredients, which is apparent in the wide difference in the percentage of "fine earth," in the table below, between the immediate subsoil 12 to 24 inches depth, and the

sample taken from the interval 36 to 48 inches, the latter containing less than one-fourth as much of soil matter proper than the former. But it is also seen that from 36 down to 72 inches the soil percentage remains almost the same, and judging from the aspect of the bank where the level land breaks off into the valley, the same might be true to the depth of 10 or 12 feet, if not more.

### ANALYSES OF SOILS AND SUBSOILS FROM UNIVERSITY VINEYARD PLOT, CUPERTINO.

No.	No.	No.	No.
986.	987.	989.	991.
Soil,	Sub-	Under-	Under-
0 to	soil,	subsoil,	subsoil,
12 in.	12 to	36 to	60 to
	24 in.	48 in.	72 in.
Coarse Gravel.		35.2	73.0
Fine gravel and sand.	30.3	37.5	
Fine earth.	69.7	62.5	13.5
	100.0	100.0	100.0

### ANALYSES OF FINE EARTH.

	No.	No.	No.
	986.	987.	991.
	Soil,	Sub-	Under-
	0 to	soil,	subsoil,
	12 in.	12 to	60 to
		24 in.	72 in.
Insoluble matter.....	73.63	71.43	65.54
Soluble silica.....	6.25	7.98	9.74
Potash.....	.60	.63	.79
Soda.....	.03	.14	.03
Lime.....	1.44	1.59	1.29
Magnesia.....	1.36	1.53	1.88
Br. ox. of manganese.....	.02	.01	.01
Peroxide of iron.....	6.68	6.75	7.58
Alumina.....	5.43	5.72	8.58
Phosphoric acid.....	.10	.08	.11
Sulphuric acid.....	.01	.01	.01
Water a'd organic matter.....	4.30	3.96	4.65
Total.....	69.84	99.82	100.22
Humus.....	.96	....	....
Available inorganic.....	1.64	....	....
Hygroscopic moisture absorbed at 15 deg. C.	5.14	5.13	8.05

It will be noted that notwithstanding the wide differences in the mechanical composition of the materials analyzed, they do not differ materially in the general composition of the fine earth; although there is a manifest increase downward of several of the ingredients. The potash supply is from good to high, the lowest material having one-fourth more than the surface soil. The lime percentage is good in all, but decreases slightly in the lowest material, while the magnesia increases steadily downward. Phosphoric acid is practically probably the same throughout, and is in fair supply; sulphuric acid is low throughout, and might advantageously be raised by the aid of plaster. Humus in the surface soil shows a fair percentage, perhaps as large as so previous a soil will maintain in the local climate. The moisture-absorption reaches a very satisfactory figure, and increases downward, parallel with a greater heaviness of the soil, as is shown by the increase of the item of alumina, the characteristic ingredient of clay.

Altogether the soil is a very fine one for vineyard purposes, both as to its mechanical and chemical composition; and considering the great depth to which roots can readily penetrate it, it promises high durability. It is, moreover, so "generalized" in its character as to render the results obtained on it of wide applicability.

### Product of the Vines.

In order that the conditions under which these results were obtained may be fully understood, the history of the vines in this plot, already given in the report for 1886, should be re-stated. The vineyard plot of which the use is granted the University, consisted originally of 37 rows, eight feet apart, of 40 vines each, the latter being, at the time, three-year-old Zinfandels. These were, in 1884, grafted to the following varieties of wine grapes:

Grossblau,	Herbement,
Crabb's Burgundy,	Franken Riesling,
"Portals' Ploussard,"	Pizzutello di Roma,
Gamay Teinturier (Crabb)	Chauche Gris,
Barbera,	Sauvignon Vert
Nebbiolo, 2 varieties,	Johannisberg Riesling,
Malbeck,	West's White Prolific,
Verdot,	Kleinberger (True Burger)
Meunier,	Chasselas Fontainebleau,
Carbener Franc,	Semillon,
Petite Sirah,	"Golden Chasselas,"
Ploussard,	Burger,
Chauche Noir,	Seedless Sultana,
Fresa (Monfra),	Muskateller,
Black Hamburg,	Huasco Muscat,
Barbarossa,	Lignanza,
Teinturier Male,	Alexandria Muscat,
West's St. Peters (?),	Pinot St. George.

Most of the grafts took well, and those which had not were mostly regrafted to the same varieties in 1885. It was expected that in that year at least a small crop would be obtained from them, but the season being so universally unfavorable, the product was too small to serve for more than an identification of varieties in doubtful cases.

This season, 1886, all the vines were pruned long, three canes, and trained on stakes, so as to insure an adequate crop for experimental winemaking. This point must of course be taken into consideration in judging of the results, since short-pruning varieties would thus naturally overbear and show a heavier crop than that which they could be permanently charged without greatly shortening their lives.

The following table shows, in the last column, the average product, in pounds, of the vines sampled, the number from which this average is

deduced being given in the first column, while the middle one gives the total product of all:

### PRODUCT OF VINES IN UNIVERSITY EXPERIMENTAL PLOT AT CUPERTINO, SANTA CLARA CO.

Variety.	No. of Vines.	Total Weight of Grapes.	Average for Each Vine.
Nebbiolo.	20	650	32.5
Fresa.	7	200	28.5
Black Hamburg.	40	1050	26.2
Franken Riesling.	20	686	34.3
Grossblau.	20	685	34.2
Crabb's Black Burgundy.	20	404	20.2
Chauche Gris.	20	853	42.6
Gamay Teinturier.	20	596	29.8
Malbeck.	20	253	12.6
"Portals' Ploussard" (Malbeck)	20	247	12.3
Meunier.	20	510	25.5
Sauvignon Vert.	20	1037	51.8
Folle Blanche.	20	765	38.2
Johannisberger Riesling.	20	309	15.4
Herbement.	20	658	32.9
West's White Prolific.	33	1953	59.1
West's St. Peter's (?).	20	345	17.2
Cabernet Franc.	20	425	21.2
Teinturier.	20	440	22
Sirah.	14	430	30.7
Kleinberger.	20	1000	50
Ploussard (proper).	20	881	44
Chasselas de Fontainebleau.	20	1412	70.6
Semillon.	20	750	37.5
Barbarossa.	13	991	76
Gros Verdot.	7	555	79.2
Palomino ("Gold'n Chasselas").	28	1605	57.3
Zinfandel (?).	18	1145	63.6
Burger.	32	1884	58.8
Sultana.	7	487	72.4
Chauche Noir.	7	457	65.3

It will be seen that the highest product of this list is that of the Gros Verdot, which gave nearly 80 pounds to the vine. This figure may require to be discounted to some extent, from the fact that it is an average of only seven vines, which were picked out from the somewhat mixed row of which it is intended to form the sole ingredient. Making all allowances, however, the Verdot must be classed as a very prolific vine. It will be interesting to see what is the quality of the wine resulting from such heavy bearing.

Immediately below it, but still in the seventies, we find the Barbarossa, Chasselas de Fontainebleau, Palomino and Sultana. Of these the latter is usually supposed to be capable of bearing the heaviest crops, but it is evident that on this soil at least, the two others are even with it.

Ranging close to the sixties we find the Zinfandel, Chauche Noir, Burger, Palomino and West's White Prolific.

Close to the fifties are the Sauvignon Vert and the Kleinberger, or True Burger.

Close to the forties are the True Ploussard, Chauche Gris and the Semillon. The latter, as so prolific a bearer, will agreeably surprise some of those who have hesitated about planting this noble grape. The Ploussard, likewise, is a high-grade grape which thus shows its claim to attention.

Near the thirties, we have the Sirah, Nebbiolo, Fresa, Franken Riesling, Grossblau, Gamay Teinturier, Herbement, Meunier, Black Hamburg.

Near the twenties, Crabb's Black Burgundy, West's St. Peter's, Teinturier Male.

Between 20 and 12, the Johannisberger Riesling, and Malbeck, including "Portals' Ploussard," which is undoubtedly identical with the Malbeck of the University plot, Krug's direct importation.

The low figure for Malbeck will be a disappointment to many who would like to cultivate this desirable variety. To these might be said, what is true of the entire series here recorded, that what is true at Cupertino may not hold good elsewhere on different soils, and also that of the several sub-varieties of the Malbeck, some may be found more prolific even at Cupertino, hereafter; also that vines of greater age may bear more abundantly.

As to the Riesling, its low product will disappoint no one; it is in accord with experience on soils to which it is adapted, although on valley soils it may be forced into heavier bearing with a corresponding reduction in quality.

It will, of course, require the experience of several years to obtain a reliable average of the bearing of these several varieties, even on this particular soil. Still, the season of 1886 was in general a good one, except in the case of particular varieties badly affected by *coulure*. From the record on the latter subject made by Mr. F. W. Morse, with respect to the grapes received from Cupertino, it does not appear that either the Malbeck or the Riesling was materially affected by *coulure* this season. A detailed account of the discussion of this point will be given in the forthcoming report.

In view of the numerous additional grape varieties that have come into notice since 1884, and deserve exact comparison in respect to their adaptation and merits in the Cupertino region, Mr. Doyle has added to the list above given, by grafting on five-year-old Zinfandel stocks, the following:

Isabella Regia,	Cinsaut,
Howland's Black Hamburg,	Petit Verdot,
Black Prince,	Bastardo,
Grape of Almeria,	Mourastel,
Semillon,	Pedro Jimenez,
Pinot Vert d'Orce,	Verdelho,
Canon Hall Muscat,	Palomino,
Ugni Blanc,	Tinta Amarella,
Franc Pinot,	Merlot,
Noirien,	Gros Mancini,
Pinot de Pernand,	Aramon,
	Serine,

Pinot Blanc Chardonay, Tinta Cao, Mondeuse, Tinta Madeira.

Still further additions to the collection are contemplated for the coming season, so that, including the varieties constituting Mr. Doyle's large vineyard, nearly 100 will be represented in 1887. E. W. HILGARD. Berkeley, Nov. 26, 1886.

# THE STOCK YARD.

## The Percheron Horse-breeders' Meeting.

The American Percheron Horse-breeders' Association held its annual meeting at the Sherman house, Chicago, Nov. 17, 1886, a large attendance of the members being present.

In the absence of the president, Senator T. W. Palmer, the chair was occupied by the vice-president, Mr. Rufus B. Kellogg, of Green Bay, Wis.

Mr. Kellogg congratulated the society upon its large number of members, on the harmony of its action, on the wonderful success achieved at the Illinois State Fair, and upon the favorable condition of its treasury. He concluded by saying: "Gentlemen, you are engaged in the noble work of planting on American soil what we believe to be the best race of draft horses in the world. The process of selection is continually going on in France, while pride and self-interest induce you to import the best. Let it be our characteristic aim to raise our standard of excellence and seek to give to our country a better race than now exists in France. We extend the hand of friendship to our brothers of the other draft breeds, with the hope that they will give to America the best of the European races."

The following extracts from Secretary S. D. Thompson's report will show the standing of the association: "The progress of our association since its reorganization one year ago as a Stock Association, is unprecedented in the history of any like organization. Without one dollar in the treasury, we have in that short time collected the large sum of \$11,420.72. Out of this, we have expended for fair and other purposes \$9702.58, leaving a balance to the credit of the association of \$1718.14, to which is to be added \$2530 of the capital stock that is as good as cash, making the grand total in favor of the association, \$4248.14. The membership numbers 180 bona fide stockholders, representing \$2470 of the capital stock." The secretary further reported that the fourth volume of the Percheron Stud-book was now in process of active compilation and would be issued at an early date. This book will contain, in addition to the 3000 new entries, an alphabetical appendix of all the horses registered in previous volumes, thus making it a complete hand-book of Percheron horses.

The Fair Committee made a very elaborate report, stating that the Illinois State Board of Agriculture has extended to them every assistance in their power to make the exhibition a great success.

After the usual routine of business, a resolution was passed that the secretary be instructed to prepare letters of thanks to the Societe Hippique Percheronne for their generous gift of 5000 francs and to the Minister of Agriculture of France who so kindly acceded to the society's request to select some competent person to act as judge at the Percheron exhibition, and also to the Canadian Minister of Agriculture and the United States Commission of Agriculture for like courtesies.

## Dehorning.

EDITORS PRESS:—In your issue of Oct. 30th is an article on "Safety in Handling Bulls." I know of but one way to make a bull's horns safe, and that is to cut them off. We have begun the practice of dehorning cattle at the Wisconsin Experiment Station, commencing with a vicious six-year-old Jersey bull and running down to calves but a few days old. My mind is not settled on this question yet in all points, but this I know, that for bulls it is best to dehorn and then take all possible precautionary measures in addition. Be sure to dehorn the good bulls first; "good" bulls kill twice as many people every year as vicious ones. When I hear a man praising his bull's disposition, I always wonder if he will leave his widow in comfortable circumstances.

To remove the horns, put the bull in a strong stanchion, fasten his head by cross pieces so he cannot move, and with a carpenter's fine saw cut the horn close to the skull. Our bull lost about a pint of blood. Use absorbent cotton, tar or whatever is at hand on the wound.

We dehorned 12 steers this week and did not apply any remedy to stop the flow of blood; the animals bled freely at first, but it soon stopped.

There is a waste of sentiment against the practice of dehorning, but better the horns come off than a human life be lost.

Of course when sawing off the horns the bull will make a fearful fight, and so must be held very firmly. W. A. HENRY,

Director Wis. Agl. Experiment Station, Madison, Wisconsin.



## PATRONS OF HUSBANDRY.

Correspondence on Grange principles and work and reports of transactions of subordinate Granges are respectfully solicited for this department.

## A Better Man Demanded.

Bro. Geo. Ohleyer, the "Gen. Grant" of the anti-debris contest, is hopeful that the Democratic Legislature will not be so undemocratic as to replace Geo. Hearst in the U. S. Senate to further misrepresent the farming and other industrial interests of California. He believes a better man should be selected for the interest of the Democratic party and the people. Within 12 months past two U. S. Senators have been elected from California (besides the one appointed), whose names, if submitted fairly to the people of the State for their votes, would neither of them have received anywhere near a majority for the high office they have filled.

No one doubts this. Neither political party would have dared to have nominated either of the three for the suffrage of the voters of the State. Who will say that Bro. Ohleyer is not right, consistent and an honest member of his party, and an honest citizen, in opposing the election of an unfit and decidedly objectionable office-seeker? And more, one who has been weighed in the scales and found wanting. It is to be hoped that there are honest and independent men enough in the Legislature elect to prevent such an unwise, humiliating choice. Farmers throughout the State should unitedly counsel their representatives to the Legislature against consummating so barefaced a wrong against the great body of voters of this State.

## The National Grange.

Our reports of the late session are as yet but straggling. It seems doubtful whether the telegraphic statement was correct that Lansing had been fixed upon as the place for next year's meeting. Resolutions were indeed presented providing for the holding of the next annual session at Lansing, Michigan, and at Elmira, N. Y., but it does not appear that either of them were adopted, nor that the question was finally disposed of in any way.

An invitation was received from the secretary of the Board of Promotion of the Permanent Exhibition at Washington to attend a convention of directors and others in December, to consider and perfect a plan for properly celebrating the 100th anniversary of the Constitution of the United States, the 400th anniversary of the discovery of America by Columbus, and to arrange for a permanent exposition of the antiquities, arts and industries of the three Americas.

Among the resolutions offered was one looking to the admission of the children and wards of Patrons into the Order without initiation fees or dues, when under 18 years old, also to the establishment of Juvenile Granges.

At the open meeting Thursday evening, Alex. McClure, of the Times, made one of the speeches, telling farmers that they alone were to blame for bad legislation. This address, though loudly applauded, created a good deal of dissatisfaction. The *National Farm and Fireside* remarks that while Mr. McClure might have been less harsh upon the Granger to his face, and while the Granger might have replied with equal force upon him as a representative of the press—still he told a good deal of wholesome truth, which the Patrons from all over the country would do well to take and put in their pipes and smoke it and let the smoke go all over the land. There is no doubt that farmers, having the power, fail to protect themselves. So long as they see fit to send lawyers and every other class save farmers, to their legislative halls, who have they to blame but themselves?

## A Californian in Philadelphia.

"V" sends from the Quaker City to the *Record-Union* a chatty letter, of which we extract these paragraphs:

I found myself here a day or two since to see a gathering of Grangers from all parts of the United States. I wanted to tell them of the beauties of California and the advantages of our glorious climate, so that when they returned to their several homes and were sitting by their huge fireplaces, with big, blazing back logs to throw out sparks and a ruddy glow of heat, while they listened to the blowing of the icy blasts, they might ponder on what might be for them if they came to the beautiful Sacramento valley. I supplied them with books concerning California; with illustrations of the fruits now ripening in the November sun of our State, so that they might contrast the barrenness and dreariness of their own surroundings with what we offer them. I have made arrangements to disseminate among the Grangers information about our State, and thereby induce the proper kind of immigration to California. When I spoke of the healthfulness of our glorious climate, I pointed to the ruddy glow of health on the face of Hon. Wm. Johnston, Master of the State Grange of California, and to his stalwart body, and as for his ability and intelligence, they find that out by the success he meets with in his work in the Grange.

The meeting of the National Grange is a stir-

ring event in Philadelphia, and creates much interest. Senator Johnston is doing finely, and embodied in his report is a description of the advantages of California, which will be a widespread advertisement of our State, and will do much good. The indications are fair for a large immigration to California the present winter, and the people inquiring about the country, with a view of migrating, are of the most desirable class to produce wealth and increase commerce.

## Farmers' National Congress.

The following call for a Farmers' Congress, at Washington, appears in the *National Farm and Fireside*:

THE PLAINS, VA., Nov. 15, 1886.

Dear Sir:—At a recent meeting at St. Paul of the Farmers' National Congress, it adjourned, subject to the call of the president, to meet at an early day the coming winter, in the City of Washington, D. C. It is very necessary that a full meeting shall be held to take counsel with co-operating organizations to concert measures and take action for the promotion of the general welfare of agriculture.

In view of the present doubtful attitude of the great political parties of the country toward the measures proposed by resolutions of your body now pending, and reported by committees of both Houses of Congress, and in view of the sudden appearance upon the political field of the compactly organized grand army of skilled labor, calculated to withdraw attention from the affairs of agriculture, it is urgently necessary that you shall cause it to be known that you are in earnest in the advocacy of those measures, which, by your resolutions, several times renewed, reiterated and reaffirmed, have been presented for the consideration of the Congress of the United States; and that you are prepared to take political action, if necessary, to enforce attention to your reasonable demands. Measures deemed by you and by all agriculturists indispensably necessary for the relief of our business from the ruinous exactions of arrogant and irresponsible and defiant corporate power; for the suppression of perils in the face of which we are helpless without the effective aid of our Government, and for the rightful recognition of the importance of our calling; and the exercise of its proper influence in the great councils of the nation.

In the present industrial and political crisis, the voice of agriculture, the great conservative reserve power of the nation, should not be silent, her influence unfelt, her power unsuspected, her rights disregarded, her necessities unrelieved.

The time is opportune for effective action on your part; therefore, in pursuance of your resolution of adjournment, I hereby summon the Farmers' National Congress to meet in the City of Washington, on the 15th day of January next, for the transaction of such important business as may be brought before it, and I personally urge each member to be present, without fail, that we shall demand the passage of the resolution passed by your Congress, and now reported to the Congress of the United States by their several committees.

ROBERT BEVERLEY, President.

## Death of Mrs. G. H. Ashley.

The following notice of the late Mrs. Sarah A. Ashley, wife of the Master of Woodbridge Grange, and a charter member of the same and of Pomona Grange, No. 3, has just been received from our valued sister, Mrs. W. D. A.:

Passed to rest near Woodbridge, Nov. 22, 1886, after an illness of eight months, Mrs. G. H. Ashley. Love and skill availed naught to save a life more precious than fine gold, and calmly she obeyed the Father's will, leaving to His care her devoted husband and three sons, who rejoiced in the plenty given in her life as the means to minister to her comfort.

Thanksgiving day, with the warm sun on level fields and on great oaks, still holding their leaves, from whose branches birds sent sweet refrain on the still air, a large concourse of friends and Grangers, under the auspices of Woodbridge Grange, gathered at her home, with many chaste flower pieces, to lay her in the cemetery by the little church in Live Oak Center. Rev. C. Sprecher paid touching tribute to the graces of inner life she had cultivated. Patiently she had borne intense pain; now her example comforted her dear ones. Worthy District Lecturer Huffman had charge of the large funeral, and the service, conducted by W. M. Fiske, of Pomona Grange, No. 3, and venerable Chaplain Guernsey, was impressive.

In New Bedford, Mass., Sarah A. Edwards was born in 1834. Married G. H. Ashley in 1858, and came to this State, and in 1864 to the home where she died. Twenty-eight years she had brightened the life of our brother with her sterling New England virtues. A woman of inestimable worth, modest and unassuming, her quiet and gentle life endeared her to friends and made for her a friend in every acquaintance. Ever busy for her home and in works of usefulness, her influence in Woodbridge Grange, where she was Ceres, strengthened the bond of unity and drew members. Our hearts go out in sympathy to our sorrowing brother and her sons.

## Sacramento County Pomona Grange.

EDITORS PRESS:—Please give notice that Sacramento County Pomona Grange will hold a meeting at Grangers' Hall, Sacramento, Thursday, Dec. 16th, at which important business will be transacted. By order of Grange. J. E. BEACH, Secretary. *Routiers, Nov. 27, 1886.*

FARMERS' LEGISLATIVE COMMITTEE.—The State Grange appointed a Committee on Legislation, to look after the farming interests in our Legislature. It is none too soon for them to confer with the farmers who have been elected to the Senate and Assembly, and discuss the questions of moment to agriculturists that must arise at the opening of the session.

## State Grange—Session of 1886.

We conclude this week the report from Subordinate Granges as presented to the Secretary:

## Sutter Mill Grange.

As alternate representative of Sutter Mill Grange I beg leave to submit the following report: Number of members on the roll-book, 25; average attendance, 15; suspended for non-payment of dues, five; admitted, none. We are not rich, but can pay all claims on demand. The outlook for the future is not bright, but we yet have hope of building up a good working and permanent Grange.

W. NICHOLS.

## Temescal Grange.

[See RURAL PRESS of Nov. 6th, page 380.]

## Valley Grange.

Valley Grange, No. 279, located at Pacheco, Contra Costa county, was instituted April 18, 1885, with 18 charter members. From the date of its organization to this time, our baby, as it was christened by a visitor, has been steadily growing in numbers. At the last annual session of this body, the Master had the pleasure of reporting 60 members. Since that time the Master has admitted 31 by initiation, all engaged in agricultural pursuits.

The hand of death has called from our midst one of our charter members, Bro. John C. Martin, in the prime of life, beloved and respected by all who knew him. Surrounded by our sisters and brothers, his remains were interred in the beautiful Alhambra cemetery, with the ceremonies of our Order. Brother, we miss you; your memory will ever be cherished by our little band.

Three members have withdrawn by demit, with the assurance that they would seek admission or form a nucleus for a new Grange, if there was not one at their new home, leaving us at this time 87 members, 46 sisters and 41 brothers. Our sisters still hold the balance of power, which we hope they will continue to do. We have on hand two candidates elected, with several applications in the hands of committee.

At the time of organization it was said we would be the death of our present Grange. Our reply was that we thought differently. The sequel has shown that we were correct. It awoke them from their apparent lethargy and afforded them so much pleasure that they then added upward of a score to their number. We say, brothers and sisters, there is plenty of room for all. Cultivate your fields well and you shall have the reward. During this brief period of our existence we have met all of our obligations incident to the formation of our Grange. Our attendance has at all times been large, fully two-thirds of our members being present; our officers rarely missing roll-call. Our younger sisters and brothers are taking special interest to make our meetings pleasant. Our Grange has followed in the steps of our elder sister, Alhambra, by giving monthly socials. While not strictly a Grange social, still under their control, the committee is held responsible for the cards issued, which we believe has added much to our success.

In response to the question asked us many times during our present session, how do you manage to get so many new members? our answer is, we hand to those who desire to join us our declaration of purposes; we take every occasion to hand them a copy of the *Patron*, to have every member have blank applications on hand, and not make a miss when offered an opportunity. Lastly, not to accept an application of which we have any doubts as to being a proper person, or who will not make a good member. Hence we escape the use of the blackball, which, in our judgment, is the cause of much dissension and ill-feeling within the Grange, as well as causing outside prejudice. So far not a single blackball has been cast in our Grange.

In reply to the question, asked our Grange, if they had any commands, they bid me give our fraternal greeting to the State Grange, that our organ, the *Patron*, be sustained, and at the next session they would report above par.

G. P. LOUCKS, Master.

## Woodbridge Grange.

Our Grange may be said to be in a prosperous condition. Our monthly report of the secretary will answer that question. We are somewhat in debt, but not embarrassed. We have some faithful members, like every other community—a few that are ever ready to advance or carry the Grange cause with smiling faces and ready hands, while we have many that are very honorable, good men, who think they have done well when called to pay their dues. And so they are, for that is important too. Our delegation here is not so great as in the past. In fact this has been a bad session. Our crops have been light and prices small, for when money is tight we all feel the pressure.

I believe the *Patron* is taken by the most of our Grangers. In regard to the *Patron* stock, I think there is some disposition yet in our Grange to take some, but the most of our members that we might expect something from are rather shy of corporations. They cannot see and comprehend it all, but do see some things that are not so clear in a business sense as they desire, hence they doubt and hesitate. I think that they are reasonable and might be prevailed upon to take some stock, not as a business move or investment, but for the Good of the Order and to sustain our organ.

## Grange Items.

[Culled from the *California Patron*.]

BRO. COULTER, of Santa Rosa, has recovered from his recent illness.

In the death of Sister Ludie Dismarchias Pilot Hill Grange has lost a most earnest, valued and beloved member.

THE Grangers' Co-operative Business Association is thriving in Sacramento under the management of Bro. E. Greer.

THE house of Bro. Veerkamp, W. M. of Sutter Mill Grange, was burned to the ground on the 14th ult. The loss is a severe one and there was no insurance.

SACRAMENTO GRANGE decided to pass her second regular meeting for November, and hold a special meeting Dec. 4th in honor of the birth of the Order, with a Harvest Feast, whereto all good Patrons are cordially bidden.

FARMERS IN THE LEGISLATURE.—It is a pleasure to congratulate the Grangers of this State on the election of several of their staunch and true members to the Legislature, including Senators A. L. Chandler from Yuba, George Steele from San Luis Obispo, and Representatives George Ohleyer of Yuba City, Sherburne of Danville, and I. A. Wilcox of Santa Clara. Besides these Grangers several representative farmers are elected from other parts of the State, among them Mr. John Boggs of Colusa. We hope their constituents will confer and advise with them freely during the session and make them feel that they and all other well-doing legislators will be well sustained in faithful and independent action for the good of the commonwealth.

POMONA GRANGE ELECTION.—San Joaquin County Pomona Grange held its first quarterly meeting at Lodi on Thursday, Nov. 18, a good representation being present from the subordinate Granges of the county. The following officers were elected for the ensuing year: W. L. Overhiser, M.; E. R. Elliott, O.; Mrs. E. J. McIntosh, L.; R. Pixley, S.; W. B. White, A. S.; A. A. Guernsey, C.; Ezra Fiske, T.; J. D. Huffman, Sec.; S. W. Sollars, G. K.; Mrs. J. L. Beecher, Ceres; Mrs. C. P. Allison, Pomona; Mrs. O. O. Norton, Flora; Mrs. Jos. Adams, L. A. S. The installation of officers will take place in Stockton on the last Thursday in February, 1887, with the accompaniment of a Harvest Feast.—*Independent*.

FARMERS TO THE FRONT.—With Brother Robie as Governor of Maine, Bro. Luce as Governor of Michigan, Bro. Jones ("He pays the freight") as Lieutenant-Governor of New York, Bro. Lipscomb as Secretary of the State of South Carolina, Bro. Williams, a member of the Senate of North Carolina, Bro. Rhone, member of the Pennsylvania Legislature, and several others of other States in the same fix, it looks as if all will "get there" in time, and the sooner the better if of the same material as these above named. Farmers are coming to the front.—*Esperance, in Farmers' Friend*.

EDEN GRANGE'S THANKSGIVING.—The party given by this Grange in Oakes' hall, Hayward, Thanksgiving night, is spoken of in the *Journal* as one of the finest social affairs that has occurred in the town for five or six years. Fully 100 couples were present, Mt. Eden, San Lorenzo and San Leandro being largely represented. The music was superb, a fine supper was served in Luce's hall about midnight, and on the whole, everybody had a delightful time.

THE GAMBLERS' EFFORT.—A telegram from New York says a bill is in preparation, to be submitted to the Legislature, whose main feature will be the legalizing of betting in any form on the racetracks of the State, though with a stringent provision against permitting betting by minors. It is confidently believed in sporting circles that if the bill is passed it will be approved by Governor Hill.

ILLINOIS LEADS.—At the meeting of the National Grange, says the *American Grange Bulletin*, Illinois stands at the head of the roll of honor for membership and activity.

A CRUEL ASSAULT.—The telegraph brings the news from New York that Prof. C. H. Dwinelle, of the University of California, who has been traveling abroad for a year, has brought suit in New York against the New York Central Car Co., for a cruel assault inflicted upon him, without provocation, by a porter in one of the sleeping cars. We had heard of the assault before, but hoped it would prove less serious than is indicated by the dispatch, which says: "The blow of the negro's fist fractured and indented his cheek-bone so that his face is distorted. The blow also paralyzed the nerves of his eyes, so that he can no longer bear the ordinary amount of light." As Mr. Dwinelle gave much attention to microscopic work, such an injury is of exceptional importance to him. The suit against the railroad is to recover \$50,000 damages for the injuries inflicted. We know Prof. Dwinelle as a gentleman of very quiet and peaceable disposition, and we are quite ready to believe that the assault was unprovoked. There should certainly be a lesson given to the railways against employing such pugnacious agents.



# AGRICULTURAL NOTES.

## CALIFORNIA.

### Colusa.

**LEVEEING.**—*Sun*, Nov. 27: We took a trip up the east side of the river, Monday, as far as E. McDaniel's. All along the line we found teams at work, or else newly-worked levees. At Joe McVey's place, about 50 teams were at work moving the levee back from the river. They were putting up an immense levee—some 20 feet or more wide on top. A great length of strong levee work has been done above Colusa, and we may expect to see some big water here—that is, if some weak place does not first give way. The river accommodates itself a great deal to circumstances. At the bridge, for example, it is at least 50 feet wider than it was when the bridge was put in. This means 35 feet by 50 feet of water at floodtime. The river is also scouring out at the bottom and becoming deeper.

### Contra Costa.

**RAISINS.**—*Antioch Ledger*: A lot of raisins made by Messrs. A. J. & P. K. Biglow at the Oak Point Farm are for sale at the store of G. C. Carman. They are among the best that we ever saw, and for flavor and size cannot be excelled. They are made from Seedless Sultana grapes.

**POULTRY.**—*Concord Sun*: S. Bacon has placed about 250 head of poultry on his ranch, with the intention of increasing the number to a thousand. He feels confident that, with proper attention, the poultry business will return large dividends. This profitable industry has been much neglected in California, considering the enormous consumption of eggs on this coast shipped from the Eastern States, besides the immense demand for poultry for table use.

### El Dorado.

**RAISINS.**—*Placerville Republican*, Nov. 25: The Muscatel raisins produced by Thos. Hardie, at the Cedar Hill Vineyard, near Placerville, are carefully put up, and equal in size and flavor to any we have ever seen, either of home or foreign production. Such fruit ought to find an unlimited sale in the East and eventually displace imported raisins. Mr. Hardie has about six tons of raisins cured this fall.

### Humboldt.

**FORAGE PLANTS.**—*D. A. Spear in Eureka Standard*. I notice a request that some one mention the most profitable clover or grasses for Humboldt county. For the mountains I find the English rib grass and orchard grass most certain, with burr clover mixed, for late fall feed; for the lower lands, white clover and orchard grass. These two kinds are certainly the most profitable where used for stock to graze on. If dairymen are confined to quite low, moist lands and wish to make a large quantity of hay, then I recommend plowing their land every two or three years and seeding to alfalfa and red clover, equal parts. My reasons for mixing the seeds are that cows require a variety of food, and often one variety will fail partially while the other will prosper, and if the farmer or dairyman wants early grass for his cows, every time he plows his clover and alfalfa land sow 20 pounds of cheat seed to every acre, independent of alfalfa and clover, 10 pounds each of clover and alfalfa per acre), as it will protect the clover from frosts. Some might ask my reasons for plowing the lands for alfalfa and clover often. First, the land will naturally become grown up with briars and wild weeds that cows will eat and damage the quality of butter; second, the foul weeds are in your hay, and when the dairyman is feeding his cows beets, carrots or shorts he will detect the peculiar taste of his butter, and if his hay is not free from weeds the butter will taste of the herbs or briars as the case might be.

### Lake.

**HOLSTEINS.**—*Lakeport Democrat*, Nov. 26: We have always taken great interest in the Holstein cattle brought to this county by A. G. Platt, with the laudable purpose of giving our people a chance to improve their breed of cattle for either milk, butter, cheese or beef. Mr. Platt's bull is a thoroughbred from one of the purest and best herds in the world. We are led to these remarks by seeing the progeny from this bull, "Edgar S," the third and last one belonging to L. H. Twede. They are all beauties, and so far as markings in color and form go, only an expert could tell that they are not full-blood Holsteins. No better evidence of the value of this bull to Lake county need be cited than the fact that \$50 will probably not buy either of these calves, while ordinary calves can be purchased for from \$2.50 to \$7.50. A blind man can figure the difference in profit if he cannot otherwise appreciate the difference between fine and common stock.

### Lassen.

**SHIPPING APPLES.**—*Sagebrush Stockman*, Nov. 24: L. P. Whitney, of Milford, shipped a carload of apples to Sacramento Monday. This is the first shipment Mr. W. has made to that city, and if the experiment is successful he will establish an agency there. He has an orchard of 1600 trees, and this year the crop was about 3000 boxes.

### Los Angeles.

**RAISINS AT POMONA.**—*Times-Courier*: E. S. Gerling has, from a three-year-old vineyard of 10 acres, made upward of 6000 pounds of raisins; his grapes are of the Sultana variety.

C. E. White has put up about 300 boxes of Sultanas and 500 boxes of Malagas. W. J. Jewell has also been somewhat extensively engaged in the business. Each of the above gentlemen will in future give considerable attention to the raisin industry, and many others are contemplating the same course.

### Nevada.

**PERSIMMONS.**—*Nevada City Transcript*: There are on exhibition at the rooms of the L. and I. Association five varieties of Japanese persimmons, raised on the ranch of S. Allison, near town. Some of the kinds will keep until next March, if not eaten before. They are splendid specimens of this luscious fruit, being large, fine of texture and possessing rare flavor. The Japanese persimmon is raised with much success in the Bartlett pear belt of this county, and should be more generally cultivated by our ranchers.

### Plumas.

**APPLES AND POTATOES.**—*Quincy Cor. Repub. Free Press*: Our valleys have a large and excellent crop of apples this year, worth from a cent to a cent and a half per pound. The potato crop is short. Potatoes have been selling at a cent and a half, but are now worth two cents. Oats are a cent and a half.

### San Benito.

**RANCH RETURNS.**—*Free Lance*: L. B. Shaw's farm is in the San Benito district, 32 miles from Hollister, and 25 from the terminus of the S. P. Co.'s railroad in this county. The section of country in which he resides is regarded by those unacquainted with it as rocky and mountainous, adapted to little else than stock-raising. In proof that this conception is erroneous, it is only necessary to give the returns received. Mr. Shaw has 128 acres of deeded, tillable land. Of this, 100 acres are in grain, and 28 in orchard, pasture, etc. His grain land yielded him this year an average of 18 cents per acre, or 1800 cents. For this he was offered, Tuesday last, \$1.26½ per cental, or \$2277 for the lot. He estimates the actual cost of preparing the land, harvesting, and hauling to the warehouse at Tres Pinos, at \$700, which leaves him a profit of over \$1500 on his grain. He has now 700 young fruit trees which will come into bearing next season. These are mostly prunes and apricots, the fruit of which can be easily dried and commands a ready sale. If the yield of Mr. Shaw's ranch can be exceeded by that of any other farmer in his district, we should be glad to learn of it.

### San Bernardino.

**COLD SNAP.**—*Valley Echo*, Nov. 25: The frosts of last week were quite sharp in places. The young and tender sprouts of new growth on the orange have in many orchards been killed back a foot or two, and many leaves begin to show white, as the frosted foliage fades. It amounts to a little pruning, that's all.

### San Diego.

**APPLES.**—*San Diego Union*: A wagon-load of apples was brought to town yesterday from the orchard of J. P. Parsons, a mile and a half from Julian. The load comprised Bellefleurs, Greenings, Baldwins and Bush's Seedlings. No such fruit is shipped in here from any place outside the county as that comprised in this load. In form, size, color, flavor and quality of pulp, nothing better could be desired. This fruit grew upon four-year-old trees.

### San Luis Obispo.

**BEANS.**—*Tribune*, Nov. 26: Arroyo Grande is surprising herself and the world by the quantity of beans she has raised and is shipping. From early morn until late at night our streets are thronged with wagons heavily loaded with beans. A reasonable price for them would make our people rich.

**THE PASO ROBLES "BOOM."**—The actual sale at the auction exceeded \$35,000, and since then the sales have averaged \$1000 a day, and at prices 25 to 50 per cent better than those obtained at the auction. R. E. Jack, M. Goldtree, M. Donohue, Baron Von Schroeder, R. M. Shackelford, C. H. Street, C. H. Reed, J. W. Smith, and men remarkable for business foresight and success from Hollister, Watsonville, San Jose and San Francisco, are purchasers, besides those from San Luis. The sales on the Paso Robles ranch during the last 80 days aggregate \$121,254. None of the purchases thus far have been made for speculative purposes, but have been made by actual settlers, by business men for their own permanent occupation. These sales comprise 4767 acres of farming land.

**GRAIN EXPORTS.**—*Telegram*, Nov. 27: The shipment of grain from Port Harford, the San Luis Obispo seaport, for the last four months has amounted to 23,131 tons.

### Santa Clara.

**THE GRAPE INTEREST.**—*Times*, Nov. 21: Along the coast counties, Santa Clara especially, the preference will be for wine grapes. As an evidence of the growth of this industry, take the following exhibit: In 1855 this county had 6945 acres in vineyard, two-thirds of which were for wine purposes; in 1856 there were 9918 acres, and more than three-fourths for wine purposes. In 1857 there were 5,404,000 pounds of table grapes sold from this county; in 1858, 3,534,400; in 1859, 1,116,500. For 1856 no accurate figures can be given, but vineyardists think that the total will be greater than last year. But, as to the yield of wine, in 1853 there were reported 190,040 gallons; in 1854, 535,030; in 1855, 615,500. Careful esti-

mates indicate that the vintage this year will be greatly in excess of that of last year, some placing it as high as 1,000,000 gallons. Thus it appears that while the grapes produced for table use have steadily decreased, the production of wines has rapidly advanced. Among the most extensive producers of wine in this county may be mentioned these: J. T. Doyle, Capt. Merithew and Mr. Portal in the Cupertino country; Le Franc, Lone Hill, Estarde, toward the foot-hills in the west side of the valley; two companies, one in Los Gatos, the other between Los Gatos and Saratoga; Bowen, A. Devaux, J. Cuzard, in the southern part of the county; Delmas & Snyder, near Mountain View; Collins, Gaines & Crandall, Paul O. Burns, etc. Besides those mentioned there are a great many others manufacturing large amounts in San Jose and surrounding country.

**PRUNING EARLY.**—*San Jose Times*, Nov. 24: A ride across the valley, yesterday, disclosed the fact that a number of orchardists are already busily engaged in pruning. In several vineyards, also, pruners were noticed at work. This pruning in the middle of November is unusual. Trees were seen clipped which had not dropped their leaves. It may be all right, but it is unprecedented. As to vines, according to the commonly received opinion, early pruning tends to make them put forth their shoots much earlier in the spring, and thus renders them much more liable to injury by frosts. It does seem that one crop ought to be fully gathered before pruning commences.

### Santa Barbara.

**OLIVES.**—*S. Maria Times*, Nov. 20: We were shown yesterday a sample of olives from Mr. Selby's orchard, near the Mission of Santa Ynez, that would be hard to beat in any country. The orchard is only three years old, yet it is bearing a good crop. A. M. Boyd has a fine one-year-old orchard of several thousand trees, all growing well, and will plant out 40 acres more the coming season. Mr. D'Urban also will put out 20 acres to this fruit the coming season near the town of Ballard.

**WEEDING BY FIRE.**—About one-half of the valley has been burned over by the farmers in their efforts to rid the land of the tall stubble and obnoxious weeds.

**LOMPOC SPUDS.**—*Record*, Nov. 20: J. M. K. Bateman, principal of our town school, presented us this week with as handsome a potato as we have ever seen. It was grown on his ranch near the river, evidently on geometrical principles. It has a bright, smooth, whitish skin, and weighs 2½ lbs. It measures 14 inches in length, with an almost uniform circumference of nine inches, tapering at the ends to 7½ inches. We were shown yesterday a Peerless potato weighing nine lbs.; also three Early Goodrich potatoes weighing respectively 4, 3½ and 3½ lbs. They were grown on the G. L. Hunter farm by Wm. Downing. W. H. Trowbridge showed us last Saturday three Peerless potatoes, weighing respectively 7½, 7½ and 5½ lbs. He states that they had been dug three weeks and had lost some weight by shrinkage.

### Santa Cruz.

**BLUE-GUM FUEL.**—*Sentinel*, Nov. 27: Ten years ago Joe Arana set out 120 eucalyptus trees along the north side of the road leading from this place on the west. During the past month the trees were cut down and chopped into cordwood. Over 25 cords of excellent stove-wood were realized therefrom, valued at \$5 per cord. Allowing the space occupied by these trees to be one-half an acre of ground, this is considered a good return. Mr. Arana believes that these trees could be planted with profit in this locality.

**TABLE GRAPES FOR TEXAS.**—*Courier-Item*, Nov. 25: We learn from Judge Anson S. Miller that a Texas fruit-buyer visited the Summit last week, making purchases of table grapes for shipment at prices ranging from \$50 to \$80 per ton, with cost of crates added, expense of packing and delivering at Wright's Station being borne by the grower. The Eastern shipments of this year, says Judge Miller, have paid better than those of last year. The rainfall of Saturday was much less on the Summit than at points nearer the coast, and the grapes remaining on the vines are still in good condition for shipment.

**SUCCESSFUL DAIRYING.**—Since our visit to his ranch last spring, D. D. Wilder has built an addition to his dairy barn, making the present dimensions 36x320 feet. He has also introduced a steam mill for cutting and grinding feed, which works to a charm. For a month past he has been feeding about three tons of cut pumpkins daily, and the operation of cutting and feeding is a very interesting one. Mr. Wilder's figures show an increase in the production of butter this year over last of 10,000 pounds, the greater portion of which he attributes to the use of the cream separator.

### Shasta.

**CITRUS SUCCESSSES.**—*Free Press*, Nov. 27: Last Wednesday our reporter visited the old Wiser orchard on the Shasta road to view the orange trees, and found them literally breaking down under their loads of golden fruit, which is now ripening. Not a leaf is injured by the frost. In the same inclosure are some beautiful young lemon trees growing thriflily.

**ORANGES.**—*Cottonwood Index*, Nov. 23: Aleck Leiter, Warren Dunham and Thad Jones, near Igo, have orange trees loaded full of oranges as fine as ever grew in Florida. These trees are not in especially protected places, and

are at an elevation of about 1000 feet above sea level. At "The Winery" are half a dozen trees, probably 15 years old, that have yielded a bountiful crop of the golden fruit every season for several years. A year ago G. W. Hopkins set out a small orchard of 24 orange trees on the Schafer ranch, just north of this town, that are all doing nicely. These trees are in a decidedly open and unprotected spot, and their growth will be watched with great interest.

**POTATOES.**—Nine tons of Peach Blow potatoes were dug this season from one acre on Mr. Boot's mountain ranch.

**CORN.**—Antone C. Nunis, a thrifty farmer on Battle creek, left at the Land Office some ears of corn that other farmers, who have never tried to raise corn, should come in and see. The corn is of the white flint variety. The ears are solid, well filled and larger than the average corn grown in the Mississippi bottoms. Mr. Nunis raised 1000 bushels on 40 acres this year and 2000 bushels on the same 40 acres two years ago. He has averaged for all the corn he has raised in 12 years, \$1.50 per hundred, or, as our Eastern friends would count it, 90 cents per bushel.

### Siskiyou.

**GLANDERS ALARMINGLY PREVALENT.**—*Shasta Co. Democrat*, Nov. 24: T. Trullinger, a veterinary surgeon, appointed by the Board of Supervisors of Siskiyou county to examine into the condition of horses at the railroad front reported to be diseased with glanders, reports as follows: "On the day of my appointment I started for the railroad front, and upon my arrival there examined 95 horses, 10 of which I diagnosed carefully and found two cases of glanders and eight cases of farcy in different stages of the disease. Of the remainder, I found 38 animals in the first stage. Twenty-six of the horses were working on the highway between Butteville and Keyser's place. I found three out of the ten (where the disease had fully developed) on the range along the line of the public road between the points. The disease is contagious, and if not eradicated is almost certain to spread generally among the horses of the county. Prompt and efficient means should be taken to destroy all animals affected with the disease and to otherwise prevent its spread. All of which is respectfully submitted." Mr. Trullinger's report shows an alarming state of the malady in that locality. Glanders is not only fatal to horseflesh, but persons are susceptible of being inoculated with the deadly disease, and as the locality is contiguous to Shasta county, people should keep vigilant watch lest the dreadful disease should get a start in this county.

### Sonoma.

**VINTAGE OF '86.**—*Flag*, Nov. 24: The vintage season is at an end in Sonoma county. Summing up the results, we do not find a satisfactory showing. Yield and quality have been all that could be desired, but in other respects the grape-grower has been at a decided disadvantage. Coöperation has been inadequate to make the grapes into wine, and prices have been unreasonably low, much lower than prices paid for like varieties in Napa county. Young vineyards have come into bearing, and the local market for the best varieties even has been overstocked. Few grape-growers have made money and many have lost.

### Stanislaus.

**FINE ORANGES.**—*Modesto Herald*, Nov. 25: On Saturday last, Mr. A. Collins, of Knight's Ferry, brought to Modesto the first installment of oranges from his orchard. They are as beautiful in size and color as any we ever saw, ripe and sweet, and the crop this year promises to be plentiful.

### Tehama.

**EDITORS PRESS.**—Mr. W. O. Jennings lives 22 miles east of Red Bluff, in the mountains. He has a neighbor who has 12 apple trees, set out only 12 feet apart, which is very much too close, of course. Mr. Jennings bought 300 pounds of apples at three cents per pound from him, and the trees produced this year 3000 pounds, giving \$90 returns on a bit of land 36x48 feet. Surely Tehama county is a poor place for fruit!—*R., Red Bluff*.

### Tulare.

**MONEY IN BLACKBERRIES.**—*Register*: J. W. Dunlap, living four miles north of Tulare, has three rows of Lawton blackberries, each row 100 feet long. From this little patch he gathered and sold 600 lbs., at an average price of 8 cents per lb., and still had all that was required for table use during the berry season, and to put up for family use during the winter.

### Yuba.

**COUNTY'S CAPABILITIES.**—Brown's Valley Cor. *Record-Union*: I have lived in the foot-hills of Yuba and Butte counties since 1858. There are two things needed to make this part of the State flourish equal to any other, viz., a large ditch to carry water for irrigating and a branch railroad to run along the foothills. The quality of the land here is a guaranty of success, both in farming and in fruit-raising. Grapes of any variety grow to perfection; peaches, pears, apples, apricots, and even oranges, ripen well and are fine-flavored, and all kinds of vegetables grow to perfection. I have seen as fine wheat and barley raised here as is grown in any place. The land is mostly claimed, but it can be bought cheap in lots to suit the buyer, with all of these advantages and a fine climate.





## November in California.

[Written for the RURAL PRESS by MALLIE STAFFORD.]

The year is fading; but it fades in splendor,  
Like some grand monarch of the forest world;  
Sunlit and tipped with gold his flag is furled,  
And unto Time his trophies he surrenders  
To dirges low and tender.

Not with stern blasts and storms that bitter wail,  
And winds that sigh their mournful tale of woe,  
And lowering clouds that trail their weight of snow  
Mid withered leaves that drift before the gale  
'Neath slanting sunbeams pale;

But gentle rains have drenched the waiting earth,  
And green the grasses spring on hill and plain.  
Only the fading leaf whispers of autumn's reign,  
While plenty lingers round the radiant hearth  
With jest and songs of mirth.

Adown the garden-walk bright blossoms bend;  
The rose has opened again its varied blooms,  
The tender violet sheds forth its sweet perfume,  
Green leaves and vines and rarest buds doth lend  
Grace to the old year's end.

Warmth and bright sunshine and the songs of birds,  
The golden oriole and the soulful lark,  
The blue jay and the linnet, the robin red—and  
hark!  
That was the quail's shrill piping note I heard,  
The sauciest of birds.

Along the lanes the grass is springing green,  
And lo! the plowman turns the damp dark mold,  
And Nature's God with blessings manifold  
Will deck ere long the sodden fields serene  
With robes of emerald sheen.

It is Thanksgiving; over land and sea  
Deep anthems float from many a templed dome;  
Sweet songs and praise from hut and happy homes  
Our grateful hearts doth render up to Thee,  
Adored Divinity!

Arcadian Hights, Thanksgiving, Nov. 25, 1886.

## In the Rocky Mountains.

[Written for the RURAL PRESS by FANNIE ISABELL SHERRICK.]

I could not imagine a lovelier spot than this mining camp at the present writing. The autumn frosts have turned the foliage, and the mountains are regal in their garments of gold and scarlet. Seen in the morning sun, I can liken the slopes to nothing but a golden plush, deepening into a wine-brown, and touched here and there with flames of crimson; and if they are splendid in the noon they are even more gorgeous when viewed under the rose-hues of the sunset.

Perhaps of all the surrounding hights "Red mountain" is the most singularly beautiful. It is well named. All of the lower slope is covered with a rich, deep red, while the crown is of pure yellow. When the full glory of the afternoon sun falls upon it the effect is beyond the power of words to describe.

Often as I stand wonder-stricken with my eyes upon this mount, I wish for the power of an artist to immortalize it, but reason tells me that no brush or pen, however skillful, could transfer one tithe of that supernal beauty to canvas. Like all of Nature's master-pieces, it cannot be copied.

Every day this brilliant coloring seems to change, but only to grow more and more beautiful, the amber tints deepening, the crimson hues more resplendent. It will be almost a sorrow to see the colder finger of October laid upon them, making them sere and unlovely.

Like Tamalpais, this mount has a meaning above and beyond all the rest. All summer long it was beautiful in its emerald blossoming, and I think it will be supremely grand when robed in the kingly white of winter.

Aspen is encircled with mountains literally hemmed in, as it were, by rocky walls, and beyond these nearer mountains are the purple cloud-paths of the ranges, with now and then a hoary head lifted up loftily into the azure spaces. Even in midsummer, the snow lies white and unbroken on these far grand peaks.

On the Fourth of July our party crossed the range and we snowballed each other on the summit. On the very edge of the snow-plains we gathered flowers. It seems almost incredible that these dainty darlings of summer should bloom on the snow line, but so they do. They are of a pure white with creamy yellow centers somewhat resembling the edelweiss.

It is like an Alpine dream to cross this range. I think Switzerland knows nothing grander. From Twin Lakes, sparkling sapphire gems in an emerald setting, to Aspen, the ride is one of continual beauty and grandeur. Staging is always hard and this journey is no exception, but the compensations in the way of scenery are many.

Leaving Leadville at six in the morning, the stage arrives at Aspen at six in the evening,

having traveled 60 miles across the range. To inexperienced travelers these mountain roads are appalling, but having done the Yosemite and the Geysers in California, I was prepared for the steep grades, though scarcely for the great altitude which we reached. It was almost painful to see the stage-horses toiling up those fearful mountain roads, panting in the rarified atmosphere. At 10,000 feet one loses breath with the least exertion, and we were much higher than that. Above timber line our own breath came with difficulty, and when we reached the divide and descended from the coach we found our lungs aching with the effort to breathe.

From the snow-fields the mountain streams flowed, gathering force and momentum as they sped downward to the mighty rivers and the sea. Above the clouds we paused, but only for a moment was that grand outlook ours. In a trice we were flying down on the other side at a speed that threatened the dissolution of soul and body. How the stages ever maintain their equilibrium is a mystery. Every moment it seems as if the wheels must swing over the road and precipitate coach and passengers in the bed of the stream, hundreds of feet below. Yet there is a mad sort of pleasure even in the danger—to see the leaders sweeping around the sharp curves—to feel the exultation of the swift movement and to see the dizzy slopes growing lower and lower beneath until we merge into the valley.

In the summer-time the mountains and valleys are beautiful in their blossoming. The wild flowers are luxuriant, and though so hardy their forms and coloring are of the most delicate type. Now they are gradually fading, as the frosts grow nightly more severe.

After riding for miles and miles through the unbroken solitude of the mountain forests, Aspen is a surprise. Isolated as it is from the rest of the world, it is yet modern in all its improvements. Wide-awake, ambitious, full of energetic people, and marvelously rich in its mineral resources, it has a future of great promise. Its rapid growth is remarkable. Several years ago there were a few log cabins here—now there is a prosperous town with beautiful residences and handsome business blocks which would not do discredit to a much larger and older town.

The mines, of course, form the mainspring of wealth, but the valley beyond is rich in its agricultural resources and is being gradually filled up with fine ranches.

The Roaring Fork river runs through the valley; a sparkling mountain stream, fresh from the snows of the upper slopes.

Not far from Aspen are the Glenwood springs, famous for their curative properties. The water of the springs is salt and sulphurous, and comes from the ground at a boiling temperature. The baths are not unlike sea baths.

In quite another direction are the hot springs on Rock creek, almost at the foot of Mount Sopris. They are comparatively unknown to the public, being very difficult of access. The only way to reach them is over a rough and dangerous trail. But it was my good fortune to camp near these springs in August, and I was much pleased, not only with the springs, but the beauty of the location. It is a delightful spot, and the memory of many pleasant days there will linger a long time.

The water of these springs is of a somewhat lower temperature than those of Glenwood, and they are sulphurous but not salty.

I wish time and space might allow of a detailed description of our camping life in the wilds of the Rockies. It was, indeed, an interesting experience, but to most Californians, camp-life is no novelty. It was, perhaps, more the ideal of our camping-grounds and the jollity of our party that made our trip so successful. We camped in the shadow of that grand peak, Sopris, which is snow-crowned the year round. Looking down our canyon the massive heights of the Elk range could be seen, and on either side of us rose cliffs of the most exalted grandeur. Through the canyon flows Rock creek, more poetically known as Crystal river. It is, indeed, a beautiful stream, crystal-clear and full of enchanting rapids and quiet mirrored pools.

The narrow canyon hemmed in by the straight-walled cliffs reminded me more of Yosemite than any spot I have ever seen.

Fishing, riding, rambling and progressive euchre parties around the camp-fire—these were our principal amusements. They were varied the last evening by a supper and dance at a neighboring ranch. This proved to be quite a unique affair. Considering the fact that we were nearly 50 miles from Aspen, in one of the wildest spots of the mountains, the supper was a remarkably good one. Our costumes were more picturesque than elaborate. It would have appalled a society reporter to have seen them. But notwithstanding our camping attire we managed to have a good dance and a jolly time. The house was certainly primitive in its arrangements and furniture, but all lack of exterior adornment was amply compensated for by the cordial hospitality of the inmates.

One of the girls, a rosy-cheeked, healthy little lassie, is soon to be a bride. She came to Aspen the other day and ordered her trousseau, a very elaborate one—indeed, the stores in this thriving little city were not equal to her wants. She was obliged to order part of her wedding outfit in Denver. Her father, it is said, has made considerable money as a ranchman.

On the walls of this home I saw the loveliest head of a mountain sheep that I have ever seen.

It was indeed a superb specimen. In winter these sheep come down from the higher mountains and may be seen in the close vicinity of the ranches. Formerly there were great quantities of elk and bear, but the former, owing to indiscriminate slaughter, have become rare.

The country surrounding Aspen is an interesting one. A lover of the curious and beautiful might well find material for a summer's study, and stretching out beyond here is a long line of scenic travel.

From Gunnison the Denver & Rio Grande Railway leads one through one of the grandest gorges on the continent. If possible, it is even more beautiful than the Royal Gorge of the Arkansas, of which I think I made mention in a former letter. Of all the mighty freaks of nature, I think these canyons are the most remarkable. It seems almost incredible that a small mountain stream should force its way through the heart of these august mountains, laughing in the face of dark-browed cliffs whose very walls suggest a mysterious terror. The stupendous forces that rent them asunder show plainly in their seamed and scarred fronts, impressing the beholder with the Titanic majesty of nature.

In this far-famed Black canyon is the Current Needle, one of the most singular formations I have ever seen. It is in reality a massive structure, but in the perspective it narrows to a slender shaft that seems to pierce the sky. And even when one approaches it, it wears that look of ethereal slenderness. It is only when the train has sped onward, under its shadow and beyond it, that the mind comprehends in the least its overwhelming massiveness and grandeur.

This gorge of the Gunnison is replete with wonders. But it would take a volume to tell of its turrets and towers and the wondrous forms and faces carved on its castle-walls, as though Nature would fain wrest the crown of master sculptor from all humanity. These graven, fantastic shapes are very similar to those seen below The Dalles on the Columbia river.

But space and power are lacking to tell you of all the beauties of this Black canyon—the emerald splendor of the river, the dusky wonders of the cliffs and the white-foamed radiance of the over-leaping falls. Neither can I give you much idea, unless you have seen part of it yourself, of the wondrous sublimity of Colorado scenery and the enterprise of a people which boasts a railroad that reaches an altitude of nearly 11,000 feet.

Unless you have stood on Marshall Pass and seen the great ranges stretching out into the limitless space around you, you have not felt the exultation that comes from the triumph of human skill over the stern, unyielding powers of Nature.

And why go to Switzerland to view the Alps when the Rockies and the Sierras hold out their sublime hands to ennobel and uplift us?

Aspen, Colorado.

## A Defense of Fact.

EDITORS PRESS:—It seems to me that Mr. Berwick has wandered, in his letter of October 3d, from the original contention, viz: fact versus fiction.

Fact versus sentiment is a quite different subject; however, as Mr. Berwick has advanced it, I shall make a few strictures concerning it.

I quite agree with him in thinking right sentiments edifying. But I cannot concur with his remark that "a mind well stored with fact is rightly credited with knowledge, which puffs up." I believe, with Bacon, that knowledge is power, and with Shakespeare that

"Ignorance is the curse of God;  
Knowledge the wing wherewith we fly to heaven."

The characters of our great philosophers, scientists and naturalists teach us that much knowledge makes us very humble and full of reverence for the Power that is above it all. Herbert Spencer has some fine remarks on this point in the first chapter of his essay on education, which any one would profit by reading. He, himself, is a living refutation of the assumption that fact tends to inflate us. His, undoubtedly, is the most comprehensive mind of the age, and the extent of his knowledge is something overwhelming to an ordinary mind; still he has a great, kind and gentle heart. And so it was with Newton, Darwin, Faraday, the brothers Humboldt and many others. The fact is, that the more we know the less we feel we know.

Man has an intellect as well as a heart, and it is his duty to cultivate both. There is, as Agassiz says, a hunger keener than physical hunger. It is the craving for knowledge. Man is a thinking, aspiring being, as well as a moral one, and his intellect imperiously demands sustenance. And what wonders has it not accomplished. The nineteenth century may well be proud of her sons.

I liked very much what the correspondent who signed herself "Working Girl" said a few months back in the RURAL on this subject, viz., that she wished people were more interested than they are in natural science. This, I believe, is one of the chief ends of man. And what a vast domain of facts it opens to us! What an immense field for study! Brought up in the city, my love for nature did not awaken till the kindly voice of one of her lovers bade it arouse. It was the poet-naturalist Thoreau that

first woke it from its slumber; then Humboldt, Lubbock, Huxley, Proctor, Tyndall and many others helped to keep it on the *qui vive*.

The field occupied by fact is a very broad one. It covers all the earth and extends up into the heavens. It behooves us to know something about who we are, where we are and what surrounds us. F. A.

## When the Day is Gone.

How quiet the house is at midnight! The people who talk and laugh and sing in it every day are asleep, and the people who fell asleep in it long ago come back into it. Every house has these two classes of tenants. Do we love best those with whom we can laugh and talk and sing, or the dear silent ones who come so noiselessly to our side and whisper to us in faint, sweet, far-away whispers that have no sound, so that we only hear their very stillness?

I am not tired, but my pen is weary. It falls from my fingers, and I raise my head. I start to leave the table and my eyes fall upon a little book lying on the floor. It is a little "First Reader." He left it there this afternoon. I remember just how I was impatient because he could not read the simple little lesson, such an easy lesson, and I told him it was a waste of my time to teach him, and pushed him away from me. I remember now. I see the flush come into the little tired face, the brave, cheerful look in his eyes, his mother's brave, patient cheeriness struggling with his disappointment and pain. I see him lie down on the floor and the little face bend over the troublesome little lesson, such a simple, easy lesson, any baby might read it. Then, after a little struggle alone, it has to be given up, and the baffled little soldier, with one more appealing look toward me for reinforcements, sighs and goes away from the lesson he cannot read to the play that comforts him. And there lies the little book, just as he left it. Ah, me! I could kneel down and kiss it now, as though it were alive and loving.

Why, what was my time worth to me to-day? What was there in the book I wanted to read one-half so precious to me as one cooing word from the prattling lips that quivered when I turned away? I hate the book I read. I will never look at it again. Were it the last book in the world, I think I would burn it. All its gracious words are lies, I say to you, though all men praise the book, and though an hour ago I thought it excellent. I say to you that there is poison in its hateful pages. Why, what can I learn from books that baby lips cannot teach me? Do you know I want to go to the door of his room and listen; the house is so still; maybe he is not breathing. Why, if between my book and my boy I choose my book, why should not God leave me with my books? My hateful books!

But I was not harsh. I was only a little impatient. Because, you see, his lesson was so easy, so simple. Ah, me! there were two of us trying to read this afternoon. There were two easy, simple lessons. Mine was such a very simple, easy, pleasant, loving one to learn. Just a line; just a little throb of patience, of gentleness, of love that would have made my own heart glow and laugh and sing. The letters were so large and plain, the words so easy and the sentences so short. And I! Oh, pity me, I missed every word. I did not read one line aright. See, here is my copy now; all blurred and blistered with tears and heartache, all marred and misspelled and blotted. I am ashamed to show it to the Master. And yet I know he will be patient with me; I know how loving and gentle he will be. Why, how patiently and loving all these years he has been teaching me this simple lesson I failed upon to-day. But when my little pupil stumbled on a single word—is my time, then, so much more precious than the Master's that I cannot teach the little lesson more than once?

Ah, friend, we do waste time when we plight ourselves for ourselves. These hurrying days, these busy, anxious, shrewd, ambitious times of ours, are wasted when they take our hearts away from patient gentleness, and give us fame for love and gold for kisses. Some day, then, when our hungry souls will seek for bread, our selfish god will give us a stone. Life is not a deep, profound, perplexing problem. It is a simple, easy lesson, such as any child may read. You cannot find its solution in the ponderous tomes of the old fathers, the philosophers, the investigators, the theorists. It is not on your book shelves. But in the warmest corner of the most unlettered heart it glows in letters that the blindest may read; a sweet, plain, simple, easy, loving lesson. And when you have learned it, brother of mine, the world will be better and happier.—R. J. Burdette.

MARRYING DRINKING MEN.—Marrying men to reform them has never been a successful enterprise on the part of women. Girls are worth too much to sacrifice themselves to beat sense into the head of any man on God's footstool. Such a man does not wean so easily as a calf. He will go home only to sober up, and then not till all the other places are closed. A girl will marry such a man, hoping that on next year he will be better; but the next year he will be worse. There are sober boys enough for all the girls; and there is no need of marrying a drunkard.—Exchange.



## Our World.

[Original—By J. W. MACKIE.]

How strange, indeed, is this world of ours!  
Now gaily dressed in summer flowers,  
Then draped in winter gloom.  
And we, like it, feel light as air,  
Or sad, oppressed with grief and care;  
We feel at times inclined to dare  
The terrors of the tomb.

Still, holy raptures fraught with joy  
Will oft the saddest heart employ,  
And heaven then is near;  
The love of friends, the mirth of youth,  
The gleesome jest or solemn truth,  
Or affections pure from gentle Ruth,  
Can make a heaven here.

I welcome all these scenes to view;  
They prove that God is kind and true  
To all that life possesses.  
For life indeed is Deity,  
In all, the only entity,  
Throughout the universe.

Tulare, Cal., Nov., 1886.

## College Boys at Work.

Some years ago a young man graduated from the Georgia State University, and returned home to Columbus. His father was a large contractor and prominent citizen, and one day we saw the son hard at work laying brick with all the skill of an experienced mason. In reply to our expression of surprise, the father, Judge Coleman, said: "My son did not go to college to forget how to work, or to become ashamed of his father's calling. He comes back better fitted by education for earning his own living, and he proposes to do it, believing a mechanic is quite as honorable as a lawyer or doctor, if he is their equal morally and intellectually."

We had always held to that view, and contended that while Elihu Burritt was no better blacksmith, and Hugh Miller no better stonemason, because of classical education, they elevated their callings and dignified their manhood by their high moral and intellectual culture. Our boys make a great mistake, the *Cultivator* believes, when they think a college education elevates them above the ordinary pursuits of life, and consequently they must go into one of the professions. A few days ago we saw a handsome, bright, energetic young fellow, Harry Snook, hard at work with hammer, saw and screw-driver, boxing furniture at his father's extensive shipping warehouse on Walton street. And yet he has only recently graduated from the State University with credit to himself and honor to his class. Instead of taking to law, medicine or other overcrowded profession, to continue an expense to his father for years, probably, he wisely resolved to at once assume the burden of an active, laborious life. So he is to-day earning a handsome salary (one-half of which he gives monthly to his devoted mother for investment), and training himself for a thorough and successful business man. Would that thousands of college boys—instead of dozens—would follow the example of young Coleman and Snook, and learn by experience that labor is honorable.—*Southern Cultivator*.

IF HE CHOOSES.—"He read dime novels, and was a thief from way back," is the tell-tale heading of a young man's arrest for crime in Brooklyn. What the world needs is a dime Bible and a dime Shakespeare.—*Alta*.

What the world needs is to know that we have dime Bibles, that the New Testament can be had from five cents per copy upward; that the best of American and foreign literature can be bought in the popular library forms at the same prices for which the printed horrors, known as dime novels, are sold, and that for the money a young man spends for "zwei glasse," a drink of whisky, or a package of cigarettes, he can, if he chooses, purchase the brain work of a Shakespeare or the inspiration of the apostles. The pith of the whole matter lies in the three words, "if he chooses;" when our young men learn to choose, they will find no restriction in the matter of cheap and good literature.—*Courier-Item*.

OVERSTUDY.—School-girls of the present day are too often overtaxed. Think of an undeveloped brain getting up book knowledge on ten different subjects all the same day, and this going on day after day for several years! It is altogether contrary to the principles of a sound psychology to imagine that any sort of mental process worthy of the name of brain thinking can take place in that brain while this is going on. The natural tendency of good brain at age to be inquisitive and receptive is glutted more than satiety. The natural process of building up a fabric of mental completeness, having each new fact and observation looked at in different ways, and having it suggest other facts and ideas, and then settle down as a part of the regular furniture of the mind, cannot possibly go on where new facts are shoveled in by the hundred, day by day. The effect of this is bad, boys, but it is worse on girls, because it is more alien to their mental constitution.

THE Fruit and Flower Mission wishes to thank the paper for calling attention to its needs at giving; also to thank all those who so generously responded to the appeal for contributions. Many poor people were made happy through the gifts of the friends of the Flower Mission.  
—ELIZA D. KEITH, Secretary.

## YOUNG FOLKS' COLUMN.

## A Lesson for Boys and Girls.

There is nothing like Purpose, Pluck and Perseverance to make a boy's or a girl's spirit strong and effective. Purpose, Pluck and Perseverance are the winning P's. Purpose sees something that ought to be done; Pluck dares to undertake it; Perseverance sticks at it until it is accomplished. The people of the world, both old and young, are largely indebted to these three P's. A writer in the *Christian Advocate* illustrates what they can do in the following brief history, which every boy and girl ought to read and remember: Boys and Girls, I want to tell you about a man who is not often referred to in society, though millions of people are constantly enjoying the fruit of his Purpose, Pluck and Perseverance. We do not eat this fruit, but we wear it on our heads, backs and feet, and it is used for many household, mechanical and scientific purposes. To this man you are indebted for your nice gum overshoes and ulster. While you are enjoying their protection from the dampness you do not think to honor the name of Charles Goodyear, whose noble Purpose, Pluck and Perseverance gave to the world one of its most useful improvements. He was a native American, born in New Haven, Dec. 29, 1800. He had not the favorable opportunities for obtaining an education that the boys of to-day have. He received a very limited course of instruction in the public schools. When he was quite young his father moved with his family to Philadelphia and opened a hardware store. Charles grew into familiarity with the business. When he became of age his father took him into the store as a partner. The firm for several years enjoyed a fair degree of prosperity. The financial crash of 1836 threw both father and son into bankruptcy.

During the time he was engaged in the hardware trade, Charles had his attention directed to the experiments being made with India-rubber. Now, being out of business, he determined fully to investigate the subject. With this purpose he went to New York, and sought an interview with the agent of a company that had been operating in India-rubber; here he received a discouraging account of the whole business. He was told that every effort to successfully work it was a failure, and that the most sanguine friends of the enterprise had abandoned it, because no durability could be imparted to goods made of India-rubber. He listened attentively to all this, and to an explanation of the process employed in the effort to manufacture rubber goods.

He saw that mankind would be greatly benefited if this business could be so perfected as properly to utilize gum elastic; formed the deliberate Purpose to undertake to accomplish what many others had failed in trying to do. His Pluck was displayed in attempting to accomplish what others had failed to do. He experimented long, and labored hard, and suffered much from poverty and discouragement. At last his wife, pleading their poverty and the helplessness of their family, besought him to cease his efforts with India-rubber and provide for his family; this plea was more powerful than all arguments, for he was a man of tender feeling and loved his family ardently. He would have yielded to his wife's entreaty, had not Perseverance said, "On, keep on; you are near the realization of your hopes. The secret that has so long eluded you is within reach; another effort will unfold it." The effort was made, the secret obtained, glorious success crowned the efforts and sacrifice made during ten years of constant application to one purpose. He was the first man to produce a perfectly vulcanized India-rubber. By doing this he gave to the world a new material that could be used in a great variety of ways for man's benefit. Out of it are manufactured various articles of clothing, boots, shoes, caps, and many articles for family use, besides toys, mechanical, surgical and scientific instruments. It is a blessing to men on land and sea, and is the fruit of Charles Goodyear's Purpose, Pluck and Perseverance.

## Discontented Polly.

Polly ought to have been a very happy little girl, but she was not, because she hadn't a doll. She had everything else: a beautiful kitchen, a stove with everything to use on it, some pretty china dishes, a table to put them on, and a neat little wicker chair to match the table.

Only a little while ago she had three lovely dolls; but there was another D to Polly's name—Destructive Polly; and now there was not a bit of a doll left, and mamma had determined to let her wait till she wanted one so very much that when it did come she would be sure to take care of it. But Aunt Alice said one day, "That child shall have a doll to-morrow." And sure enough! the next morning, in the little wicker chair, Polly found the most beautiful doll she had ever seen.

It had fluffy, golden hair, and bright blue eyes, and a dress just like Polly's best one with puffed sleeves. It could say "papa" and "mamma" quite plainly, and could move its eyes.

Of course, the first thing to be done was to find a name for the new treasure, and that

made Polly discontented again. She wanted to call it after herself, but she said "Polly is such an everyday name, it would never do; my doll must have a 'company' name." So she called her doll "Rosalinda."

The next day mamma said there might be a party in honor of the new doll; so Polly carried Rosalinda into the play-room, put her in the little chair, and began to get ready for the party. Rosalinda looked as though she would like to help; so Polly filled one of her prettiest cups with milk, and put it in the dolly's lap, while she went out for three lumps of sugar.

Just then a dreadful thing happened. Puss, who had been hidden under a chair, came out, jumped to Rosalinda's lap, and began to drink the milk as fast as he could. Before it was half gone he heard Polly coming, so he jumped down again in a hurry, and out of the window. But one hind paw caught the cup by the handle, spilled the milk on dolly's dress, dashed the cup to the floor, and broke it all to bits!

When Polly came in and saw this, what do you think she did? She just looked at Rosalinda a moment, then she took her out of the chair and shook her—shook her so hard, and sat her down again with such a bounce that the pretty blue eyes shut up tight, and wouldn't come open.

Polly didn't mind that at first. She said, "Yes, you'd better shut your eyes, you naughty thing! Don't tell me it was 'a accident.' You did it yourself, I know, and I don't love you one bit. You don't look fit to be seen, and the party will be here before I'm ready. Oh, dear! Just open your eyes and see what you've done."

But poor Rosalinda's eyes wouldn't open, and the more Polly shook her the tighter shut they stayed, till she ran crying to mamma to ask for help. Mamma had seen it all; so now she took Polly and Rosalinda both on her lap, and gave what Polly called "a little preach."

It did her good, real good, and at last she said: "Dear mamma, if Rosalinda will only open her eyes once more and look at me, I believe I will never be so naughty again."

So mamma found a way to open the pretty blue eyes, and Polly kissed them both, and then kissed mamma for helping her.

By the time the party came, everything was ready. Polly was very good, and let the girls play with her beautiful Rosalinda the whole time. I do not know how long the good will last. I hope till every one forgets to call her Discontented Polly, and learns to call her Darling Polly instead.

## GOOD HEALTH.

## Smoking and Heart Disease.

In a report by Dr. Frantzel, of Berlin, on immoderate smoking and its effects upon the heart, it is stated that the latter show themselves chiefly by rapid, irregular palpitation of the heart, disturbances in the region of the heart, short breath, languor, sleeplessness, etc. Dr. Frantzel says that, if the causes of these complaints are inquired into, it is generally found that the patients are great smokers. They may not smoke cigars rich in nicotine, but full-flavored cigars imported from the Havanas. Smoking, as a rule, agrees with persons for many years, perhaps for 20 years and longer, although by degrees cigars of a finer flavor are chosen. But all at once, without any assignable cause, troubles are experienced with the heart, which rapidly increase, and compel the sufferer to call in the help of a medical man. It is strange that persons consuming cigars of ordinary quality, even if they smoke them very largely, rarely are attacked in that way. The excessive use of cigarettes has not been known to give rise to similar trouble, although it is the cause of complaints of a different nature. The age at which disturbances of the heart become pronounced varies very much. It is but rare that patients are under 30 years of age; they are mostly between 40 and 60 years old. Persons who are able to smoke full-flavored Havanas continue to do so up to their death. If we look round among the better classes of society, who, it is well known, are the principal consumers of such cigars, it is astonishing to find how many persons with advancing years discontinue smoking. As a rule, affection of the heart has caused them to abjure the weed. In such cases the patient has found the best cure, without consulting the medical man. If he makes up his mind to discontinue smoking at once, the complaint frequently ceases at once; in other instances it takes some time before the action of the heart is restored to its normal state. In such cases, besides discontinuing smoking, relief must be sought also by regulating the diet, taking only easily digestible food, light beer and wine in moderate quantities, abjuring coffee, as well as by short walks, residence among mountains of moderate elevation, and suitable interior treatment. By taking this course, all symptoms disappear in the course of a year and do not reappear if the patient does not recommence smoking. In a third category of cases the more acute disturbances leave the patient; he feels well and hearty, but an irregularity of the heart, more or less pronounced, is left behind. It has not yet been determined what it is that makes smoking injurious; but this much appears certain, that it does not depend upon the amount of nicotine which cigars may contain.

THE SECRET OF SCARLET FEVER.—Certain English physicians have made a most important discovery. They have found that the scarlet fever poison really comes from diseased cows. The contagion is not necessarily in the milk. Indeed, a cow impregnated with the fever may give wholesome milk, but there is always danger that in milking the cow the matter from the sores on the udder may find its way into the milk-pail. Then comes the rapid multiplication of the scarlet fever germs, which technically are known as "streptococcus." These germs have been transmitted to calves and other animals, which have thereupon shown the symptoms of scarlet fever. The disease is so deadly an enemy of the human race that now we have discovered its origin every effort will be made to put an end to its depredations. The cow is of the greatest benefit to the human race, but the milk it furnishes sometimes communicates the infection of typhus as well as scarlet fevers.

SHADE TREES CAUSE SICKNESS.—The shade trees about our dwellings have done much to make our wives and daughters pale, feeble and neuragic. Trees ought never to stand so near to our dwellings as to cast a shade upon them. If the blinds were removed, and nothing left but a curtain with which to lessen on the hottest days the intensity of the heat, it would add greatly to the tone of our nerves and to our general vigor. The piazzas which project over the lower story always make that less healthful than the upper story, especially for sleeping purposes. I have cured many cases of rheumatism by advising patients to leave bedrooms shaded by trees or piazzas and sleep in rooms constantly dried and purified by the direct rays of the sun.—*Dio Lewis' Journal*.

## DOMESTIC ECONOMY.

STEWED SHEEP TONGUES.—Soak for an hour in cold water; drain and cover with boiling water until you can peel off the skin. Do this over night and leave on ice until morning. Then split lengthwise into four pieces when you have trimmed them neatly. Put for each tongue a tablespoonful of chopped pork into a saucepan, a teaspoonful of minced parsley, half a dozen chopped mushrooms, salt and pepper to taste, and the juice of half a lemon for the whole number. Lay the split tongues on this prepared bed, pour in a cupful of skimmed gravy or weak broth, cold water if you have neither, and stew gently until tender. Thicken with browned flour; boil up and pour out. Your butcher will save the tongues for you at a small cost if you give him timely notice. A half-cup of stewed and strained tomatoes is an improvement to the stew.

SWEETBREAD CROQUETTES.—Chop fine and then pound to a pulp in a stoneware mortar the breast of a chicken. Have ready three sweetbreads which have been thoroughly cleaned and boiled about 20 minutes. Pound these also in the mortar and add to the chicken. Put over the fire in a small pan a large lump of fresh butter. Wet up a tablespoonful of corn-starch or arrowroot in a small cupful of rich cream. When the butter bubbles, add to it the thickened cream, and let it cook till done, stirring all the time. Pour it into the mass of meat and mix thoroughly, adding pepper, salt, nutmeg, a little mace and chopped parsley to taste. Mold with the hands into croquettes or rolls, and put away to get cold. When wanted to serve, dip each in beaten yolk of egg, then in bread-crumbs or cracker-crumbs, and fry like doughnuts in boiling lard. Garnish with sprigs of parsley.

WATER POUND CAKE.—One pound of butter, one pound of powdered sugar, four eggs, one cupful of boiling water, one pound of prepared flour, flavor with lemon. Beat butter, sugar and the yolks of the eggs to a cream, then add the boiling water, and stir gently till cold, then the pound of flour with the whites of the eggs which have been beaten to a stiff froth, the lemon last; bake one hour. This cake cannot be told from real pound cake, and it will keep two weeks.

LEMON MARMALADE.—Slice the lemons very thin, only taking out the seeds; add three pints of cold water to each pound of fruit after being cut into pieces; let it stand 24 hours; boil it until tender, pour into an earthen bowl until the following day, weigh it, and to every pound of boiled fruit add 1½ pounds of lump sugar; boil the whole together till the syrup jellies and the chips are rather transparent.

BUTTERED POTATOES.—Boil with the skins on, peel carefully, lay in a heated bake-dish, butter plentifully, pepper and salt; cover and set in the oven ten minutes, rolling them over in the melted butter several times. Remove with a split spoon to a hot deep dish; add half a cup of hot milk to the butter left in the bake-dish, stir well and pour boiling hot over the potatoes.

HARICOT MUTTON.—Make a good gravy by boiling the trimmings, seasoning it with pepper and salt. Strain and add carrots, parsnips and onions previously boiled tender. Slice them in, then pepper and salt the mutton, broil it brown; put it into the gravy along with the vegetables, and stew all together ten minutes.





A. T. DEWEY.

W. B. EWER.

Published by DEWEY &amp; CO.

Office, 252 Market St., N. E. cor. Front St., S. F.  
Take the Elevator, No. 12 Front St.

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SAN FRANCISCO:

Saturday, December 4, 1886.

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## The Week.

People are naturally getting somewhat uneasy about the tardy opening of the rainy season, and the perfect weather which so delights city people and tourists is becoming somewhat monotonous to men who have sown and fear the need of resowing, or to those who are waiting for the rain before putting in the plows. It is beyond our power to make a season just as we would like it, but our experience is that a late opening is better than a heavy October or November rain and a long dry period following. Over much of the area of the State there has no appreciable rain yet fallen, and so far as we have heard, live-stock have kept in fair condition. If a rain should come this month and then a warm, growing winter should follow, the result would be

better than to have had growth started early, and then repressed by a long, cold drouth. Of course people who have much field work to do are injured by having it crowded into a short, hurried season, but as a rule, it seems to us it is still too early for anxiety. The elements still have plenty of time to arrange a splendid season for us, and it is more comfortable to trust they will yet do it than to be consumed by worry and doubt.

## The Stock Craze.

Once more, and for the first time in a number of years, the mining share market of San Francisco has gotten into one of its old-time tantrums. Though a mere flurry compared with the whirlwind of excitement that in former days swept over the community, the movement in shares has for a week or two past been decidedly breezy. This improvised market has not, to be sure, been attended with very heavy sales or extremely high prices; nevertheless, it has for a month or more past been quite active and still so remains, transactions having been confined mostly to Comstock shares. Having been preceded by no great strike in the mines, this stir in stocks came upon the community unawares. But this is the way these speculative cyclones frequently occur, there being no signal service to foretell their advent. They very often burst upon us from a clear sky, coming suddenly and when they are least expected. Though making their appearance so unannounced, they have not for this reason proved the less mischievously effective.—*Mining and Scientific Press.*

Man is a strange bundle of incongruities. The average man is extremely cautious in his trade and dealings, especially when his money represents hard hands and the beady drops of the brow. He must have an abstract of the title to the house and lot or piece of land he buys. The age and disposition of a horse is carefully examined before he opens his purse. He will often higgie and hesitate over the price of a hat, coat or a few pounds of beefsteak. And yet when the gambling craze smites a community, no such business caution founded on good sense, wisdom and experience is observed. Men will mortgage their homesteads, pawn their watches and jewelry, hypothecate their credit, and often tamper with trust funds, in order to get money to invest in stocks, upon no better assurance of success than the winks and nods of stock-sharps or the rumors and gossip of the street. Stocks are advancing, and that covers all the fortitudes of the case. Some one out of a thousand bought a block of shares the other day and made money by the venture. That is the A and Izzard of the stock-gambling logic, and upon it thousands peril their homes, business, honor and reputation.

Perhaps there has never been a stock boom in this State more absolutely fatuous than the present excitement. That bore more unmistakably the marks of a sharp effort to galvanize a malodorous cadaver into a fitful existence. There is clearly not one particle of merit in it. The whole thing is born of brag and bluster, tom-tom and gong. The most rampant bull, the most venal press, has not ventured the statement that there is any claim of reason in the present advance on the stock tape. In the language of the editor of the *Mining and Scientific Press*, "there remains still in the upper portions of these Comstock mines a great deal of low-grade ore, the most of which can be extracted and milled with a fair margin of profit. But that there exists there any more bonanzas is more than problematic, as they who hold to a contrary opinion will, if they proceed to act on the same, be very likely to find to their grief. During the earlier history of the Comstock mines, when the uncovering of a bonanza was a thing that might almost any day be looked for, the occurrence of a furor like that which is now running its course was an event that might be winked at, if not wholly pardoned. But that a craze of this kind should now be suffered to obtain is so without reason or excuse that its originators, aiders and abettors may justly be held amenable to public condemnation."

The present appreciation in Comstock shares is wholly based upon the rumor that a body of paying ore has been struck in the Consolidated Virginia. No precise statement of such a discovery has been anywhere made. The whole thing is a wild conjecture; and were there some little foundation for the rumor, this is no good reason why there should be a flurry along the whole line. It does not even justify confidence in an adjacent claim. Why should Best and Belcher, for instance, where no considerable body of ore has ever been found, or is likely to be, feel the thrill, and be selling at such an ad-

vanced fate? There would be just as much sense in getting up a furor over a lot of abandoned drifts, tunnels and holes in the ground 100 miles away. The whole thing is a craze, a return of the speculative measles, and after all the woe, sorrow and ruin of the past there are still hundreds of noodles, callow innocents, ready to go out on the street and catch the complaint. "Experience is a dear school, but fools will learn in no other," is an old adage.

We have just begun to emerge from the valley of hard times and sore tribulations. Many have made money, merchants have expanded their business, mechanics paid for their cozy homes, farmers lifted the mortgages from their fields, orchards and vineyards, and some of them may feel able to hazard a little money. The history of the past teaches us that the passion for gambling ventures of this kind is rarely ever cured till the infatuated victim is cast a wreck upon the rocks, or flies to the oblivion of suicide. But what cares the eager, feverish, expectant multitude we now see on the street and surging around the Stock Board for danger signals and red lights on the reef? They will venture to the edge of the beetling precipice, they will cruise around the maelstrom, and like many before them only come out of the horrible trance when ruined in fortune and honor. The result of this flurry will be as in the past, a few will come out successful, while the wail of despair and regret will come from the sad, desolate homes of thousands.

## Intemperance and Insanity.

Urging the importance of temperance upon what may be called sentimental grounds sometimes becomes trite and has little effect because of the familiarity which follows frequent appeals. To those who are not moved by such twice-told tales, there comes once in awhile an item of evidence concerning the value of temperance which must arrest attention and thought because of its startling character and its obvious truth. If people will not listen to the preachers and the lecturers and other agencies of temperance reform, possibly they will hearken to the doctor whose words can have no savor of sentiment or sensation, but who states calm and impressive facts. What could be stronger as an exhortation to temperance than this paragraph which we find in the report of Dr. W. H. Mays, superintendent of the Stockton asylum for the insane, of which we have just received a copy:

Insanity is, to a large extent, a preventable malady. It comes from an ignoring of the laws of health and sobriety. Without entering upon an enumeration of the many causes of insanity, I shall make a brief reference to one of the most prominent factors in the question—intemperance. All my observation goes to strengthen the belief that there is no greater mind-destroyer than this.

It is in the second generation that the evil works its most harm. One-half the insane—perhaps more—owe their derangement to hereditary influence, inheriting an ancestral taint or predisposition. But this hereditary taint—how had it its origin? Where the family history can be searched into, the starting point will often be found in a drunken progenitor. The damaging effects of the excessive use of alcohol upon the brain are more often manifested in the offspring than in the drinker himself. He may manage to keep out of the asylum, and even maintain a respectable place in society, but his children will often find it hard to do so. They inherit qualities that unfit them for the struggle for existence, and go down under the strain. The families of intemperate parents furnish the recruiting ground for insane asylums. These unfortunate children, if not idiots or epileptics, are liable to grow up with querulous, explosive tempers, with feeble powers of self-guidance, weak in temptation, unstable, self-indulgent, vicious, hysterical. They form the bulk of what are known as the defective classes.

One would think this would arrest the drunkard. Suppose he should care little for himself, can be deliberately consign his innocent children to lives of misery and to homes in the asylums of the country? Men will indulge in certain evil propensities and vices, and yet guard their children from a knowledge of their habits; but this is a matter in which there can be no concealment. Silently, and yet surely, the seeds of destruction and woe, planted in the very constitution of the child, will germinate and grow, and despite the most careful moral training and physical culture, the evil will pursue its way in some cases until its most deplorable end is reached. It is hardly necessary to commend such a matter as this to careful consideration.

**GRAIN RUINED BY SMOKE.**—Examination of several carloads of wheat just arrived at Winnipeg from Western Manitoba showed it to be so saturated with smoke, blown into fields of standing grain from prairie fires, as to give it an acrid taste and render it utterly useless.

## The Stockmen and the President.

To His Excellency Grover Cleveland, President of the United States: The time has come when that branch of the commercial interests of our country represented by the live-stock industry feels that it should no longer plead for, but demand, justice. I am empowered by the stockmen of the plains, who have more than \$600,000,000 invested in cattle alone, to respectfully invite the attention of your Excellency to the imminent danger threatening our herds by existence of contagious bovine diseases, which if once introduced to the open ranges of the West will sweep our entire interests from earth.

I feel that I am justified in asking that in your forthcoming message to Congress some suggestions may be made in the interest of legislation looking to the extermination of the contagious disease known as pleuro-pneumonia, and such sanitary regulations as will protect the cattle interests of the United States against the importation of cattle from known diseased centers of other countries.

I would further respectfully submit that, under the pooling system entered into by the transportation companies of the United States and the iniquitous favoritism of the rebate system, grievous wrongs are perpetrated on the producer of beef, and its consumer as well. That same combination which compels the millions who toil to pay an exorbitant price for one of the prime necessities of life compels the producer to accept for his products a price which has pressed the cattle-grower to the verge of ruin.

The bill now pending before Congress for the regulation of inter-state commerce, known as the "Reagan bill," is in the interest of justice and equity, and the cattle industry bespeaks for it such attention in your message as may meet your commendation. Respectfully,

R. G. HEAD,  
President Inter National Range Association.

Denver, Nov. 30, 1886.

This appeal should carry weight. Protection to the live-stock interest from the insidious and deadly foe, contagious disease, is perhaps just now the crowning need of our agricultural industry. It has been demonstrated that we have within our borders the most deadly plagues, and unless something effective is done our vast cattle interest will suffer in two ways, each in itself fatal. First, the very lives of all the beasts in the country are menaced. Second, the announcement that diseases are spreading unchecked in this country will lead all importing countries to pass prohibitory laws against the entrance of our meat products into their ports. Foreign governments are very sensitive upon the large money we are securing from them for meats canned and salted and smoked, and they only need such a pretext as protection of the health of their citizens to send our shipments adrift.

The experience with the outbreak of pleuro-pneumonia in Chicago, concerning which we have had items in the *RURAL*, shows that existing United States laws are inadequate to grapple with such outbreaks, and that ordinary State laws are ineffective. It is plainly an inter-state problem, and should be handled thoroughly by the General Government. Our whole live-stock interest, which of course includes the dairy and its adjuncts, is now seriously menaced. The Chicago case was handled gingerly, and great opportunity has remained for the dissemination of the plague. It is eminently proper that President Cleveland be appealed to, to urge Congress to do this winter what it left undone last winter, that is, to enact some laws which will give power to thoroughly crush and stamp out an outbreak of a malignant, contagious disease.

One has but to read the cattle history of the world to become convinced of such a need. These diseases are not new. Some of them have been known for centuries. Now and then they appear, and rage like the old plagues among mankind, almost sweeping from the infested parts all the kind of life which is subject to them. They have ruined poor men by destroying their main alliance; they have annihilated some of the finest bred herds upon which generations of owners have expended time and money, and the value of which, as agencies for the improvement of their kind, can hardly be overestimated. At present, when the herds are almost the corner-stone of the prosperity of the country, both in the older States and on the great plains, it is the highest folly for the Government to shut its eyes upon the experience of years all over the world.

The second part of the appeal to the President mentions the grievance of the cattle growers on the transportation question. The Reagan bill recalls the fact to Mr. Reagan is now a candidate for election to the United States Senate from Texas, a service he can do in that body in the way of forcing the needs of the country for fair rates upon the transportation companies will be the sincere hopes of the people for the regulation of the issue of his canvass of the Texas side of the matter. Mr. Reagan is not on the heels of the oleomargarine question, but is hereby value in other respects may elicit does not in this regard. The coming Senator who are promise to have any surplus monopoly interest in some way entangled in the matter, and the accession of producers of the body will be a real gain for the country.



## California-Grown Walnuts.

Those who have read the RURAL PRESS for the last 10 years or more know with what zeal and enterprise Mr. Felix Gillet, of Nevada City, has pursued the horticultural specialties to the understanding and distribution of which he has apparently devoted his life. The service he is rendering our horticulture has won him many friends and should entitle him to general esteem. This was our first thought when we received from him the other day a neat box with 15 English walnuts neatly arranged in it, and each one labeled, with the request that we keep it on exhibition in our editorial rooms, that any one interested in walnut growing might have opportunity to examine the characteristics of the different varieties exhibited. The matter seemed to us so interesting that we secured outline engravings of the nuts and present them to our readers upon this page.

Mr. Gillet will soon issue, as a supplement to his general catalogue, a pamphlet of 20 pages, the first half of which is chiefly devoted to a discussion of the newer and improved varieties of walnuts, chestnuts and filberts. We desire in this article to present a few leading points, which are claimed with reference to the walnut, and first of all the *proparturiens* walnut, which has been described and discussed in our columns during the last few years. The general fact that the *proparturiens* will bear early, as its name indicates, has been often mentioned. This seems to be, however, a fact, which admits degrees of truth, and in his latest writing Mr. Gillet lays especial stress upon the necessity of getting "second generation *proparturiens*," to order trees which will fruit very early. The idea is that one must have trees grown from the seed of the original *proparturiens* tree in order to transmit the precocity. If one grows seedlings from the nuts taken from a "second generation" tree, these seedlings become, according to Mr. Gillet's classification, "third generation *proparturiens*." The reason is that by propagation by the seed the tendency is to revert more and more to the original type, which is the common English or French walnut (*Juglans regia*). The result of this reversion is shown in the characteristic growth and form of the tree, and in its time of coming to bearing. Thus Mr. Gillet claims:

The second generation *proparturiens* have a great tendency to spread out, grow fruit ramifications, and go to bearing at once—all that, of course, at the expense of the top; and whenever it is desirable to have the trees to shoot up instead of spreading out, all that has to be done is to cut off those limbs that spread out so much, and that will force the tree to grow up. In this way we made our *proparturiens* shoot up to a height of 25 to 30 feet. But with third generation *proparturiens*, the trees mostly all shoot up and commence to spread out for good only about the time they are getting into bearing, which is at eight to nine years.

Mr. Gillet says that he has had third generation *proparturiens* bear at four years of age, but not more than 5 per cent of such trees will do that; while of the second generation from 80 to 90 per cent may be expected to bear at four years or younger. The character of the nut undergoes reversion toward the common type, being on the average smaller, but still a very desirable nut. The engravings on this page show the difference between the nuts of the second and third generation. The first six nuts are those borne upon trees grown from nuts from the "original" tree, and are therefore second generation. The next three nuts are from trees grown from nuts borne on second generation trees; thus making them third generation. These nuts are from trees grown by Mr. Gillet, which have just come into bearing at their eighth or ninth year—the nuts from which they grew having been placed where the trees now stand. The superiority of the second generation nuts, as shown in the engraving, is well borne out by samples which we have tested. They are soft-shelled, and with rich, sweet kernels. The shapes vary, as the engravings show.

After all this talk about the reversion and degeneration of seedling walnuts, the idea may occur to some, why not discard seedlings and grow trees true to the variety from buds or grafts? The reason lies in the difficulty of propagating that way. Although grafting may be successfully done in working over old trees, the grafting of small seedlings has too large a percentage of failure to induce tree-growers to adopt it. Mr. Gillet says that all his orders for grafted trees from France have been respectfully declined.

Besides the different classes of *proparturiens*, the engravings show individual nuts of five varieties, as named beneath the figures. All these, except Parisienne and Mayette, were grown upon trees in Mr. Gillet's orchard in Nevada City, and all have good points. The Franquette, Parisienne and Mayette are among the finest nuts grown for the French markets, having large size, fine shape and superior flavor,

growing even in parts where the common walnut of the State does not succeed. He finds that all the new varieties he has fruited are "perfect bloomers," that is, the male and female blossoms are in condition for fertilization at the same time instead of being, as is common with the ordinary kind, with pistillate bloom dormant until the staminate catkin has lost its power. They are also later in bloom-



SECOND GENERATION PROPARTURIENS WALNUTS.



THIRD GENERATION PROPARTURIENS WALNUTS.



Franquette.

Mayette.

Parisienne.



Serotina.

Mesange.

OTHER LEADING FRENCH VARIETIES.

## FRENCH VARIETIES OF "ENGLISH WALNUT"—GROWN IN CALIFORNIA.

and should receive the attention of planters as well as the *proparturiens*. The Serotina is especially fine and promising. The variety seems to give quite a uniformity in the size of the nuts, and its shape is refined and high-bred—if we may apply a live-stock term to a fruit. The flavor of the kernel is exquisite, as we judge from a sample tested. The Mesange is a pretty nut with a medium shell and rich meat. It seems to have a tendency toward precocity, as Mr. Gillet informs us he has gathered several nuts from a six-year-old tree.

Mr. Gillet's chapter on nut-bearing trees, to which we have alluded, shows that he is becoming an enthusiast upon the subject of walnut

growing, so that they are less liable to be caught by frost. Upon this point we find an interesting experience given of grafting over a barren tree with the *proparturiens*. Mr. Gillet describes it as follows:

The most surprising yield of nuts that has come to our notice was from a 30-years-old tree, owned by Mr. L. Charonnat, near Nevada City. That tree, which is now the largest *proparturiens* to be found in California or the United States, was four years old when planted in 1860; it was then one of those common Los Angeles walnuts; it bore 17 nuts in 20 years, 11 nuts in 1 year; was grafted by us into our late *proparturiens* in the fall of 1880; in 1884, the tree completely transformed into a *proparturiens* bore 627 nuts, twice as many in 1885; but in 1886 the crop was so large that the long branches were bending down under the burden of the nuts, which

could be seen all over the tree in bunches of two to six. Over 6000 nuts were gathered from that tree this year, 1886. Mr. Charonnat has now to cut back some of the longest limbs for fear that next year the branches will break down under the heavy weight of the nuts. That tree is now 66 inches in circumference, 57 inches at six feet from the ground, 35 feet in height, with a top 30 feet in width. As a true *proparturiens*, it spreads out all round and bears enormous crops.

Of course, getting varieties which will extend the area suitable for walnut growing over a greater portion of the State will be a general benefit. There is every reason to believe that with the walnut, as with the almond, many regions have been set down as ill adapted to the nut, when, as a matter of fact, the trouble was in experimenting with a variety ill adapted to the conditions prevailing. If this is so, the sooner it is generally understood the better.

## Dynamiters and Socialists.

The recent discovery of three dynamite bombs fastened to the springs of one of the coaches on the Buffalo, Rochester & Pittsburg Railroad, and the threat of the socialists in Chicago to blow up the water-works and set the city on fire, may well serve to warn the people of this country who look so complacently upon the doings of the dynamiters of England, Austria and Russia, that similar methods may be at any time used here by desperadoes who want to get rid of individuals, or to be revenged on societies or corporations obnoxious to them. Men who would not commit a murder with pistol or dagger will not scruple to touch a button or pull a string. No one may be hurt by this or that attempt or threat, but this will not always be the case. The socialists, at least, are known to be terribly in earnest, though things wrought out in secret are peculiarly liable to miscarry. The people and press of this country have been too remiss in expressing their disapprobation of and horror at the doings of those who would make themselves infamous by assassination with a lethal agent which works widespread destruction even when it fails to attain the object at which it was directed. In this respect dynamite is a far more dastardly agent than any weapon used by the ordinary assassin. Some may cherish a lurking, smothered admiration for such a man as Rhud, who took his own life into his hand in order to smite unto death the betrayer of his country; for Judith, who nerved her womanhood to the slaughter of Holofernes; for Brutus, who struck down his best friend, as he thought, for the public good, or for Jael, who treacherously slew Sisera; but for the sneaking fiend who, from some hiding-place, explodes dynamite or nitro-glycerine in the center of a crowded city, risking the lives of thousands of his fellow-men and destroying their property, we can feel nothing but the most profound contempt and abhorrence. The threats of such brutal enemies of social order and government should be nipped in the bud, and their cowardly acts visited by the swiftest and most severe retributions of the law. They deliberately place themselves on the level with mad dogs and wild beasts, and should be exterminated as the enemies of civilization.

**A WISE EFFORT.**—An exchange mentions that Mrs. Housh is circulating a petition to editors and proprietors of daily papers, asking them to minify the records of crime and debauchery that they may gain space to magnify the world's good news; to reduce the records of pugilism so that of philanthropy may be extended, and that by these means the daily press may become the wise counselor and ally of the home in the work of renewing the life-blood of the State from sources of purity and patriotism.

**EXPORTING SALMON EGGS.**—The Redding Free Press mentions that the U. S. hatchery on the McLeod has lately received from Peru an order for 750,000 salmon eggs, which are now being prepared for shipment. The eggs are packed in moss, and then covered with ice, that they may be kept damp during the long trip. An order for 2,000,000 salmon eggs was lately filled for New Zealand. From a salmon about 3500 eggs are secured.

**WON'T DO WITHOUT THE RURAL.**—Mr. J. D. Phillips, of Potter Valley, being in San Francisco a few days since, called on us to pay up his subscription. During his stay he remarked that his wife says she "can't do without the RURAL PRESS; whatever paper has to be stopped it shan't be that one." Sensible woman!



## FORESTRY.

## Arbor Day Happily Inaugurated.

The first festival of Californian tree-planting was celebrated most auspiciously. The weather was delightful. From San Francisco and Oakland several steamers bore to Yerba Buena 2000 or 3000 people, old and young; and as the visitors, among whom ladies and school children outnumbered the voters, climbed the steep ascent from the landing to the summit of the island, their gaily-clad procession up the winding trail, led by the U. S. Infantry band, in brilliant uniforms and white-plumed helmets, was singularly picturesque and pleasing.

Upon the southern slope, just below the summit, a space in the shape of a cross, about 650x150 feet, had been cleared of brush, and hither, in advance of the rest, had come the Poet of the Sierras, and completed the preliminaries by marking off the ground with stakes and lines.

The military band played stirring music. Soon after 11 o'clock, the throng on the brow of the hill was called to order by G. D. Shadburne; and Joaquin Miller, poet of the day, read with feeling and effect the following verses:

## Arbor Day.

Against our golden orient dawns  
We lift a living light to-day,  
That shall outshine the splendid bronze  
That lords and lights that lesser bay.

Sweet Paradise was sown with trees,  
Thy very name, lorn Nazareth,  
Means woods, means sense of birds and bees  
And song of leaves with lisping breath.

God gave us mother earth, full blest  
With robes of green in healthful fold;  
We tore the green robes from her breast!  
We sold our mother's robes for gold!

We sold her garments fair, and she  
Lies shamed and naked at our feet!  
In penitence we plant a tree;  
We plant the cross and count it meet.

For this, where Balboa's waters toss,  
Here in this glorious Spanish bay,  
We plant the cross, the Christian cross,  
The Crusade Cross of Arbor Day.

Gen. Vallejo had not then reached the summit, and in his absence the address which he had written was read by F. M. Campbell.

## Gen. Vallejo's Address.

Ladies and Gentlemen and Scholars: This occasion brings us back to the year 1806, when a cadet from Texas was sent with a force of soldiers to recover some horses which had been stolen from the Mission Dolores by a tribe of Indians, a very numerous band of the name Tachayunes, whose headquarters were on the mainland of Tachayune, who possessed on this island a fishing station, and also a large Turkish bath, named by them Temescal, considered both a luxury and a sovereign remedy for all ailments. At this period the island bore the name of Yerba Buena, and on the founding of San Francisco, in 1835, it gave its name to the municipality. Up to 1836 San Francisco contained 8 to 10 houses, whose first occupants were Jacob P. Leese, M. Leidesdorff, John Fuller, Nathaniel Spear and others. The year previous Spear brought some goats from the Sandwich islands and made Fuller a present of a pair, which became so destructive to the flowers and garden-truck that the latter gentleman took them to this island, where they increased rapidly; hence the name of Goat island, which it now bears. In 1849 there were nearly 1000 goats here, but they were soon destroyed by the hosts of immigrants.

My hope is that the plantation we inaugurate to-day may result in a garden of the herb of which we heard in my theology in boyhood's days. It is pleasant to be here to-day surrounded by so many happy children, and I am glad I have the honor of being here on this occasion with Donna Chonita Fuller de Ramirez, the daughter of the original owner of this island. My words fail to express my delight with the contrast between this island to-day and what it was in the older days in the possession of the Tachayunes. Surely the wand of the higher civilization has passed over us, for all of which I have thanks. I thank also the committee of arrangements for their kindness in inviting me to be present.

## Adolph Sutro's Remarks.

Mr. Sutro, after observing that he fully appreciated the great honor conferred upon him of being permitted to plant the first tree, went on to say:

"In 100 years from to-day the people who then inhabit this fair western land will assemble on this island and celebrate the centennial of the inauguration of Arbor Day in California. None of the bright faces I see about me will then be here. Your grandchildren and great-grandchildren will do the honors of the day. They will bless you and speak with reverence of their forefathers who had the foresight to commence this good work. Let you children, here assembled, determine to continue tree-planting each year of your lives, and before you have well arrived at manhood or womanhood, you will already see small forests beautify what is now but barren land, and you will point with pride and satisfaction to the work in which you took part. You should mark your

tree with a slip of wood, bearing your name, so that you may be able to find it again."

## Trees from the University.

Among the plantings was a collection of trees sent by the College of Agriculture of the State University. They are such as have proved to be hardy in this part of the State, and are the following: Olive, cork oak, English oak, English laurel, black wattle acacia of Australia, fragrant eucalyptus (*Eucalyptus citriodora*), three species of pectisporum, white mulberry, Japanese ligustrum and *Juniperus procumbens*. These were planted in rows on each side of the foot of the cross. They will be taken especial care of and it is thought will grow up to be a distinctive ornament.

As to the other speeches and the actual setting of the treelets, we will allow a correspondent to tell her story below.

## At the Presidio and Fort Mason.

At the Presidio, also, a crowd variously estimated at 5000 to 10,000 assembled. A. J. Moulder, I. G. Hoitt and James Denman were present, representing the Board of Education. There was music, an address, a poem, and then some 3000 slips were carefully set out, the eagerness of the children to plant their seedlings being only equalled by the pleasure which the grown people appeared to take in gratifying them.

At Fort Mason about 1000 happy children from the Spring Valley grammar and primary and the North Cosmopolitan schools, with their teachers, were welcomed by Major Darling, and assisted in giving their arboreal pets a favorable outset. And so California's Arbor Day was auspiciously celebrated.

## On Yerba Buena.

[Written for the RURAL PRESS by E. S. B.]

How charming the sail to Yerba Buena; how merry the long scramble up the mountain-like slope; how warm the welcome from Gen. Howard as we reached the summit.

The band began its sweetest, softest strains, immediately; then "America" enthused us; then the minstrel, Joaquin Miller, gave us his lovely song notes. Gov. Perkins made a few remarks, and F. M. Campbell read Gen. Vallejo's address—the General's horse not having arrived to bear him up the steep ascent until after Col. Irish had begun to amuse and delight us with his speech and his account of the puffing tug which brought him up the slippery height. Gen. Howard's grand, inspiring words moved every heart. Adolph Sutro planted the first tree in his courtly, distinguished manner. Mrs. Ramirez dug and dug into the dry soil and amid the stones in determined fashion, as she planted her own and Gen. Vallejo's tree, looking up, with real feeling in her beautiful eyes, at the touching allusion to her beloved father, Mr. Fuller, the former owner of the island. Mr. Shadburne called for the poetess of California, Miss Coolbrith, and she planted her tree, while Mr. Shadburne continued to hold his darling-prized Norfolk Island pine to his heart, till he gracefully set it down at last in Yerba Buena soil to adorn the world.

San Francisco climate seems particularly suitable to that beautiful tree. The redwoods, too, grow easily from shoots, and should be set out on the island and the lumbermen forbidden to cut them down. The live-oak, madrone and native trees suited to the soil should be planted on our hills.

The Toyon's red berries were plentiful at Yerba Buena, and Prof. Rattan, the botanist, said he hoped the beautiful Indian name Toyon would be used instead of "California Holly," or the proper but too long botanical name *Heteromeles arbutifolia*. The large palm planted by Joaquin Miller, sent by his beautiful wife for their daughter Juanita, waved rejoicingly in the tropic sun. Among others, we saw the editor of the RURAL PRESS hard at work planting trees.

Of course, we all wish "Arbor Day" had been set in January, but the trees we planted are going to live and flourish, even if we do not have rain very soon. Did not our noble General, who "never sent a substitute," hasten off and bring to the island a chosen band and lead them up the toilsome slope, carrying a bucket of water himself on his left arm in order to preserve the lives of the young plantation?

Be sure, ye croakers, that what General Howard has shown love and tenderness and care for will never be left to perish. Yes, Arbor Day at Yerba Buena island was a grand success. Soon may our good State Legislators pass laws that will prevent the present horrible slaughter of California's noble forest trees!

## Preservation of the Forests.

The following is a copy of a concurrent resolution which has been prepared by the California State Board of Forestry, for presentation to the next Legislature. The vital importance of standing forests to the welfare of the State, and the immediate necessity of some means being taken to prevent the destruction of the State and Government timber tracts, is well understood, and it is the earnest desire of the Board that all will lend their aid and influence to the adoption of the resolution annexed:

WHEREAS, The interests of California, like those of all countries, necessitate the reservation of a cer-

tain portion of land in forest for the best interests of agriculture; and

Whereas, The proportion of land in the greater part of California in forest is already much less than is deemed essential by scientific men; and

Whereas, The land laws of the United States and of this State, applying to forest lands, are unsuited to the honestly conducted lumber trade, and fail totally to guard against waste or destruction by fire, and provide no protection for a future lumber and fuel supply, or for the preservation of the watersheds of our State; and

Whereas, When these laws are good, the absence of adequate machinery for their execution forms a bar to their utility, and thus fraud, dishonesty and waste are rife, and robbery of the timber of the general government and from the State school lands is common; and

Whereas, These practices and wrongs should cease; therefore, be it

Resolved, By the Senate and Assembly of California, that the Senators and Representatives of this State, in the Federal Congress, are hereby requested to use their utmost endeavors to improve the present land laws applying to timber lands, and especially to provide for an immediate withdrawal of all Government timber lands in California from sale, until a definitive survey shall have ascertained what portion of such lands should be reserved to secure a permanent and continuous supply of timber and fuel for our citizens, and to protect the agriculture of the State from injury and destruction by flood and drought.

## THE PUBLIC LANDS.

## Stopping the Land Steals.

At the banquet of the Iroquois Club in Chicago, Nov. 17th, Commissioner Sparks, of the General Land Office, in responding to the toast, "The Public Lands, the People's Heritage for Homes," gave his views upon the proper policy to be pursued by the Government in regard to each class of public lands. He held that while the obligations of the Government, so far as incurred, must be carried out, the effects of this doubtful and mistaken land-grant legislation must not be so magnified that, while requiring of the Government a strict compliance with its part of the contract, the corporations shall be allowed unlimited license to violate theirs. True, it takes two parties to make a bargain, and it is equally true that the failure of one party to the contract is a release of the obligations of the other. He was prepared to say that in grants amounting to 110,000,000 acres there has been no such compliance with the law by the companies as binds the Government to any legal obligation in respect to the granted lands. By the Northern Pacific Railroad alone nearly 40,000,000 acres of the people's heritage for homes was being unjustly withheld. An act should be passed declaring forfeitures of the grants, if only to the extent of portions of unconstructed roads, at the time fixed by law for their entire completion. Such an act, while a measure of partial justice only, would leave to the companies, at their average price of the lands, more than enough to meet the legitimate cost of the entire construction of their roads. The great land grants to private individuals, he said, were nearly all made for colonization purposes, and are not binding unless the conditions involved have been complied with. The Commissioner's characterization of these grants was almost as sweeping as that of the railroad lands. The manner in which existing laws operate in regard to swamp lands, pre-emptions, homesteads, timber-culture and desert lands, was unsparingly condemned by the speaker. Before resuming his seat Commissioner Sparks briefly reviewed his course in office, and declared that his efforts had been directed solely to the prevention of the illegal control of lands, the recovery of those fraudulently held to which the title had not yet been passed, and to the protection of lands for actual settlement and the benefit of actual inhabitants.

A STORY ABOUT PRESIDENT CLEVELAND.—It is telegraphed from Washington that an official of the Land Office tells an incident of the President that is worth recording. Commissioner Sparks made a decision that deprived a Pacific Coast farmer of his quarter section. He came to Washington to protest, but getting no satisfaction at the Land Office went to the White House to appeal to the President. The latter became interested in the man's story, and instead of sending him to the Secretary of the Interior, or advising him to go to the courts, ordered all the papers up from the Land Office and took up the case himself. After spending considerable time in the study of the evidence, the President, with his own hand, wrote a brief, in which he argued the man's claims with as much care and earnestness as he could have shown if he had been his legal representative, and sent it with the papers back to Commissioner Sparks.

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## To Make Water-Proof Blacking.

A correspondent of the *Country Gentleman* writes to that paper as follows: Tallow, beeswax and castor oil are very good for leather, and would tend to keep the water out of boots, but I cannot see what good the rosin would do. Now I will give you a receipt for the manufacture of a water-proof blacking, that I got some years since from a manufacturer of water-proof boots in Liverpool, England. I have tried this receipt on my own boots, both in salt and fresh water; and my neighbors, that I have given some of my make to, are, like Oliver Twist, asking for more. I also use it on my harness, and I find it makes a very good blacking. Two days after it is applied to leather, the leather will receive a polish from ordinary blacking. My receipt is as follows: Take an old pair of India rubber shoes (boots or any old India rubber); cut them up and pull off the cloth lining; put the rubber in about a pint of neat's-foot oil, and set it on the stove until the rubber is entirely melted, stirring it once in awhile, and don't let it boil or burn. It will take about two days to melt the rubber. As soon as the rubber is melted, stir in one-half pound of beef or mutton tallow and one-half pound of beeswax. If it is not black enough you may add a little lamp-black, but I don't see any use in it.

Now to apply to the boots: Wash them clean of mud and blacking; when they are nearly dry, apply the water-proof all over them—if the weather is cold, work near the stove. The best thing to use in applying this blacking is one's hands and considerable elbow grease to rub it well into the leather.

Any one using this application to a pair of boots, and then having wet feet, had best give the boots away and buy a new pair, or send the old ones and have the seams attended to.

**GLANDERS NORTH AND SOUTH.**—As may be seen by an item in our Agricultural Notes this week, glanders is fearfully prevalent in Siskiyou county. We learn also that there are many cases in the valley of the Santa Ana. This terrible malady is gaining quite too wide a footing in California, and it may be well for the State authorities to take vigorous action, lest it assume the character and proportions of a pestilence. The peril to human life involved in the spread of this horrible disease among horses makes the situation very serious.

## A Fearful Leap

Into the abyss of poverty, over the precipice of short-sightedness is taken by thousands, who might become wealthy, if they availed themselves of their opportunities. Those who write to Hallett & Co., Portland, Maine, will be informed, free, how they can make from \$5 to \$25 a day and upwards. Some have made over \$50 in a day. You can do the work and live at home wherever you are located. Both sexes; all ages. All is new. You are started free. Capital not needed. Now is the time. Better not delay. Every worker can secure a snug little fortune.

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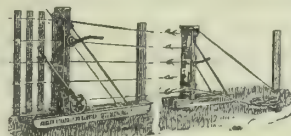
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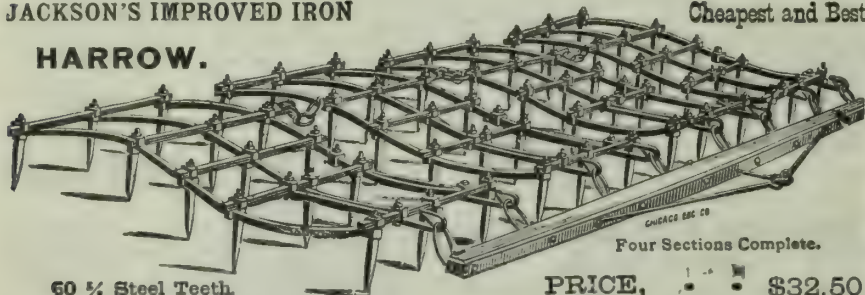
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No. 1 has three sections, 45 1/2 steel teeth; cuts 9 feet wide. This is a light size for two horses. Weight, 168 pounds.....	\$25 00
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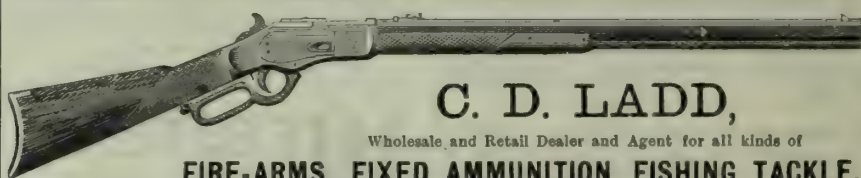
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## FRUIT MARKETING.

## Various Points on the Auction Method.

The New York *Market Journal*, of November 20th, gave several columns to interviews with New York fruit merchants concerning the auction method of disposing of Florida and California fruits. The great majority of the merchants warmly favored the plan and gave strong reasons for its probable success. We have not space to reproduce the article, but we have received an advance proof from the *Sacramento Weekly Union* of December 4th, in which Capt. H. Weinstock reviews the positions taken by those among the New York merchants who oppose the auction method. As this is the more interesting phase of the question, we give Capt. Weinstock's article as follows:

In the article in the New York *Market Journal* of the 20th inst., I find that, out of the 16 New York fruit-dealers interviewed by the representative of that journal, eight believe the auction plan the best for marketing California fruit in the East, six favor private sales through commission men, and two are neutral in their opinions. I desire to point out a number of fallacious arguments used by the six dealers who are opposed to auction sales, and who are anxious to perpetuate the present method of selling on commission at private sale—a method which, while it may be satisfactory to a few of the Eastern commission men, has thus far, as a rule, proven almost disastrous to the California as well as to the Florida grower.

In the article taken from the New York *Market Journal*, F. F. Cogrove & Sons, dealers in Florida oranges, say: "Frequent letters from our Florida correspondent state that our returns are from 15 to 20 per cent higher than auction sales of the same goods."

Against this statement permit me to quote the following, taken from the annual report of the Florida Fruit-growers' Exchange, which has just come to hand:

Last season was our first. We do not pretend to claim that we pleased everybody. We do not claim to have committed no errors, nor do we claim to have accomplished everything we hoped for. But we do claim to have netted the growers more money for the fruit handled than they received for the same quantity of fruit during the previous season.

In answer to the statement made in the same article by F. S. Maynard, who says: "I think good fruit will bring more sold by commission dealers, and poor fruit should be sent to auction," I would say that we have absolute proof, as certified to by Brown & Seecomb, the New York fruit auctioneers, and by Sgobel & Day, the largest Mediterranean consignees, that this season good Almeria grapes brought at auction from \$7.50 to \$9 per barrel alongside of thousands of barrels of inferior fruits, which sold at from \$1.50 to \$2.50. Could Mr. Maynard have secured better prices for the fine fruits at private sale? I think not.

J. Cromwell says, in his opinion, as the result of 20 years' experience in the fruit trade, that it will be vastly more to the interest of fruit-growers of both Florida and California to send their product to responsible commission houses here, as he thinks returns made by the latter will be in the future, as they have been in the past, more satisfactory than by any other disposition which can be made of them. I have this season handled 50 carloads of California grapes, and I do not believe that at auction these grapes would have netted two-thirds the prices I have been able to realize for my consignees.

In reply to the statement made by Mr. Cromwell, I would say that if California growers are content with this season's limited consumption of California fruits in New York and other extreme Eastern markets, then the system Mr. Cromwell advocates, of selling through a few commission houses at private sales, may be as good as any; but in that event California growers should cease planting and extending their acreage; in fact, should tear up a liberal proportion of trees and vines already planted. If our fruits are to be popularized in the New York market, it can never be done under Mr. Cromwell's plan. If we send to a few commission houses, the consumption, as was the case this season, must be limited. If we send to a great many commission houses, we bring about the condition which this year existed in Chicago and the West, where California fruit came into the fiercest competition with itself; where markets were continually glutted, and returns highly unsatisfactory. Hence, so far as the California grower is concerned, the returns in the past, Mr. Cromwell's statement to the contrary notwithstanding, have been far from satisfactory. As to the Florida grower, let him speak for himself, as he most emphatically does, in the following extracts taken from the first annual report of the Florida Fruit Exchange:

During past seasons no organized system was in force among the growers. Every grower shipped according to his own inclination, few, if any, having reliable information as to the condition of markets. The worst feature of this method was that the shipments were scattered indiscriminately all over the country in such a manner that the fruit was continually competing with itself. New York City, for instance, with from 100 to 200 commission merchants,

all receiving shipments direct from the growers, to be sold on commission. Of course, these commission men will never buy fruit so long as they can get it to sell on commission. They run no risks whatever in receiving fruit to sell for account of the growers. Again, not one fruit-grower out of every hundred is in a position to know or keep fully posted as to the reliability of the commission merchant to whom their fruit is shipped. Ignorance on this point alone has caused many to lose hundreds of dollars. Notwithstanding all this, the growers have persisted in following this hap-hazard policy year after year. Season after season, markets were glutted in the same old way, and as a natural consequence low prices ruled. Now, while the growers have been suffering through these disasters, the facts show that the commission men have not become discouraged. One fact alone proves that they have sustained no losses, and this is the continual increase in the number of soliciting agents sent to Florida every season, all eager to secure a share of the spoils for their respective houses. Now, as long as the Florida growers continue to supply commission men with fruit, the commission men will never buy, and just so long as the scatteration policy continues, just so long will success in the orange business be an uncertainty.

Mr. Merritt, of the Merritt Fruit Company, does not believe in auction sales. He avers that in his experience of over 20 years in handling fruit, he has been able to realize from 20 to 40 per cent above auction prices.

If for 20 years past fruit at private sale has realized from 20 to 40 per cent above auction prices, what are we to think of the Mediterranean growers who during all those years have clung so tenaciously to the auction plan? Are we to regard them as being so blinded to their own interests that they willfully ignore a method of sale which would bring them from 20 to 40 per cent more than they now realize? And what are we to think of the Florida growers, who, in the face of Mr. Merritt's statement, have so recently abandoned the method he advocates and are adopting the auction plan, as the following will show:

As soon as the Exchange became thoroughly organized, the officers immediately proceeded to investigate past methods, for the purpose of ascertaining the causes of the existing evils. They at once decided that the trouble lay in the indiscriminate distribution of the fruit, and that owing to this scatteration policy, the growers were continually competing with themselves. Our General Manager spent several weeks in the Eastern markets examining into the methods pursued in sales of foreign fruits. He found that this fruit was not scattered all over the country to be sold on commission like Florida fruit. On the contrary, it was handled by only a few dealers, and sold by one firm in each city, all sales being made by auction. By this means the commission men and fruit dealers are forced to buy the fruit outright, and they can get it only by buying it. Through this system the commission merchants and other fruit dealers are placed in active competition, and at these auction sales we see several hundred of them all trying to buy from one man.

Now, why do they buy this fruit? Simply because they can get it in no other way. Foreign fruit has been sold by this method for years, and it almost invariably realizes from 50 cents to \$1 per box net more than the Florida oranges. Seeing this, the officers of the Exchange concluded to place only one agent in each of the principal cities, and let these agents handle all the fruit that might be consigned to the Exchange. At present the Exchange has agents at the following places: New York, Boston, Philadelphia, Baltimore, Washington, Savannah, Macon, Ga., Cincinnati, O., Chicago, Ill., St. Louis, Mo., Peoria, Ill., Cleveland, O., Indianapolis, Ind., Kansas City, St. Paul, Minn., Minneapolis, Minn., and Louisville, Ky.

Mr. Palmer thinks, says the *Market Journal*, that domestic fruits would command better returns through commission houses than from auction sales, and would reach a much larger consumption. He says:

Commission dealers have been largely instrumental in creating and organizing the present trade in these fruits, and they are entitled to consideration. Established commission merchants do not, as a rule, buy goods; they are compelled to stick to their legitimate commission business. They now have close communication with dealers in adjoining States, and furnish them regular supplies. Sales exclusively by auction will largely dry up present avenues of distribution. Goods arriving from long distances require inspection and careful assorting to bring value. My Florida correspondents say the growers thoroughly tested the auction plan last season through the Florida Fruit Exchange, and they have found it unsatisfactory. The institution which was to remedy their difficulties has proved worse than the disease.

In reply to this statement, I deem it needless to again call attention to the fact that the experience of the past shows that fruits do not, as a rule, command better returns at private sale than at auction. That commission dealers have been largely instrumental in creating and organizing trade in fruits is to be conceded; that they are entitled to consideration is also to be conceded, provided the results are mutually satisfactory; but when the profits are all on the side of the commission man, and the risks and losses altogether on the side of the California shipper and grower, then the traffic ceases to be mutually profitable, and the commission man as such is no longer entitled to any consideration. Furthermore, who will dare affirm that in order that a few men may make liberal commissions, without assuming any risks, an industry like that of California fruit culture shall be choked and limited, and its markets either cramped by shipping to a few commission men, or overloaded and glutted by many commission men? With due respect to the commission men of the East, permit me to say that in my opinion the occupation of the commission dealer is largely a thing of the past. Future possibilities in California fruits are vast, not in

handling them on commission, but in buying and selling. Let the commission man in the East do as the commission man in California who ships East has done. Let him buy at the lowest price and sell at the highest. If our Eastern commission friend says it will not pay to come to California to buy fruits, our answer is that we propose to make such a journey unnecessary, we shall place our fruits at his doors, but if he wants them he must buy and pay for them and share our risks as well as our profits.

Mr. Palmer further says: "Sales extensively by auction will largely dry up present avenues of distribution."

So far as California fruits in the East are concerned, we have thus far very few avenues of distribution to dry up, as our fruits have hardly begun to make any impression east of Chicago. But even though our present avenues of distribution were numerous, the experience of the past would indicate that auction sales, instead of drying up distributing avenues, increase them with marvelous rapidity.

Imports of Almeria grapes have grown from a few hundred barrels a season to 175,000 barrels, equal to 37½ carloads, per week, the estimated receipts of this season at the port of New York City. They have penetrated into every town and hamlet in the East, West and Northwest, and are now consumed by millions of people, many of whom never get even a glimpse of California fruits. All this has been done under the auction system. Mr. Palmer must be well aware of these facts. How can he, therefore, state that the auction method dries up avenues of distribution?

Again, Mr. Palmer says: "My Florida correspondents say the growers thoroughly tested the auction plan last season, and they have found it unsatisfactory."

The statements made by Mr. Palmer's correspondents are, however, not supported by facts. From the information at hand it would appear that the Florida growers tested the auction plan in Boston last season, and the results were so satisfactory that arrangements were made for New York and elsewhere for this season, as the following statement of Mr. Day, of Sgobel & Day, clearly shows:

Mr. Day says:

It is my conviction, based upon experience, that the proper way to dispose of large quantities of oranges, lemons and grapes is by auction. Great numbers of new men throughout the country have, within the past few years, arranged to make regular and direct purchases from the auction house, personally and through their brokers here. I sincerely believe that before very long the entire fruit product of the country will be distributed at auction. It will be found necessary, and in full accord with the progressive spirit of commercial affairs. Our first sale of Florida oranges at auction, this season, took place on Thursday, and the prices obtained were fully equal to any made at private sale for the same grade of fruit. Returns to the shippers were made the next day.

In conclusion, permit me to quote still further from the annual report of the Florida Fruit Exchange. It says:

Our commission friends charged us with "breaking the markets." They seemed totally oblivious to the fact that, although the Exchange was not in existence during the previous season, yet the markets were never so badly demoralized as then. During the best part of the winter of 1884, oranges were selling at from 75 cents to \$1.25 per box gross. What must have been the net average? At present we see no better plan than the Florida Fruit Exchange plan, which, though operated only for one winter, and the worst winter Florida has ever known at that, kept up the prices of oranges through December, the worst month, fully \$1 per box more than we got last year.

Nowhere in the world is a valuable agricultural crop sent to market in such hap-hazard manner as the Florida orange crop. Three million boxes of Mediterranean fruit—all that comes to our shores—are handled by one firm in New York; and this tasteless, sour, ugly fruit actually brings more than our beautiful, high-flavored Florida fruit, simply because it is handled by one house who control the market, rendering gluts impossible. Mr. W. K. Lente, the founder of Seville and a prominent orange-grower, pertinently asks: "How is it with us, and our crop?" We ship it all over the country; we ship it to small towns to retail grocers. Now a man in an interior town who formerly bought 50 boxes a week during the season, is afraid to buy more than a few boxes at a time, lest some retail dealer should get a consignment or commission direct from Florida, and, by selling low, make the former wholesale dealer lose money. Formerly the "50-box man" was the local wholesale dealer who went to New York, attended auction sales, and supplied the retail dealers with a box at a time; now his business is ruined. The retail dealer, if he knew prices would be kept up, would prefer to buy his fruit outright, and he could make more money than if he received consignments direct from Florida at 10 per cent commission. A retail merchant cannot afford to sell oranges at 10 per cent commission, as, for instance, 35 cents on \$3.50. A terrible temptation is placed in the hands of all these men to "knock off" 25 cents. Commission men may kick at this, but while I do not state that all do it, I do emphatically state, and can prove, that some do, especially if, by being diligent workers, they have received a much higher price than the quotations would lead shippers to expect. Let me cite another case. A well-known buyer came to town for oranges. He wanted a carload—250 boxes. The fruit commission merchant offered him a carload at \$3.50. While thinking over the matter, another commission man came in and cut under the first man 25 cents. It is literally true that, at last, the buyer bought at \$2.25, and even then got so frightened at the underbidders that he only bought 50 boxes, fearing that some of his neighbors might buy at \$1.75 and make him lose money.

Officers of the Exchange have witnessed sales of from 20,000 to 30,000 boxes of foreign fruit in New York City at one time, all sold by one man at auc-

tion, and realized splendid prices, the entire lot being disposed of within two or three hours.

Now, 10,000 boxes of Florida fruit shipped in the old, indiscriminate style into the New York market at one time, will create a ruinous glut, and the fruit will sell at from 50 cents to \$1 per box. Why is this? Simply because the fruit is sent to every dealer in the city to be sold on commission. So many dealers get it to sell on commission, that there are scarcely any buyers to be found. Nine men out of every 10 want to sell. Fruit-growers, think of it! for it is you who suffer.

If, with the 500,000 to 1,000,000 boxes shipped during each season for the past three years, markets have been ruinously glutted, how do you suppose they will stand 5,000,000 to 10,000,000 boxes, five or 10 years hence, if the old hap-hazard method of shipping continues, that old method which in the past has practically arrayed the produce of one grower against that of another.

H. WEINSTOCK.

## Arbor Day.

Oh, ye hills, scarred with mines, desolated!

Oh, ye vast shadeless valleys of wheat!

Hear ye not the great words of the poet?

Western winds, speed away, and repeat

To the bared wasted slopes of Sierra—

"Ye shall yet in your children be blessed;

For the signals of love will be lifted

On the mist-laden hills of the West."

Arbor Day! Arbor Day! God be with us!

I see the green banners draw near,

And the rivers long hid in the mountains

In their old stony pathways appear.

Arbor Day on the old Eldorados!

Whose birthright of beauty was sold

When the forests that leaned to the rivers

Made way for the triumphs of gold.

Arbor Day in the wide, rolling valleys!

Where the rivers run silent and deep;

Where the sway of the conquering plowshare

The grove and the hedge-row will keep.

Arbor Day on the hills looking seaward!

Arbor Day by the shimmering bay!

And the forest-bound heights by the ocean

The breath of the tempest will stay.

Arbor Day for land of my childhood!

Let the child-arms their offerings lend;

For down the green paths of the future

I see the fair children descend.

Shout aloud, all ye long barren ridges!

Sing for joy, oh, my desolate plain!

'Tis the chant of the South Wind proclaiming

The longing and love of the rain!

—Lillian H. Shney, in *Golden Era*.

[An account of Arbor Day exercises on Goat Island may be found on page 470.—EDS. PRESS.]

## Stockton Notes.

[Written for the *RURAL PRESS* by MRS. W. D. A.]

Thanksgiving made brisk times in the turkey trade, but did not give farmers' wives the pocket money expected, 10 and 12 cents being the highest paid, but this brought turkey within the means of the poor.

Three light rains have fallen, the last on the 20th, which set flowers growing on sandy land. Black soil is not wet enough yet, and frosty nights with warm days dry fast. Summer-fallow 10 miles north of the city is up so that the fields look green. Many are plowing and putting in.

Seers of ill-omen note similarity to the drouth season of 1864, yet two years ago Christmas brought the first heavy rain, and several times the new year has inaugurated the first down-pour. Wheat has advanced to \$1.42½ per cental, and if it still rises, land which is down at bedrock will rise also. Nowhere else can a better chance be found to buy a home or the best vineyard land.

Taxes are lower than in any other county but one—only one cent on the dollar. The waters of the Mokelumne are sure to be brought down before many years to moisten the northern part of the county, and with a reservoir, furnish the city with pure, cold water; and the tunnel begun on the Stanislaus will be continued to carry the waters into Littlejohn's creek and over the southern part of the county. Many have already had the foresight to set out vineyards. Many Italians have bought from 6 to 20 acres sloping southeastward, and in four years fine peaches are ready for market, vineyards bearing and vegetables bringing the dimes. Even with present irrigation and the low price of wheat, farmers should be independent of peddlers' carts. Their own ground should be a wholesome factor in the home supply instead of tiring the traveler with garden-less homes, and orchards whose scrawny fruit can hardly stretch over the pit.

It has been said that a locality is in better times when times are hard than when flush, for people go to work and save some of their earnings, instead of throwing out on the prosperous tide, and that if the wealth of the world was divided among each man, woman and child, each would have 50 cents per day; but it is held by the few, and three-fourths of us must work, and the sooner each householder and farmer goes to the bottom of things and becomes self-dependent, the sooner will prosperity begin.

Stockton, Nov. 23, 1886.

CHOICE GRAPE-CUTTINGS.—Vine planters should not overlook the announcement of cuttings of various rare and desirable grapes from the vineyards of J. B. J. Portal, whose advertisement we publish on another page.



## Breeders' Directory.

Six lines or less in this Directory at 50c per line per month.

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MRS. M. E. NEWHALL, San Jose. White and Brown Leghorns, Langshans, Plymouth Rocks, Light Brahmas, Pekin Ducks and Bronze Turkeys.

JAS. T. BROWN, 18 Georgia St., Los Angeles, Cal. Breeder of Thoroughbred Poultry of the leading varieties. Send for circular and price list.

CHOICE LAND AND WATER FOWLS for sale at all times of all the most popular and profitable varieties. Please inclose stamp for new circular and price list to R. G. Head, Napa, Cal.

T. D. MORRIS, Sonoma, Cal. Toulouse and Embden Geese, Bronze and W. Holland Turkeys, and all leading varieties of Thoroughbred Poultry.

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AXFORD'S IMPROVED INCUBATOR.—400 eggs, \$50; 150 eggs, \$25. Guarantee satisfaction. For particulars address, I. P. Clark, Mayfield, Cal.

J. N. LUND, Box 116, Oakland, Cal. Wyandottes, Langshans, L. Brahmas, P. Rocks, B. Leghorns, B. B. R. Game Bantams, T. Guineas, Hom'g Antwerp Pigeons.

D. D. BRIGGS, Los Gatos, Cal. Fancy Poultry breeder

O. J. ALBEE, Santa Clara. Thoroughbred poultry.

E. C. CLAPP, South Pasadena, Cal. Light Brahmas and Plymouth Rocks. No fowls for sale. Eggs from first-class stock, after Nov. 1st.

CALIFORNIA POULTRY FARM, Stockton, Cal. Send 2-cent stamp for illustrated Catalogue.

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FRANK H. BURKE, 401 Montgomery St., S. F. Holsteins—all ages and strains. Berkshire Hogs.

E. W. STEELE, San Luis Obispo, Cal., breeder of Thoroughbred Holstein and Jersey Cattle.

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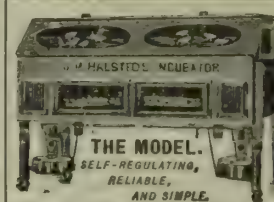
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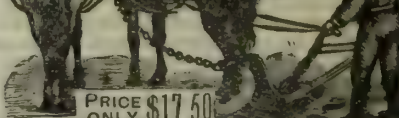
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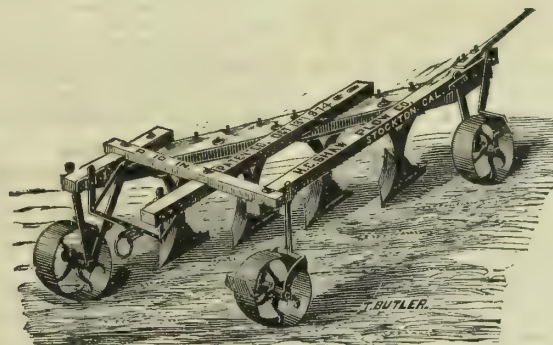
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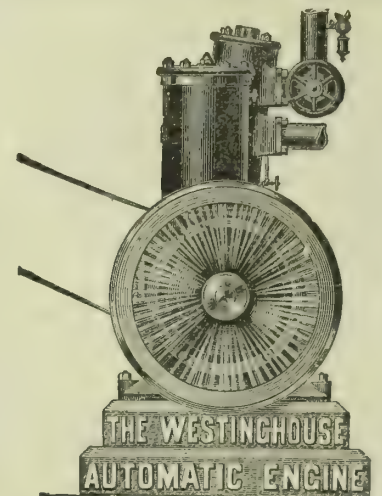
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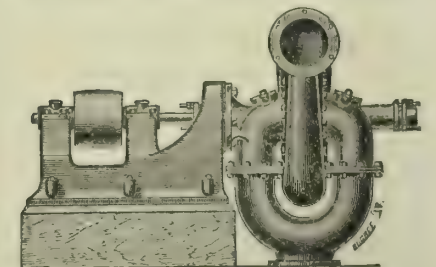
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## The Citrus Fair.

## The Revised Premium List.

According to program the Central California Citrus Fair will open in Sacramento, on Monday, Dec. 13th. At a meeting of the Executive Committee, held Nov. 29th, it appeared that arrangements for the fair were nearly complete. The railroad company has agreed to send the exhibit to Chicago, free of charge, after the fair at Sacramento.

The premium list is not yet complete, but so far decided upon, the following awards will be made:

County Exhibits.—Best exhibit of citrus and other semi-tropic fruit, and including wine and brandy, first-class diploma; second best exhibit of citrus and other semi-tropic fruit, including wine and brandy, second-class diploma; third best exhibit of citrus and semi-tropic fruit, including wine and brandy, third-class diploma.

Oranges.—Best individual exhibit of oranges, Garland range, donated by L. L. Lewis & Co., valued at \$150, or a gold medal; second best individual exhibit of oranges, a fine two-horse wagon, valued at \$125, donated by Baker & Hamilton; third best individual exhibit of oranges, silver water pitcher, valued at \$30; fourth to fifteenth exhibits, special prizes, according to merit. Best oranges, raised by one person, special prize; second best, special prize; third, special prize; fourth, special prize; fifth, special prize. Best cluster of oranges, special prize; second, special prize; third, special prize; fourth, special prize; fifth, special prize. Best exhibit of budded oranges, special prize; second, special prize; third, special prize.

Shaddocks.—Best exhibit of shaddocks or pumalos, special prize; second best, special prize; third best, special prize.

Lemons.—Best individual exhibit of lemons, gold medal; second best, silver medal; third best, special prize. Best individual exhibit of Sicily lemons, special prize; second best, special prize; third best, special prize.

Limes.—Best individual exhibit of limes, special prize; second best, special prize; third best, special prize.

Olives.—Best individual exhibit of olives, gold medal; second best, silver medal; third best, special prize. Best exhibit of olive oil, special prize; second best, special prize; third best, special prize.

Persimmons.—Best individual exhibit of persimmons, special prize; second best, special prize; third best, special prize.

Apples.—Best individual exhibit of apples, special prize; second best, special prize; third best, special prize.

Winter Pears.—Best individual exhibit of winter pears, special prize; second best, special prize; third best, special prize.

Pomegranates.—Best individual exhibit of pomegranates, special prize; second best, special prize; third best, special prize.

Sun-dried Fruits.—Best individual exhibit of sun-dried fruits (other than raisins, figs, and prunes), gold medal; second best, silver medal; third best, special prize.

Evaporated Fruits.—Best individual exhibit of evaporated fruits (other than raisins, figs, and prunes), gold medal; second best, silver medal; third best, special prize.

Raisins.—Best individual exhibit of raisins, elegant mirror, valued at \$100, donated by Whittier & Fuller, or gold medal; second best, raisin press, donated by H. S. Crocker & Co., valued at \$40; third best, special prize.

Wines.—Best individual exhibit of red wine, gold medal; second best, silver medal; third best, special prize. Best individual exhibit of white wine, gold medal; second best, silver medal; third best, special prize. Best sherry wine, special prize; second best, special prize; third best, special prize. Best exhibit of sweet wine, special prize; second best, special prize; third best, special prize.

Brandies.—Best individual exhibit of brandy, gold medal; second best, silver medal; third best, special prize.

Figs.—Best individual exhibit of dried figs, gold medal; second best, silver medal; third best, special prize.

Prunes.—Best individual exhibit of dried prunes, gold medal; second best, silver medal; third best, special prize.

Nuts.—Best individual exhibit of nuts, special prize, valued at \$100; second best, special prize; third best, special prize.

Crystallized Fruits.—Best exhibit of glace or crystallized fruit, special prize; second best, special prize; third best, special prize.

Licorice.—Best exhibit of licorice root grown in California, special prize.

**LOSS OF A VALUABLE BULL.**—We regret to learn by a letter from Moses Wick, of Sündale, Butte county, of the death of his imported Shorthorn bull Mazurka Bell Duke 57079. He was a fine breeder and pure Mazurka bull, and his loss will be much regretted. Mr. Wick fortunately has some very fine calves of his get. Mr. Wick writes that it is still very dry in his section—wheat sown six weeks ago is un-sprouted; pastures are very bare and there is nothing green, and yet live-stock is doing very well. A good rain will be very welcome.

**SERIOUSLY ILL.**—We hear with regret that Col. A. H. Webb, secretary of the State Board of Horticulture, is quite ill at his home in Oakland. We saw that Col. Webb was quite out of sorts during the Sacramento convention, but he kept up well and attended to his work in the city after his return, perhaps longer than he should. We are not aware of the nature of his complaint, and hope it will be only of short duration.

**THERE** has been cut, so far, in the mountains adjacent to Fresno City, somewhere in the neighborhood of 5,000,000 feet of pine lumber and about 900,000 to 1,000,000 pine shakes.

## The Diffusion Process in Sugar-Making.

The experiment of making sugar by the diffusion process at Fort Scott, Kansas, has been concluded. From what can be learned, the whole of the operations were attended with unusual difficulties and many that ought not to have been permitted to occur, chief of which was the scarcity and inferior character of the water. It appears also that the machinery was defective in its construction and inefficient in its operation; nevertheless the result has conclusively proved that by the diffusion process it is practicable to extract nearly the whole of the saccharine material from the cane. This diffusion apparatus was set up at Fort Scott, Kan., to operate on sorghum, and in order to get any experiments with true sugar-cane it had to be sent there from Louisiana, that used having been cut from the Iberville plantations of Hon. E. J. Gay. The diffusion method, which is used specifically for extracting the juice from the cane, consists, in brief, in slicing the cane into chips, and then in vessels designed for the purpose, exposing these chips to the action of steam and hot water. After the juice has been extracted in a diluted form it is passed through the processes of concentration and purification necessary to reduce it to syrup, when it is converted to sugar by usual methods. The diffusion process is in use in Europe for extracting the sugar from the beet, and the completeness with which its work was done recommended it as superior to the crushing or rolling mills heretofore used in this country for cane, but which failed to extract all the sugar, leaving, indeed, a large proportion which was always lost.

The great cheapness of the European beet product has had the effect to depress the cane-sugar industry of tropical America to a point where disaster stares all cane-planters in the face. The necessity which now forces itself upon them is by the use of more perfect methods for the extraction of the cane juice and thorough system in the operating of central sugar works to so increase the product and reduce the expenses of production that our sugar may compete in cheapness with any that can be placed in the market. This is the problem, and it is possible that it may be solved satisfactorily to a large extent by a proper use of the diffusion process. This seems to be indicated by the news from the Kansas Station.—N. O. Picayune.

LUTHER BURBANK'S catalogue of the fruit and shade trees, ornamental plants and roses, which he raises and has for sale at his Santa Rosa nurseries, comes to us tastefully printed, neatly illustrated, conveniently indexed and accompanied by wholesale price list, and terse directions for transplanting and training.

THE great stone drydock at Mare island, so many years in course of construction, has been completed, and the old receiving ship *Independence* (built in 1812) has been docked and repaired in it.

## Inducements to Subscribers.

To favor subscribers to this paper, and to induce new patrons to try our publication, we will furnish, to those who pay fully one year in advance of date, if requested, the following articles (while this notice continues), at the very greatly reduced figures named at the right:

- 1.—The Agricultural Features of California, by Prof. Hilgard, 138 large pages, illustrated, cloth, with colored maps (full price \$1).....\$0.25
- 2.—World's Encyclopedia, 794 pages, 1250 illustrations; (exceedingly valuable).....50
- 3.—Dewey's Patent Elastic Binder (cloth cover), name of this paper stamped in gilt.....50
- 4.—Niles' Stock and Poultry Book for Pacific Coast, pamphlet, 120 pages, illustrated.....25
- 5.—Kendall's Treatise on the Horse and Diseases, 89 pages, instructive illustrations.....05
- 6.—To New Subscribers, 12 select back Nos. of the RURAL PRESS, "good as new".....Free
- 7.—Any of Harper's, Frank Leslie's and most other first-class U. S. periodicals, 15 per ct. off regular rates
- 8.—Pacific Coast and Eastern Dailies, Books and Periodicals, except special publications, we can usually give 10 to 15 per cent off advertised retail rates.
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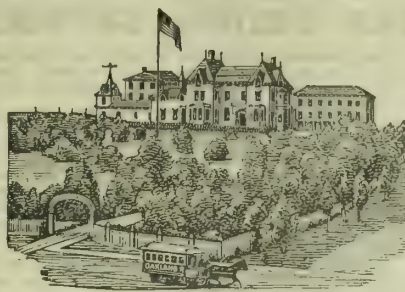
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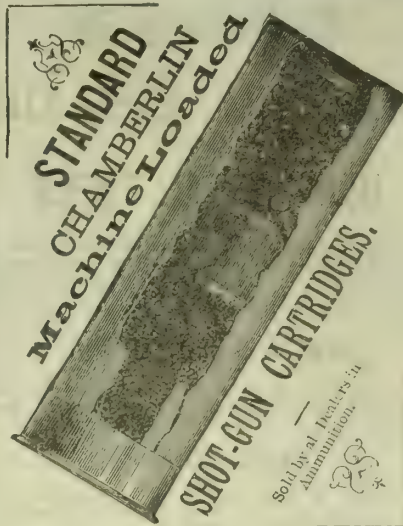
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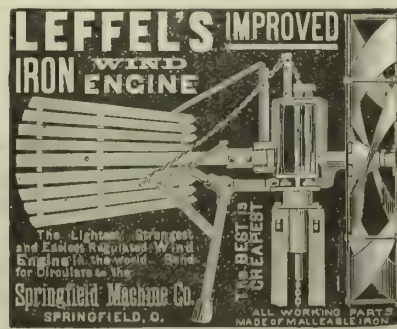
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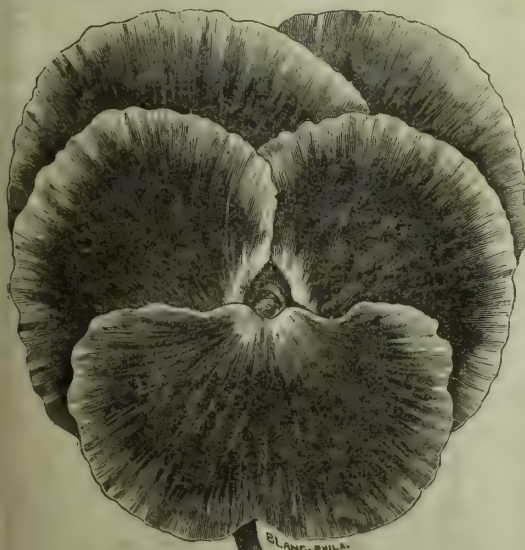
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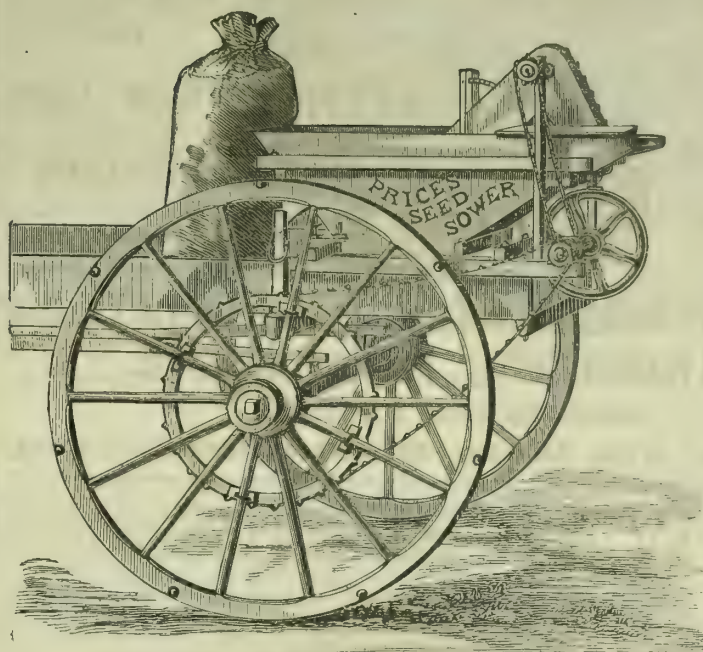
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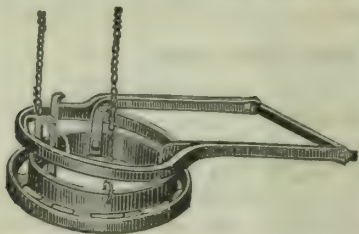
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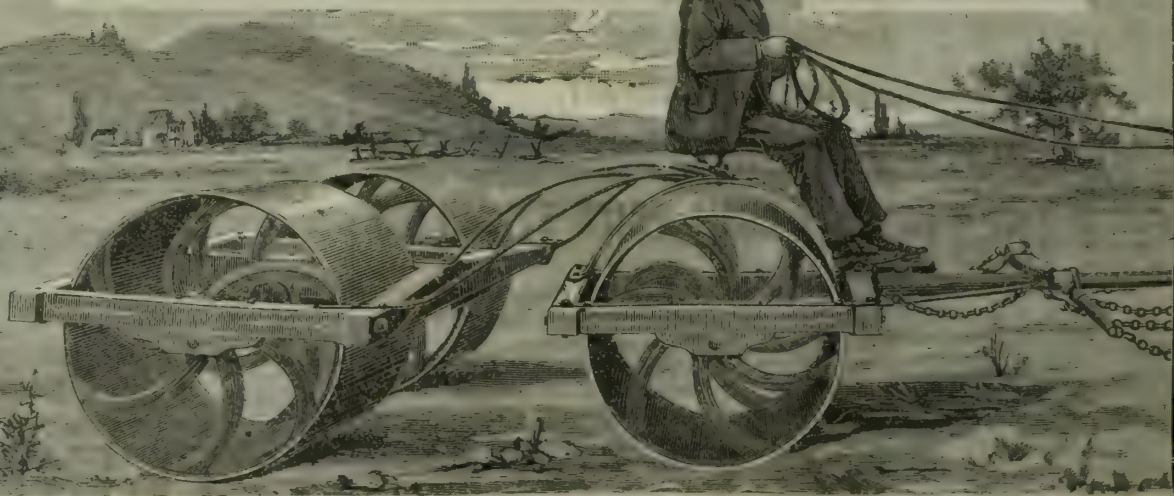
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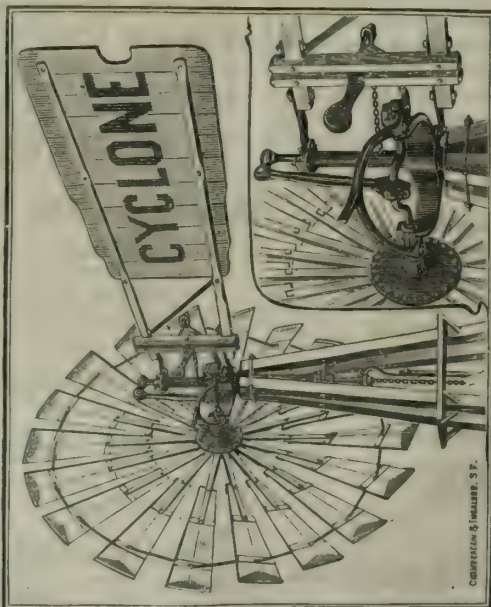


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# PACIFIC RURAL PRESS

SACRAMENTO CITRUS FAIR EDITION, TWENTY-FOUR PAGES.

Vol. XXXII.—No. 24.]

SAN FRANCISCO, SATURDAY, DECEMBER 11, 1886.

{ \$3 a Year, in Advance  
SINGLE COPIES, 10 CTS.

## The Orange-Eater.

The orange has a peculiar charm for the average youth—at least those in upper latitudes. We well remember our boyish longing for the fruit and the incredulity with which we received the statement from a wise elder that boys in the South would be glad to give a whole apron full of oranges for a single apple. In California the preference for either one or the other cannot be so well marked, because California youth can have plenty either of apples or oranges, as both these fruits grow here and there over most of the area of the State. It was long the opinion that the apple did not do well in Southern California, but the experience of the last few years has shown that in favoring situations at the South, certain varieties of apples can be grown of unsurpassed excellence, and the fact is now gaining wider acceptance that in suitable situations at the North the orange does admirably. It is therefore quite true to claim for the California boy that he can choose between the two fruits, and thus has the advantage of most boys in other parts of the world.

Our artist has given us the picture of a handsome boy just entering upon the discussion of the internal economy of an orange. He is a handsome young chap. Although we apprehend that the artist made his study on the shore of the Mediterranean, the picture suits well to adorn an edition of the RURAL which is to honor the Citrus Fair at Sacramento, because we have just as handsome boys in California, and no doubt many of them, as we write, are watching with keen interest the packing up of fruit in a dozen counties of the State to be sent to Sacramento for exhibition next week. No doubt some kind-hearted fruit-grower will toss some of the surplus fruit to the boys, and then we shall have the model which the artist chose reproduced on California soil.

Those who are mindful of the youth's delights in oranges should not forget to take the young people to Sacramento with them next week. The fair will be a scene fit to fill the youthful mind with great joy. There will be oranges and lemons, in clusters, in pyramids, in boxes—in short, in every conceivable shape which is calculated to impress the beholder



THE ORANGE EATER—A STUDY FOR CITRUS FAIR WEEK.

with the beauty and profusion of the fruit. Let the young people attend, and when they return, let them each plant a tree in the best place they can find for rich soil and warm exposure, and in the years to come they will have exhibits to make from trees of their own

planting. Those who have no trees can surely get the seed, and with the youngsters with whom time is no particular consideration, a growth from the very starting point will be the more prized, and they may like later to bud with some choice variety.

## The Citrus Fair.

As we stated last week, all indications favor a grand success at the exhibition of the Central California Citrus Fair Association, which will open in Sacramento on Monday, Dec. 13. The premium list, which we published as far as prepared last week, is being extended by the offering of a host of special premiums by outside parties who take an interest in making this part of the State better known. For example, Dr. Obed Harvey, of Galt, Sacramento county, sends word that he will give as a premium, to be used as the management sees fit, a lot in Galt worth \$200. J. A. Parker, of Sacramento, will give as sweepstakes premium two lots in the town of Kirkwood, Tehama county, worth \$125 and \$100 respectively. Kirkwood is on the railroad, in the midst of one of the finest, most fertile sections of California. There will probably be a number of other similar premiums offered during the present week, and they will all add interest to the fair by enlarging the competition for awards.

On the other hand, there appears to be the most gratifying activity in a number of counties in gathering county displays. On Monday of this week there was a large meeting at Newcastle, Placer county, and the reports declare that the growers of that county propose to capture the leading award if effort and good fruit will do it. Yuba county has been at work for some time and the exhibit is progressing finely. In Napa a meeting was held last Saturday and a disposition manifested to make a strong effort for the first place in certain products. Other counties are also at work, and we fully believe that a far greater surprise awaits the populace this year than they experienced at the hastily collected exhibit of last January. The way to be convinced of the truth of this is to go to the capital city next week.

The fair will be held in a large building on the north side of J street, between Second and Third. This location is quite near the railway and horse cars. The building is now being put in good shape, the interior lined with white cloth and graced with evergreen and patriotic decorations. It is designed to give the whole interior a very beautiful appearance, to better consort with the beauty of the products shown.



## THE FIELD.

## Vitality of Seeds.

EDITORS PRESS:—The germinating power of many seeds seems to be well-nigh unlimited, while in others it is very limited. Some even improve in vitality by age, such as cucumber, melon, squash, pumpkin, and kindred seeds. On the contrary, onion seed, and some few other kinds of seed, are nearly worthless after one or two years. Hence the practice of quite too many seedsmen of mixing all their old unsold seeds with fresh ones and labeling them as fresh seeds cannot be too highly condemned. Several instances of seeds retaining their vitality for a number of years have come under my own observation. I once kept turnip seed in the house for 15 years, and it was just as good the fifteenth year as the first. In the spring of 1825 my father had a piece of bottom land in Michigan cleared off and sown to turnips of the white flat Dutch variety. They were not all gathered in the autumn, and the heavy fall of snow, which came early, preserved those left from freezing. In the spring, these sprouted up and went to seed. The ground was seeded to herdsgrass, and remained in pasture and meadow for 25 years, when it was plowed up and planted to corn. Soon a multitude of turnips made their appearance, and a very good crop was raised among the corn. The next year the ground was plowed and sown to oats, and plenty of turnips appeared again. I have no doubt that if the same piece of ground should be plowed now, after the lapse of over 60 years, turnips would again appear.

A similar occurrence took place on the Michigan Agricultural College Farm. The first president of the college, Joseph R. Williams, had the boys clear off a small patch for turnips. Not being a practical agriculturist, he ordered three pounds of seed sown to the acre! Of course, turnips came up nearly as thick as "hair on a dog," but the crop was a failure. President Williams observed: "Boys, we have made a mistake, but mistakes sometimes teach as valuable lessons as successes; but be very careful not to make such a mistake as this again." This plot of ground was seeded to grass, and lay in grass for nine years. Having charge of the farm at that time, I ordered the piece plowed up and planted to corn. Soon the irrepressible turnip made its appearance, and we harvested a much better crop than was grown nine years previously.

Some 40 years ago I engaged some men to dig a well. After going down about 20 feet, they came to a fine white, dry sand. They threw out 25 feet of this sand and bored 15 feet into it without finding water, and then abandoned the job. This pile of sand remained exposed to the rains, warmth and light for several weeks, when it became covered with a growth of weeds, different in every respect from anything of the kind in the vicinity. The seeds of weeds, especially, seem to be covered with a sort of varnish which renders them well-nigh indestructible. This is the reason why locust seed requires to be soaked in scalding water before it will germinate. It is a good plan to pour scalding water on onion seed before sowing it.

Thistle seed requires much heat to melt this resinous coating before it will sprout. After fires have run over woodland, thistles and mullein usually make their appearance at the East. The soil is now pretty well stocked to a great depth with seeds of harmful plants, and it is not wise to let any more weeds go to seed to add to the present abundant stock on hand.

J. S. TIBBITS.

Santa Rita, Nov., 1886.

## Soil Cultivation—No. 2.

EDITORS PRESS:—In this article I treat more especially of free or natural fertilization and the growth of plants.

As long as the surface soil remains compact, the fertilizing gases are excluded; but as soon as broken up, ammonia, carbonic acid gas and other matters are absorbed, the amount absorbed depending upon the length of time, the depth broken and the larger amount of surface that is exposed to sun and air. Moderately small lumps of earth would probably present the largest area of surface. Cultivation toward this end is, of course, to be done when there is no crop on the land. In the dry season deep plowing of annual crops would destroy the shallow roots.

## Summer-fallow.

If land soon after harvest could be broken up, it would be fertilized nearly as well as summer-fallow, and thus raise a crop every year. This, though, would require stronger implements and more teams; but with the improved chisel cultivator it can be accomplished.

Here in March or April, near the close of the rainy season, it is too cold to plant corn or beans and seeds that require a high temperature to grow. Then as it grows warmer the surface gets too dry, to vegetate the seed unless in perfect tith; thus it sometimes happens that three or four days' time causes a failure.

Most of our improvement in plants and animals has been obtained by bettering the conditions of growth. First, by the eternal progress

of universal nature, and second, by the intelligent guidance of man. Each and every variety of animal plant has its period of time to mature its seed. If hurried for the want of moisture, sometimes a part of the embryo seeds will stop and die and the balance develop fully. Sometimes all will be shrunken.

There may be two ways of rapid growth of plants—one by evaporation of large quantities of water, poor in the elements of plant food, the other with less water, rich in plant food. The real growth of plants is little during showers and rain, when the plant revives and seems to enlarge, but greater when evaporation is going on in sun and wind. Portions of plant food are carried downward into the earth at every rain, to return again to the surface when evaporation begins, there to remain (if the soil is crusted and hard), useless to the present growing crops.

It is not possible or at least difficult to determine the exact proportion of the elements absorbed by plants directly from the air; but enough is known to say the larger portion (except carbonic acid) passes up through the roots in solution.

With every fire kindled, every plant that decays, every animal that expires, solid material is converted into imponderable gases, to be again reorganized in the mountain forest or plants of the valley. If the farmer burns his refuse he gives to his rich neighbor value he might retain by burying it in his own soil. Thus does chemical science show the errors of ancient practice and ideas that fire is the purifying element. Fire does not restore the equilibrium, but merely sends most of the elements abroad in the gaseous form.

Malarious districts become healthy as the land is plowed and rapid-growing crops planted.

Though the atmospheric elements may be unlimited, the soil's capacity to store it appears limited.

It appears necessary or at least of great benefit to have the air permeate the ground about the plant during the whole time of its growth. Decayed vegetable matter, mixed with poor soil, appears to increase its capacity to store from the air.

From the foregoing it will be seen that land constantly irrigated has but small chance to obtain fertility from the air. C. P. SCRANTON.

Lower Lake, Cal.

## THE STOCK YARD.

## Value of Thoroughbreds and High Grades.

EDITORS PRESS:—How is it that so many people are ready enough to acknowledge the good effect of careful breeding in the matter of raising horses, hogs and poultry, but deny it to the same extent as regards cattle? At least, it seems to me that so far as practice goes, they do so. Hardly any one will deny that in horse breeding to get a trotter, the wisest course to pursue is to breed from trotting-bred ancestors—the purer bred the better; and for draft, use Clydesdale, Norman or some other stock that has been carefully bred for the purpose wanted. So of hogs, the pure bred Berkshires or the pure bred of some other breed are the best, although I sometimes hear it said that, we will say for example, Essex crossed with Poland China make good hogs. And so they may, but I think that those that have that kind would prize the pure bred higher if they had them. And when it comes to fowls, nearly every one acknowledges that the purer the blood the better fowl we have.

A few days ago I killed a pure bred Berkshire pig, a little less than four months old, the dressed weight of which was 76 pounds. I do not believe it would have weighed as much had it been crossed with any other breed of hogs nor fattened any better on the same food.

If these things be so, will not the same rule hold good in regard to cattle? The fact is we do not examine closely enough as to the results of our work in breeding.

Several years ago I used, for one season, a half bred Jersey bull, obtained by crossing a pure bred Jersey bull on a high grade Durham cow, and the result was far from satisfactory. I still have some cows that show what I call a taint of Jersey blood. Those cows do not please me as well for dairy purposes as pure bred or high grade Durhams, and for beef they are decidedly inferior.

Recently I sold several calves to the butchers, all sired by the same Shorthorn bull. One of the calves had a little Jersey in its make-up and showed that little quite plainly. At six months old its dressed weight was 152 pounds. Another calf at nine months weighed 315 pounds, but the dam is a good grade Durham cow. The other calves had no Jersey blood and their weights varied from 250 to 275 pounds, and their ages from six and one-half to eight months. I do not give these figures as showing what calves at their ages may be made to weigh, as they were all fed alike and fed no better than those I kept intending to raise to maturity.

I notice that others are experimenting with cross of Jersey, Holstein or Hereford, as the case may be, on grade Durham cows, but I do not expect to hear of a case where the cross has proved satisfactory. It may be in a measure satisfying until a better way is tried. Lately I was looking at some cattle. The cows

were but three in number, but all pretty well bred and nearly alike. I noticed two calves that showed a marked difference. One was good, well worth raising, and as to the other, I should say in these times, the sooner it was disposed of the less loss there would be. "Yes," said my friend, "there is a difference in the stock. The good one was sired by a Short-horn bull, the other by a grade."

My idea is that the nearer we can come to purity of blood in any breed of cattle the better will be the result. But they must be bred and fed for the purpose for which they are to be used.

Centerville, Cal.

[These points are very suggestive. Will not our live-stock breeders discuss them in the columns of the RURAL? We don't hear half enough from those in the animal industry.—EDS. PRESS.]

## The Government and Cattle Diseases.

We had an article last week on the need of thorough Government work with cattle diseases. We notice that in his report to the President, of which an outline is telegraphed, Commissioner Colman, in commenting on the work of the Bureau of Animal Industry, describes the spread of pleuro-pneumonia and says:

"Every effort possible under the existing laws has been made to locate the diseased animals and isolate all that have been exposed. It would have been most fortunate if every animal exposed to the disease and liable to contract it could have been summarily slaughtered and the contagion thus eradicated. With a disease of this character at Chicago, it has been truly said that the cattle industry of this country has reached a crisis. There can be no doubt that it will be soon widely disseminated unless prompt and effective action can be instituted for its speedy suppression. Even now it may have been scattered to some extent in the West, and investigations during next year will probably bring other outbreaks to light. The matter is a most important one, overshadowing in urgency all others affecting our agricultural population and of vital interest to almost every consumer of beef, of milk, of butter and of cheese. To prevent the spread of this scourge, which has already greatly affected our foreign and interstate commerce, additional legislation by Congress is now essential.

"Much valuable work has already been done in Maryland, and the danger of disseminating the contagion from that State has been greatly lessened. No work has been done in the State of New York, because it was evident that the appropriation was not sufficient to secure any favorable results. The disease also exists in New Jersey, Pennsylvania and Virginia, but the authorities of those States have not yet accepted the rules and regulations of the department for co-operation.

"I greatly regret the necessity of announcing the existence of this dangerous disease over such a wide area, but the serious results to be apprehended from it make it imperative that the truth should be known in order that such legislative action may be taken as is required by the emergency."

## Railroad Rates on Stock and Meats

The letter of the president of the Consolidated Cattlemen to the President of the United States we published last week. In the matter of transportation charges on live and dead stock, the following resolutions were adopted at the meeting of the Consolidated Cattle-growers' Association in Chicago last month:

WHEREAS, The pool of railroads running east from Chicago put in effect March 1, 1886, a new tariff of freight rates on live-stock and dressed meats;

And Whereas, By the new tariff of March 1, 1886, the rates of freight were advanced:

On live cattle 100 lbs. equal to . . . \$20 a car  
On dressed beef 21 1/4 c 100 lbs. equal to . . 43 a car  
On live sheep 20 c 100 lbs. equal to . . . 40 a car  
On dressed sheep 45 c 100 lbs. equal to . . 90 a car

Be it therefore

Resolved, That the action of the railroad companies in advancing rates on live-stock and dressed meats to such unreasonable figures is in direct opposition to the interests of all cattle-growers, farmers and feeders of the West, and is an extortion which should not be longer endured.

Resolved, That we emphatically protest against the said advances in rates on live-stock and dressed meats, and we hereby respectfully ask the railroads forming the eastbound pool from Chicago that they reconsider the aforesaid tariff of March 1st, and make rates that will not so unjustly discriminate against the cattle interests of the West.

Resolved, That this convention respectfully request the different live-stock exchanges, and all who are interested in the live-stock industry, to join us in this protest and use their utmost endeavors to secure a reduction in the present unreasonable rates.

Resolved, That in consideration of the unjust discrimination of rates, as set forth in the foregoing preamble, we would earnestly call the attention of our several State legislatures, as well as our members of Congress, to the fact that suitable legislation should be adopted to abate the oppression.

THE BOBOLINKS NORTH AND SOUTH.—There are likely to be some new views current in regard to the bobolink, if the ornithological reports from Washington are accepted. It is said that this little feathered glory costs the country between \$3,000,000 and \$4,000,000, that being the estimated damage he does to the rice crop in the Southern States. Part of the damage is in harm done to the crop, part in wages paid to large numbers of persons employed to protect the crop from the birds. In the North, on the contrary, he does no harm.

## THE VINEYARD.

## A Fresno Vineyard and Home.

EDITORS PRESS:—In the rounds of a recent tour in the neighborhood of Fresno city in company with J. H. Braley, we had the pleasure of a drive through the grounds of Mr. Braley's residence and vineyard, and also the advantage of his remarks on varieties and peculiarities of plants, trees and vines growing there.

The place is laid off on a very liberal scale. The front is ample, is beautifully designed, has a fine, wide-sweeping driveway, and is set with some of the most effective ornamental as well as useful trees. Within a large semicircle to the eastward are, among other trees, quite a number of very thrifty-looking white Adriatic fig trees. These were planted out in the spring of 1885, now being of two years' growth. We stopped and measured three of these trees, and found them 16 inches in circumference. Some others looked about as large. Most of them bore this year, and fairly, considering age. There are on the place 100 of this variety. Mr. B. is highly pleased with it, and prefers it to any other variety tried in this country, and pronounces it at his place a success.

Among the trees are olives which we believe are of the Mission variety, in bearing this year and only four years old next spring. A brook of water passes through the place—always running, never stagnant.

Some 50 yards to the west is a magnificent grape arbor, which is one of the most remarkable features in landscape gardening in all this country. It is 200 feet in length by 70 in breadth. The vines are 8 feet apart, trained 8 feet high, each supported by a small redwood post. On top of the posts, running with the rows and extending from post to post, lengthways of the arbor, are fastened Oregon pine boards, 4 inches wide and 1 inch thick, nailed down edgewise. These support cross slats 2 inches wide and 1 inch thick, set on edge and 2 feet apart.

There are some 40 varieties of grapes in the arbor. Over all this framework the vines have run until a complete arbor is formed, and which in the summer and fall makes a luxuriant display of leaf and fruit in great variety.

The varieties proven here most suitable for the arbor are the Rose of Italy, Emperor, Cornichon, Purple Damascus, Tokay, Jura Muscat, Olivet, Niobe, Golden Chasselas. The excellence of these is exhibited in both vine and fruit. Mrs. Martha Braley (wife of J. H. B.) pronounces the Jura Muscat as her favorite grape, and it is said to be most highly esteemed by visitors. It is purple, of medium size, very sweet, a beautiful and highly flavored grape. The Cornichon is one of the most attractive as well as one of the very best—a very dark purple, almost black; oblong, large and sweet, having flavor of very high character.

The arbor is a beautiful home resort for family and visiting friends, and during the warm days of late summer and early autumn a most delightful place for taking family lunch. A table and some rustic seats are provided for this and for purposes of recreation and amusement. Such a scene as is here afforded would form a picture worth remembering in the mind of any one who can appreciate the shade afforded by the broad green leaves overhead and the gracefully-falling vines at the arbor sides and ends, together with the many-colored, large and perfect bunches of ripe and luscious grapes hanging from the roof in every direction overhead.

Back of all this we come to the Martha vineyard, of this place, named for Mrs. Braley (by her first name above given). There are 70 acres in the vineyard, grown exclusively to raisin grapes, all of the Muscatelle variety, which Mr. B. considers the best raisin grape for this country. This remark is understood to cover the Muscat, which he considers so near the same with the Muscatelle that in descriptions he would remove all practical distinctions. Three acres were planted with rooted vines in 1883, and from these were this year taken a little over six tons of raisins—two tons per acre. The remaining 67 acres were planted in 1884, from which there would be gathered this year, at the very lowest estimate, 70 tons, making total, for 70 acres, at least 80 tons raisins. At the time of this interview the figures were not fully known. The foreman informed us that 45 tons had already been sent away, and thought there would be as many more yet to send off; but Mr. B. was anxious not to over-estimate the remainder not yet weighed.

We wish to note one thing with reference to Mr. Braley's dwelling-house. He has a basement extending some six feet, we believe, above ground. This places their living room, and other apartments usually occupied, several feet above ground, and he claims by this means protection from any malarial atmosphere that may prevail here during some seasons, and believes that if all families would adopt such a precautionary measure, our community might be comparatively free from malarial influences. His family have here been quite healthy. The kitchen is kept under the living room, and to the warmth ascending from it, through the floor, and its drying influences, he attributes healthful results.

M. D.

Fresno Co.



## THE DAIRY.

## The Milk Supply of San Francisco.

We have received a pamphlet published in this city, entitled "The Milk Supply of San Francisco." It contains matters of much interest and importance. The authority for the facts set forth and the way in which they were obtained is stated in this manner:

A few gentlemen of means, having some knowledge of the true condition of the milk supply, and believing that thousands of lives have been lost through the use of impure and poisonous milk, have, at their own expense, employed Prof. E. J. Swift, an expert in the business, to collect full and complete statistics in relation to the milk business in this city and suburbs. After months of persistent application and perseverance, he has now completed a full report, which is, no doubt, nearly correct, notwithstanding the innumerable obstacles placed in his way to prevent personal examinations.

It would have been better to have made a franker statement of the authority under which the work was done, but possibly the gentlemen aforesaid did not care to face the opposition which might come from people whose misdeeds are set forth. The publication is evidently in the interest of pure milk, and pure country milk at that, as contrasted with the fluid which is produced from ill-kept city dairies, and, as our interest and belief is rested in pure milk, we must express sympathy for and approval of the object which it aims to serve. We therefore give space to many of the statements made, hoping they will serve a good purpose. We quote as follows:

The report shows that the milk used in this city is far more dangerous than expected; but when the fact is known that there is no supervision whatever over the production and sale of milk in the city, by competent authority, and that more than half of the milk sold comes from dairies that are conducted by uncleanly, ignorant, and unscrupulous foreigners, that care not for the life or death of any one outside of their own filthy yards, it can be readily understood that the business would rapidly degenerate, until the filthy and poisonous compound would become so notoriously obnoxious as to create a general and widespread panic.

The total milk supply of San Francisco was found to be 7338 cans of three gallons each, of which only about 1300 cans came from country dairies.

One hundred and forty-nine dairies were found within the city limits, containing 6932 cows, besides numerous small dairies, from which no reports are given.

Four thousand five hundred and twenty-nine cows, that gave 11,247 gallons of milk daily, were fed on brewers' slops mainly.

Five thousand six hundred and four gallons of milk were furnished daily from dairies that used very bad water for their cows to drink, and to adulterate their milk with.

Four thousand one hundred and thirty-two gallons of milk were sold daily from 1585 poor, sickly cows.

Five thousand and forty gallons of milk came daily from outrageously filthy barns and yards.

Four thousand five hundred and eighty-six cows are watered from surface wells.

Two thousand six hundred and seventy-seven cows were housed in old, dilapidated barns and sheds.

There are about 50 small dairies, of from two to eight cows each, in addition to the 149 scattered throughout the populous portions of the city, but hidden from sight by high board fences, sheds, etc.

These small dairies—the worst of all—do a flourishing business in furnishing one cow's milk to invalids and children.

These cows are fed on the cheapest material that can be found on the wharves and way places, such as damaged hay, straw-grain, potatoes, cabbages, beets, turnips, etc., in fact anything that cows will eat.

To this class belongs the dairy that lately lost two cows suddenly by death, and supposed to be poisoned, and from whose milk two children became sick and nearly died. This dairy was visited by Judge Swift after the death of the two cows, and he found two more, out of three cows remaining, that were sick also, and likely to die at any time; and his judgment was that those cows became diseased from their feed and surroundings and from being cooped up over a bed of filth.

Out of perhaps 200 dairies only some half a dozen have any pasture or range for their cattle. Nearly all are crowded upon small city lots and generally in small valleys, ravines or sinks, where surface water can be secured cheaply, or where there is a hole or pond.

The result is that the drainage from hundreds of tons of excremental matter deposited about the premises by diseased cows and others escapes into the wells or pools from which the cattle drink, and from which, perhaps, water is obtained to adulterate their milk and wash their milk utensils with.

Nearly half the city cows are housed, fed and milked in old, dilapidated barns, through which the ocean winds are whistling, bringing clouds of dust from the grounds surrounding these filthy places and emptying disease and death, in the shape of deadly bacteria, constantly into the pails, pans and cans of these milkers—those cans and pans, left open for the milk to cool and cream to rise, getting more than the

average amount of filth by being exposed the longest.

These things have been seen and noted by Judge Swift and located on a complete map of the city, and numbered for reference, so that the Board of Health can be directed to the exact places wherein all of this abhorrent filth and poisonous food can be seen, if they will only take the trouble to look at it.

The stench alone, with an uneducated nose, will be quite sufficient to ferret out most of these places.

Many of these barns are situated directly over malarious pools, and sinks of putrid water and matter, and are appropriately the fountain head of the zymotic or filth diseases.

## Brewers' Slops.

Nearly two-thirds of the milk supplied the city comes mainly from brewers' slops or leavings. This food has been condemned time and time again by scientific men, as being extremely dangerous. Its rapid decomposition directly after it leaves the mash tubs, with its myriads of disease germs, makes it a very unsafe food, especially when fed in large quantities, as is done here.

The New York State Dairy Commissioner sent out 450 circulars in relation to the production of milk and its use the last year, and those having a knowledge of the effect of brewers' slops on milk answered "That milk from cows fed on brewers' grains could not be used to make butter, cheese or condensed milk."

This fact is well known here, and any surplus milk from this source or from distillery slops, that cannot be sold for fresh-milk purposes, must be fed to hogs or thrown away, as the butter or cheese made from it cannot be sold; and yet two-thirds of the people of San Francisco are now using this kind of milk.

Brewers' slops decompose so rapidly that it is almost impossible to use them before they become rotten. They are hauled through the streets of the city from the breweries on large wagons, with tight boxes; but the drippings along the streets give out an unmistakable odor, that parents, hoping to rear their young babes, may well be alarmed at.

These slops are stored in vats at the brewery, as well as the milk yard, being drawn from and replenished occasionally, thus affording an opportunity for disease germs to accumulate in the corners and about the vats, where the slops are not disturbed, as well as in the boxes where the cows are fed. The odor arising from these slops, when known to the senses, will never be forgotten.

Many milkmen, having conscientious scruples about using these or distillery slops, knowing their dangerous qualities, would prefer not to use them; but they are perforce compelled to do so, because milk can be made from slops for less than half the cost of milk from sound food, and they must either go out of the milk business or use the cheaper material, such as most of the milkmen do.

## Polluted Water.

It appears from Judge Swift's report that 4586 cows in this city are watered from surface wells and stagnant pools, located in many instances in the midst of the cow yards at the lowest points, and receiving, without doubt, the drainage from the accumulated filth of the yards. In other words, the suburbs of the city are being drained into the wells and pools, and from these, through the medium of cows and their milk, into the stomachs of our people.

The fatal epidemics that have appeared in various places from time to time show the importance of having pure and undefiled water for both animals and mankind.

## Official Supervision.

The Board of Health of San Francisco have full power under the present laws to exercise complete supervision over the milk business. The present fund and official force, except that a veterinarian might be employed in place of one of the present inspectors, would, no doubt, answer present purposes, and all of the cow yards in the county might be thoroughly examined within 30 days.

The country dairies, having no opportunity to use slops and decayed vegetable matter, cannot be a source of great danger; but in order to assure the public that there is, in fact, but little danger from well-regulated country dairies, they, no doubt, would be pleased to have a continual inspection of their premises and stock as well, as it would clearly be to their interest to do so.

One honest, industrious man, educated to the business, could easily supervise the milk supply of this city, and, considering the great importance and necessity of its being done, and well done, no citizen could complain of the necessary expense.

## Country Milk.

In the absence of official supervision, it is difficult for the average consumer to ascertain which is country and which is city milk that is offered for sale. To read the names on the milk wagons, it would appear that all were from the country, when it is now known that only one-seventh of the supply comes from the country.

If the appearance of the driver and his wagon is taken as proof of the purity and cleanliness of his milk, the delusion is more complete, as Prof. Swift reports that the very worst dairies in the city have the brightest painted wagons, and the best dressed and most elegant drivers. Many persons judge by personal appearances only, and much of the milk trade is controlled

by servant girls, who prefer having spruce and well-dressed young men about. Many young men that are especially qualified by their good looks, suave manner, and silvery tongues, find it profitable in buying and selling the lowest priced city milk.

San Francisco is, perhaps, the only city in the world where more than three-fourths of the milk supply comes from cows within the city limits. Nearly all of the country milk comes from San Mateo county, where the cows have a large range of pasture, among rolling hills and thousands of living springs, and where the ocean fogs give unceasing life and verdure to the perennial grasses that abound in that section. These living springs, from out the rocks of this range, furnish purer and better water to the dairies than what is furnished for household use in this city. Such crystal water, with rich and wholesome hay, grain and grass, makes a milk on which the old and young may thrive, and live their natural time.

But few can expect to get milk from the old established dairies of San Mateo county—the proportions they now supply being about one-seventh of the whole. Only one person in seven can hope to secure an article of milk now that is safe to use—and perhaps not all pure at that. There is ample space and good land enough in the country, immediately around San Francisco, to produce all of the milk required for the city; and there is no excuse whatever on the part of the Board of Health or Board of Supervisors in allowing the congregation of so many cows in the city.

If all the dairies were situated outside of the city limits, it would be unprofitable then to feed cows upon city slops, and the question of obtaining wholesome milk would be much simplified; and if this is not done, the supply of good country milk will not increase, and will not be used except for invalids and families that have a care for what they use, and are willing to pay a larger price than slop milk is sold at.

Such well-established country dairies as the Jersey Farm, Milbrae, San Mateo Ranch, XL and San Pedro, are now working to their full capacity, and cannot be expected to furnish but little more milk than they have supplied in the past. Consequently, relief from impure milk must come from the establishment of new country dairies, or from the removal of the city dairies to the country.

There will be no encouragement in the matter of starting new country dairies until milk can be sold at from 10 to 15 per cent higher than city milk is now sold at, in proof of which it may be said that there has been a constant decrease in the country-milk supply for the last 20 years.

The impure and poisonous milk now being sold in San Francisco is a constant menace to the lives, health, happiness and general prosperity of nearly 300,000 people; and no officer connected with the municipal affairs of the city can expect her citizens to withstand such a cruel and criminal imposition much longer.

[We have quoted nearly all of the pamphlet which refers directly to San Francisco. There is much other matter in the publication concerning the precautions to secure pure milk taken in Eastern and foreign cities, and many instances given of the danger to the public health from impure milk. The whole subject is of the greatest importance.—EDS. PRESS.]

## THE STABLE.

## Care in Horse-Breeding.

We find in an Eastern exchange some suggestions on horse-breeding which may be interesting to our readers: The breeding of horses rests upon the same general principles that the breeding of cattle does, though as a rule it is more practicable to obtain good mares than it sometimes is to procure good cows. It may not be always best to sacrifice an entire herd of poor cows for the purpose of replacing them with better ones. It is often better, and perhaps we might say generally wiser, to use such cows as we have and breed up. Usually, however, there are but few, sometimes but one mare on the farm to breed, and it is frequently the case that they or she could be replaced with practically better breeding stock at inconsiderable expense. Suppose, for instance, the mare is not very valuable from whatever standpoint she may be looked at, but that she is diseased or vicious. It can hardly pay to breed from such an animal. It is dangerous in the first place to do so, and then we might really find better breeders that could be purchased at a very low figure. Through a prevailing unaccountable carelessness in breeding horses, a carelessness that is never found in other lines of intelligent breeding, the laws of heredity are largely disregarded. If the mare is good for nothing else she is too often considered good enough for breeding purposes. If she is too vicious to handle with safety, she still may be considered useful as a breeder. Now, heredity is a stern fact, and its operation is frequently wonderful, going sometimes to an extent that is almost incredible; and the possibility of the mare producing her like even to the slightest defect should always be considered. We have known very valuable mares that had become diseased and were still used as breeders. In

such case such a course might be admissible. There is a chance—a bare chance—that the colt might escape the operation of hereditary laws, for a number of years at least, and have all the merits of the dam without her defects. But if there is nothing peculiarly valuable about such a mare, it is folly to breed from her. And a vicious animal should never be used for breeding. It does not pay to have a vicious animal on the farm, and it certainly does not pay to attempt to multiply such animals.

It is a trite saying that like produces like, and that as nearly as practicable we should select for breeding such a mare as suits us in all particulars. Then with a carefully selected sire we shall substantially get our idea of perfection every time. But it is a common thing to use our small native mares and a horse of one of the draft breeds. This is proper enough, provided the mare is not too small. We should not advise the use of a heavy draft stallion upon an unusually small mare. But the average common mare, if she is sound and of good disposition, may be used and ought to be used for the purposes of breeding up. There is more, however, in the selection of the stallion than there is in the selection of the mare. It would be a valuable piece of legislation if we could have a law making it a serious offense to represent a horse other than what he really is. The country is full of horses that ought never to be used for service. They are nothing but scrubs, and yet, with bogus pedigrees, they are represented to be first-class horses. Such stallions have been a great hindrance to the development of our horse interests. Men who have desired to improve their stock have been induced to use horses like these, and of course have been disappointed with the result, and perhaps have given up all further effort in that line. Thus they and the country at large have been damaged, and nobody has gained anything except the owner of the worthless horse. It is not always possible to command the service of a thoroughbred or just such a horse as we fancy; and in such case the only thing that remains for us to do is to do the best we can. But we should not be careless in the selection of a stallion. This is the point that we desire to bring prominently before our readers. There is no good reason why we should not be just as careful in breeding horses as we are in breeding cattle or other stock; and yet it is a fact that taking us as a whole we have not been. There is a steady demand for good horses of every breed. There is not much demand and never has been for poor horses. Noticing the advertisements in our daily papers, we shall find at this time of year, when many in our cities wish to get rid of their horses, horses advertised so cheap that you can buy a barnful for a few hundred dollars. Inspect such horses and they will be found to be scrub horses. But the good horse cannot be bought for nothing, and he cannot be had at a low price. Good roadsters are selling at Chicago for about \$250, and that is considered cheap in many cases; and we desire to repeat in this connection what we have frequently said, that there is a very large demand for good coach horses. Perhaps the best demand for horses is the demand for the draft and the coach. There is, of course, a steady demand for the lighter horses, the roadsters, but it may be fairly stated that the draft and coach are in the best demand. No good draft horse need go begging for a purchaser, and there has been so much care in the selection of importations by draft-horse men that those who desire draft horses have a broad and most excellent field to select from.

In some respects all our breeds can be improved upon, and we recently referred to one important needed improvement—a faster walking gait. In the item we published in reference to the matter the writer said that he had developed a Percheron family that were excellent walkers. It may be said that every breed can be made good walkers. It is a matter of both training and breeding. Right here again we should regard the laws of heredity. A fast walker will be much more apt to produce a fast walker than a slow walker. Hence we must train our horses to a better walking gait, and then be careful to breed from our best walkers. There is money in rapid walkers. If we use them ourselves the gait will be money in our pockets; for if we have a team that, in consequence of being good walkers, will do twice the plowing and other work in a day that a slower team will do, it will cost us 50 per cent less to do our team work. We shall save the expense of one team, the salary of one driver, and the wear and tear of machinery that the extra team would necessitate. If we are breeding to sell, the good walker will still be an extra profit maker, for a horse that will walk 50 per cent faster than the ordinary walking gait will bring more money than the slow walker. In a word, let us breed just the best we know how, or can learn how, and breed for high development not only in one particular, but in all particulars. Breed a good looking, large and sound horse, and one of good disposition. Such a horse will always be good property. Still, we would say nothing detrimental of those who are breeding small horses. All we mean to say to such is, breed the best, and there will always be people who will want your stock.

THE SWEDEN-DENMARK TUNNEL is still seriously talked of. The depth of water in the channel under which it is proposed to tunnel does not exceed 60 feet. The Swedish ports on the sound have only shallow water, and much difficulty arises in the shipment of goods,



## PATRONS OF HUSBANDRY.

Correspondence on Grange principles and work and reports of transactions of subordinate Granges are respectfully solicited for this department.

## Yuba City Grange Anniversary.

"Granger" furnishes the following for publication in the *PRESS* and *Patron*:

Last Saturday was a gala day for Yuba City Grange and their guests, being the 19th anniversary of the institution of the Order.

The members met promptly at 10 A. M., and conferred the third and fourth degrees. Then the doors were opened to the invited and all filed into the banquet hall, where two long tables were spread with the choicest productions of Sutter county farms. In this particular our sisters seem bound to behave in a manner altogether impossible to be described, at least by this feeble scribe; hence I shall not attempt it. Suffice it to say, the time was 1 o'clock, the appetite sharp, the crowd large, and the onslaught furious, but it had no perceptible effect on the supply. Two hours of music, speaking and recitations followed, giving pleasure to one of the largest turnouts ever assembled in our Grange hall.

Among those present from a distance were Bro. A. L. Chandler and wife, of South Sutter Grange; Sister L. Keyes, of Wheatland Grange; Bro. M. Sprague and H. M. La Rue, of Sacramento Grange; and Bro. Clark, of North Butte Grange.

The literary exercises were varied and excellent, and the music, both vocal and instrumental, could hardly be excelled. Three more applicants were elected, and they still come knocking for admission. Remarks were made by Senator Chandler, ex-Speaker La Rue, Sisters H. S. Jones, W. P. Smith, W. H. Lee, Mrs. B. F. Walters, George Ohleyer, W. J. Hardy and others; and the juveniles did themselves great credit by their selections and rehearsals.

The weather was perfect, the roads excellent and free from dust, and all felt that it was a day well spent. The election of officers had to be deferred in consequence of the other exercises, and will take place on Saturday, Dec. 18th, at 1 P. M., when we hope to have a large attendance and spirited contest.

## Grange Gathering in the Granite State.

Sincere and earnest in devotion to our beloved Order must be New England Patrons, to rally as they do from near and far, in spite of wintry weather; and very pleasant was the recent meeting of Merrimack County Pomona Grange, at New London, N. H.—the home of its Worthy Master and Ceres, Brother and Sister Shepherd. "E. V. T.," who was present, gives a long report in the *Cincinnati Bulletin*, from which we borrow a minor portion:

If you have ever traveled a long distance through storm to reach home, you can appreciate our situation on alighting at the door of the town hall, the interior of which was in striking contrast to the snowstorm raging without—warmth everywhere; in the large hall, in the ante-rooms, and in the dining-hall above; but most and best in the welcome of our truly fraternal entertainers.

Those who were at the forenoon meeting arrived before the storm commenced. There were present Patrons from Heniker, Hopkinton, Warner, East Andover and Springfield. Some must have come 20 miles with a team; Sutton and Wilmot, nearer neighbors, six or eight miles away. Worthy State Deputy Hutchinson, of Milford, rode eight miles from the railroad station, arriving in season for the private evening meeting at New London Grange hall, where among other excellent remarks he advocated the taking of Grange papers.

The exercises at the public meeting included a very warm discussion of the question: "Can co-operative labor unions benefit the laboring classes?"

The evening program embraced essays, readings and songs, and remarks by Patrons. There were present 85 of the home Grange and 23 visitors.

Bro. McDaniel, Master of Montcalm and Overseer of the State Grange, took Bro. Hutchinson to his home in Springfield. Bro. and Sister Shepherd's generous hospitality was tendered Patrons from a distance, and others were urged to remain for the night at Worthy Master Gay's.

Those who went home enjoyed a moonlight ride and moderate weather after the storm.

**ELECTIONS AND INSTALLATIONS.**—All Patrons should be wide awake in attending their Grange meetings, at this season of the year especially. Much depends on the action of the last and the first meetings of the year. No common hindrance will justify the absence of the true and faithful Granger from election and installation meetings. Make a lively start for the new year, fellow-Patrons, and you will find the work will go on better the year round. One of the best available methods of awakening and keeping up an interest in local Granges is that of furnishing the news of your meetings to the local, agricultural and Grange papers. Do not fail to send us prompt reports of your undertakings and accomplishments, brothers and sisters from all parts of the State.

TEMESCAL GRANGE meets at 2 P. M. on Saturday of next week. "Legislative Needs of California" will be the special subject for discussion. A good attendance of members and visiting Patrons is desired.

## Grange Work and Progress.

[By MORTIMER WHITEHEAD, National Lecturer.]

At the Twentieth Annual Session of the National Grange held in Philadelphia, Nov. 10 to 13, 1886, the Lecturer was directed "to prepare each week, at least, one column of printed matter, giving the latest and best Grange work and progress in all parts of the country. These to be sent to any and all Grange and agricultural papers recommended by the Masters of the several State Granges, and sent in such manner that they may all be published simultaneously."

The Grange is now 20 years old. It has stood the test of time. It has been "weighed in the balance and (not) found wanting." It is one of the largest organizations of any kind now in the country. The Twentieth Annual Session, just held in Philadelphia, was one of the largest and best ever held. Every State but four was represented and good work and progress was reported from nearly all sections.

The Grange passed its period of reaction seven or eight years ago. It passed its experimental age and settled down to solid work. Each succeeding year shows an increase of new Granges and growth in membership when the whole field is looked over.

Ninety new Granges were organized in 1885, and ninety-one in 1886; of these Connecticut reports 15; Pennsylvania, 14.

The Master of the National Grange, Put Darden, of Mississippi, in his annual address at the opening of this meeting, said: "We meet to-day, as an Order, after an existence of 20 years, under encouraging auspices and with flattering prospects. The Grange has been on trial during this long period of time, has successfully combated the strongest opposition, has passed the experimental age and been established as one of the permanent and staple institutions of the country. Notwithstanding its large membership—scattered over this broad land in nearly every county, parish, State and Territory—it has never disturbed the peace of the country, or done anything hostile to the general welfare. Opposed to all class antagonisms, its tendency has ever been to development and improvement. It offers to the American farmer the only well-grounded hope for protecting and advancing his interests."

The very best class of farmers are now uniting with the Grange. Those who have been willing to labor and give the management, even of their own affairs, into the hands of those who have stood ready to take the results of their labor, are at last awakening from their long sleep to find themselves living lives of isolation, without business habits and with few social advantages. They are asking why we should not assist each other, why may we not co-operate and secure for our labor better returns? Shall we not break up this isolation and meet where our families may have a season of enjoyment and recreation?

Not for many long years did Congress and State Legislatures so well give ear and heed to the just and proper demands of the farmers of our country as during the past year. Important matters in which every farmer and his family are interested will come before Congress this winter. Will our farmers be organized enough to speak and be heard with no uncertain sound?

Among the reports adopted at the late session of the National Grange was one suggesting that the Lecturers of the Subordinate Granges gather the best thoughts and written words of their members and send them to the Lecturer of their Pomona or State Grange. The Lecturer of the State Grange, in turn, to select, condense and compile the best thoughts thus coming to him from his State and send them to the Lecturer of the National Grange, who will thus be brought in contact with the best minds of our whole Order, and be prepared in turn to give our best thoughts national circulation through the printed page and by the spoken words of a corps of National Lecturers.

The State Granges of Alabama, Delaware, Georgia, Indiana, Iowa, Kentucky, Louisiana, Maryland, Michigan, Minnesota, Mississippi, North Carolina, Ohio, Pennsylvania and Wisconsin will commence their regular annual sessions on Tuesday, Dec. 14th, and Vermont on Wednesday, Dec. 15th.

"I think I can see in every direction evidences that the Grange heaven is working. It appears to me that the times are propitious. Many of the old political issues, which have so long divided and distracted the people, seem now to be questions of the past; and the political parties of the country, for want of these issues, will be compelled to take notice of questions of material interest to every good citizen."—J. H. BRIGHAM, Master Ohio State Grange.

The Grange offers to the farmers of the United States a means of combination, of harmony of action, such as they have never before possessed. It offers them the means of expressing their views and wishes as a body and of enforcing them.

The first plank in the Grange platform is "to develop a better and higher manhood and womanhood among ourselves." Thousands of men and women have been made better by the Grange. Who can point out a single person that it has made worse?

"Reading Circles" are growing in favor with the Granges of several States. "Joe English Grange," at New Boston, New Hampshire, has taken up the study of ancient history, etiquette and a work on the farm.

A question for Subordinate Granges, "How and in what way did I expect to be benefited by joining the Grange, and have I received any of those benefits?"

Brothers of the plow!

In calm and quiet night,

You've waited long and patiently

For what was yours by right—

A fair reward for toil,

A free and open field,

An honest share for wife and home,

Of what your harvests yield.

GRASS VALLEY GRANGE.—Brother Ohleyer, in last week's *Farmer*, tells about an interesting fraternal visit which he made to Grass Valley Grange the Saturday previous. He says the attendance was not large, but what it lacked in numbers it more than made up in earnestness and enthusiasm. Bro. J. W. DeGolia is Master, and right ably did he preside

over the assemblage. The first and second degrees were conferred on two sisters in a creditable manner. We missed the music that adds so much to the beauty of the degree work. This was merely an omission, as the musicians were unavoidably absent, which, we were told, seldom occurs. We discovered in the general discussion under the head of "Good of the Order" that partisan politics had not entered the Grange, and that the members pulled together for the good of all. We can truly tell the people of Nevada county that they can place their county affairs in no safer hands than those of their Grangers, for it is impossible for a Granger to benefit himself without strewing the good to all. The questions discussed were handled with consummate ability, and all the brothers participated, showing thought and familiarity with public affairs that gave us several pointers. Other and larger Granges might learn a lesson from this mountain Grange. Bro. Davis and the writer had something to say to encourage the brothers and sisters on their way, and now beg leave to thank them all for the many kind acts extended to these two "strays from the valley," especially to Mr. and Mrs. Peterson, Mr. and Mrs. DeGolia and Mr. Henderson. Long life and prosperity to all.

## Grange Elections.\*

LODI GRANGE.—Elected Dec. 1: C. W. Norton, M.; T. C. Shaw, O.; Sister C. P. Allison, L.; S. Ferdun, S.; R. Pixley, A. S.; A. A. Guernsey, C.; O. O. Norton, T.; J. D. Huffman, Sec.; H. Witte, G. K.; Sister Mary Fowler, Pomona; Sister R. Pixley, Flora; Sister H. Witte, Ceres; Sister Nellie Norton, L. A. S. The installation of officers was fixed for the first Wednesday in January, 1887, at 1 o'clock P. M. sharp, the installation to be public, and the Worthy P. M. of California State Grange, Bro. Flint, was selected to install the officers.

J. D. HUFFMAN, Sec.

TEMESCAL GRANGE, No. 35, Oakland.—Elected Dec. 3d: A. T. Dewey, M.; Walter Renwick, O.; Mrs. S. H. Dewey, L.; N. Sewell, S.; S. Goodenough, A. S.; Mrs. E. E. Kelsey, C.; L. Frink, T.; Mrs. Nellie G. Babcock, Sec'y; E. Kelsey, G. K.; Miss Jessie Weed, Ceres; Mrs. Eliza Brooks, P.; Miss Anita M. Dewey, F.; Mrs. W. Renwick, L. A. S. Bro. Paine, Trustee. Installation, Jan. 1, 1887.

\*Secretaries, or other officers, are invited to send us lists of officers elected, date of installations, and any other interesting matter for publication.

**LEGISLATIVE NEEDS.**—It behooves the farmers of this State to be "on deck" in season at the "sailing in" of the new Legislature. There are not a few legislative acts needed which should be justly enacted in their interest, some specially so, and others in common with other industrial interests. A change is desired in our tax and educational laws. Our Legislature should voice the sentiments of the great mass of our people by urging Congress to establish a postal telegraph system. Our probable laws should be so amended as to give married women and widows more rights and privileges. Many a member of our legislative bodies would do better service if more fully advised of the intelligent opinions and wants of their numerous constituents. Let the people be more communicative to their representatives. Discuss legislative matters in the Grange. Call public meetings for conference in localities where necessary, and, as far as possible, brace up the honorable members to do their work intelligently and honestly. As there will be an unusual number of farmers in the coming Legislature, let all try to secure better work than formerly. We should be glad to have our thinking farmers write their opinions for the *RURAL PRESS*.

## Grange Items.

We learn from the *Patron* that Tulare Grange conferred the first and second degrees on three new members November 27th.... W. L. Flint visited South Sutter Grange the same day and found a goodly number in attendance, including Senator-elect and Mrs. Chandler and District Lecturer Frisbie and wife. The third and fourth degrees were conferred on two brothers and two sisters, and they had a lively social time.... There is a movement on foot to revive Saratoga Grange.

A SOCIAL PARTY at the Sierra Nevada hotel, Coloma, has been announced for the evening of Friday, Dec. 10th, for the benefit of Bro. F. J. Veerkamp, W. M. of Sutter Mill Grange, whose house was destroyed by fire at Granite Hill.

## Congress Meets.

Congress reassembled at Washington on the 6th, with an uncommonly large attendance of members. All the representatives of this State but Henley were in their places. A. P. Williams was sworn in as Senator from California.

The President in his message says that race prejudice and competition of labor cannot justify the oppression of strangers whose safety is guaranteed by our treaty with China equally with the most favored nations. In opening our vast domains to alien elements, the purpose of our law-givers was to invite assimilation, and not to provide an arena of endless antagonisms. The paramount duty of maintaining public order and defending the interests of our own people may require the adoption of measures of

restriction, but they should not tolerate the oppression of individuals of a special race.

He favors the extension for seven years of existing treaty stipulations with Hawaii, and the negotiation with Mexico of a new and enlarged treaty of commerce and navigation.

In respect to the farmers, he says: Those who from the soil produce the things consumed by all, are perhaps more directly and plainly concerned than any other of our citizens in a just and careful system of Federal taxation. Those actually engaged in and more remotely connected with this kind of work number nearly one-half of our population, and none labor harder or more continuously than they. No enactments limit their hours of toil and no interposition of the Government enhances, to any great extent, the value of their products; and yet for many of the necessities and comforts of life which the most scrupulous economy enables them to bring into their homes, and for their implements of husbandry, they are obliged to pay a price largely increased by an unnatural profit, which, by the action of the Government, is given to the more favored manufacturer.

As to the public domain, the recommendations of the Secretary of the Interior and of the Commissioner of the General Land Office, looking to the better protection of public lands, and of the public surveys; the preservation of national forests, the adjudication of grants to States and corporations, and of private land claims, and the increased efficiency of the public service, are commended to the attention of Congress.

The President advises the repeal of the Preemption and Timber Culture Acts and that the Homestead laws be so amended as to better secure compliance with, and cultivation for the period of five years from date of entry, without commutation or provision for speculative relinquishment; also, the repeal of the Desert Land laws, unless it shall be the pleasure of Congress to so amend these laws as to render them less liable to abuse.

## Government Lands for Fruit-Growing.

The territory of the Citrus Fair Association, whose exhibition comes off next week at Sacramento, includes considerable tracts of Government land, whereon the cultivation of the orange would probably be more or less rewarded. The counties recognized in the choice of directors lie mostly in the Sacramento basin and adjacent foothills.

Looking through the carefully prepared description of this region, published last year by the Immigration Association of California, we note that in the southern part of Shasta county (where the Sacramento valley proper may be said to commence) occurs a foothill district of nearly half a million acres, the southwest portion of which is a succession of rounded hills, rising from 50 to 200 feet above the valley. The central and southern portions consist of tablelands, from 500 to 700 feet above sea level, east of which there is a gradual ascent to the higher foothills of the Sierras. Here there are many fine valleys and plateaus, and of Government land open to settlers there are, in Secretary Street's judgment at the date of our writing, 75,000 to 100,000 acres on which oranges might be grown more or less. That is to say, there is that amount of land on which homesteads of 160 acres might be made, having from 30 to 100 acres in each case available for citrus culture.

Moving southward, among the Government lands still open for settlement in Tehama county, there are perhaps 20,000 to 30,000 acres more or less suitable for orange-growing under similar limitations. In Colusa there are 5000 to 10,000 acres; in Butte, 20,000 to 30,000; in Placer, 10,000; and in Yuba, El Dorado, Amador and Calaveras counties, each about 5000 acres, of which the same may be said.

Almost all the land referred to is situated in the thermal belt of foothills and plateaus. The predominating soil of these districts is a red loam, often gravelly, with here and there a stiffening of clay. On such ground the fine Placer county oranges have been raised. It is suitable for figs, pomegranates, almonds and walnuts, as well as the common fruits of the temperate zone.

Outside the above limits, but within the counties named, there are much larger areas of Government land adapted for the cultivation of core and stone fruits; say in Shasta 500,000, in Tehama 100,000, in Colusa 50,000, in Butte 100,000, in Yuba 20,000, in Placer 100,000, in El Dorado 50,000, and in Amador and Calaveras about 60,000 acres each.

In Nevada, Sonoma and Yolo counties, while there is no Government land promising for citrus culture, some 100,000, 50,000 and 5000 acres respectively might be added to the latter list.

The foregoing estimates refer only to public lands, now open to entry by actual settlers, on application to the Registers or Receivers of the U. S. Local Land Office at Shasta, Marysville, Stockton or Sacramento, and take no account of such precincts as have already passed under the control of private parties.

REDWOOD TIMBER FOR LONDON.—The British bark *Windhover* left this port about a month ago with a cargo of redwood for London. They are just beginning to appreciate the value of our redwood in England, and there will probably be an extensive demand for it there in the near future. The bark also takes a small invoice of California wines.



AGRICULTURAL NOTES.

CALIFORNIA.

El Dorado.

CLARKSVILLE ITEMS.—Cor. *Republican*, Nov. 26: The return of our mountain neighbors has revived business in this end of the county. Their produce—beef, butter, mutton and wool—finds ready markets at good living rates, and thereby we have the proof that the dairy and stock business is profitable in the foothills of El Dorado county. The scarcity of rain is being felt by our stockmen on account of inconvenience in watering their animals. The farmers are plowing and sowing some grain.

Fresno.

FOOTHILL APPLES.—*Republican*: Some of the fruit stores are now supplied with apples, grown in the mountains in the vicinity of Fresno flats. They are equal to the best shipped from Oregon or from the East, and the report of large yields of such excellent fruit proves conclusively that apple-growing is destined to be an extensive and profitable industry in the foothills of this county. Apples at 5 cts. per lb. will pay our foothill ranchers better than hogs at 2 cts.

FINE ORANGES.—*Republican*, Dec. 3: The best oranges now to be had in this market are Fresno oranges. They are beauties—bright-colored, solid and as good as they look. They are fully equal to Riverside oranges, and as good as the earth produces. Fresno county presents first-class advantages for the production of oranges and lemons. In many of the valleys in the foothills there is a supply of water for the irrigation of land now lying idle or used only for grazing, and in many of these sheltered valleys a damaging frost is unknown. The writer recently made a short trip in the foothills directly east of Fresno, and found on Fancher creek, some six miles above where it empties on the plains, that there has been no frost this season, although for a month past it has been freezing nearly every night in the valley. Here are tomato plants two or three years old, growing during the winter without any protection from frost. It is in this warm, frostless, fogless belt that oranges and lemons grow to perfection.

Inyo.

HEREFORDS IN OWENS VALLEY.—*Independent*, Nov. 27: Last Wednesday Mr. W. J. Marsh arrived in the valley with a carload of full-blooded Hereford cattle from his ranch at Fort Churchill, Nevada. The lot included bulls and heifers. Two of the bulls were for Mr. Rawson. The price of these two animals is said to be \$2200.

Los Angeles.

WESTMINSTER SQUASHES.—*L. A. Times*: William A. Beckett reports three vines of a watermelon-squash that yielded respectively 184, 110 and 90 squashes, averaging 20 pounds each. The largest vine measured 70 feet across, and in one place the squashes grew three deep for want of room on the ground! And Mr. Beckett is a reliable man.

San Joaquin.

MR. BOYCE'S BARN.—*Lodi Cyclone*, Nov. 25: Mr. Robert Boyce, near Woodbridge, has built a new barn, which is a model and the finest in the county. Its dimensions are 52x60 feet and 61 feet high to the weather vane, a horse. It is placed on a solid brick foundation, and earth has been filled in and thoroughly tamped down to the level of the sills, which rest on the brick foundation. The stable-room, taken from the south side of the building, is 17 feet deep and will accommodate 22 head of horses. A hall running the whole length of the barn and parallel with the stables is seven feet wide. This enables the man feeding the stock to take the grain from the hopper, or the hay from the slide, and fill the mangers without going into the stable-room. Above the stable a good tight floor of surfaced flooring is laid, which makes a fine large hall, suitable for storing grain in the sack or bulk. The granary constructed near the top of the barn, and connected with the lower floor by a spout or slide, will hold about 300 sacks of ground feed. All parts of the framework are put together with joint bolts, at an extra cost of over \$50, and nails were used only in putting on the shingles and weather boards. A lately improved track, with block and tackle, enables them to unload a rack of hay in a very few minutes. The openings are all provided with double doors, an inner door made of slats to give proper ventilation and to keep the poultry out. Take it all in all, this is a model farm, and our other ranchers should take pattern after it, and thus enhance the wealth of our agricultural district.

San Bernardino.

HOLSTEINS.—*Ontario Record*: T. D. Cheney, who lives a short distance northwest of Norfolk, is the owner of the Holstein stock that carried off nearly all the premiums on that variety at the last county fair. Many of them were lying about with all the docility of pet kittens, and we felt that here was just the cow we wanted; and when we learned that one of them made an average of nine gallons of milk a day on green alfalfa alone, our want increased. But then the price! \$200 or \$300 for a calf and more hundreds for a cow. They are certainly the ideal cow, without the deer-like appearance of the Alderney, nor the vicious traits of the Jersey; of fair size and gentle. Mr. Cheney keeps a large herd of ordinary cows of superior grade, having just selected ten of the least

valuable and sold them, averaging \$85 apiece, Santa Barbara.

EDITORS PRESS:—In most parts of Santa Barbara county this year, fruits have, from some as yet unexplained cause, been almost a failure. Other crops are fair, so we do not feel disposed to complain much, especially when we complacently view our fast-approaching railroad. That, in conjunction with other causes, has produced a boom in real estate—somewhat crazy it may be; but when we consider our attractions; when we reflect upon our charming scenery of ocean, islands, mountains; when we behold our inviting canyons and groves and sylvan retreats; our beautiful drives in every direction; the charming beach and the rose-embowered country seats; the city itself, a mixture of palaces and trees, cottages and flowers and green lawns; when we contemplate our peerless and health-giving climate—when all these things and more throng upon our minds and kindle our imaginations, we cry from the fullness of our pent-up souls, Santa Barbara may have her equal; her superior, never.—S. P. SNOW, *Santa Barbara Co.*, Dec. 3, 1886.

Sutter.

MOUNTAIN MUTTON MARKETING.—*Farmer*, Dec. 3: W. H. Phillips, our enterprising drover, has been dealing in sheep to some purpose. He purchased last spring in Eastern Oregon 5560 head of select mutton sheep. They were kept in the mountains during the summer, and for the past two months have made their way by easy stages to this vicinity. In this way they have been kept growing and fattening, and arrived in the best possible condition. Mr. Phillips sold them on arrival to San Francisco butchers at \$3.50 per head, which is the best evidence of their size and quality. About 1000 per week are delivered, are driven to Sacramento and thence shipped to the bay. About 2000 of the sheep passed through town last Wednesday, and we can truly say that we never saw finer and better-conditioned mutton sheep in the State. Mr. P. is making a handsome thing in this venture, and deserves it, too, for his enterprise and pluck.

Santa Clara.

QUINCES.—*Merced Argus*: We have received from Mr. and Mrs. C. M. Merriam a box containing over 50 pounds of the largest and most deliciously-flavored quinces we ever saw or tasted. They were raised on their place near Saratoga, Santa Clara Co.

Shasta.

GARDEN AND ORCHARD NOTES.—*Free Press*, Dec. 4: To-day D. N. Honn received from Chas. Camden, of the Tower House, English walnuts, Japanese walnuts, California black walnuts, common black walnuts, butternuts and English filberts—all fine, fresh-looking nuts, this year's growth.... In J. M. Gleaves' door-yard can be found a variety of roses and other flowers in full bloom.... Judge Bush showed us yesterday a large and beautiful orange tree loaded with fine oranges, grown with no irrigation and scarcely any cultivation—proof positive that oranges can be grown on the red uplands and foothills of Shasta county.... On an orange tree of three years' growth in Lee Fader's yard there are 15 oranges that measure on an average 9½ inches each in circumference. In the same yard a lemon tree of two years' growth has attained a height of 10 feet. All kinds of flowers are now in bloom, and the green grass is 10 inches long. Can any locality beat this for December 4th?

Sierra.

WELL-BORING.—*E. J. Wood*, in *Reno Gazette*, Nov. 24: I send you data and extracts from the report of the secretary of the West Side Well-boring Company. Their outfit consists of a set of hydraulic jetting tools, total cost in complete running order, about \$90,000. It is divided and owned in 16 individual shares, and its operations have been confined almost exclusively to the west side, having crossed the tubes but once in boring a well for Keys at Loyalton. They have bored during the season, from April 15th up to the present time, 30 wells, and in 26 cases obtained flowing water running from three to 90 gallons per minute, and from 230 to 940 feet in depth, the largest wells being obtained at a depth of about 700 feet, although some very good ones have been struck at 400 feet. The wells range in temperature from 40° to 130°. In all cases the water has proven to be good and palatable, both for drinking and culinary purposes, and much superior to any surface water for washing. Cattle and horses invariably drink of it with great avidity. Some wells appear to be slightly impregnated with sulphur, and others with iron, but no alkali. The hottest well obtained thus far, that of Wm. A. Sperry, is 190° in temperature. I am confident it possesses rare medicinal qualities for the cure of dyspepsia and rheumatism. To give an idea of its temperature, it can only be drank as one would sip the very hottest tea. It tastes perfectly fresh and sweet with the exception of having a barely perceptible taste of iron, and quenches thirst better than ice water. If there is any virtue in hot water cures, Mr. Sperry certainly has a valuable sanitarium. The outpour of the above 26 wells amounts in the aggregate to 533 gallons per minute, or 756,520 gallons every 24 hours. The most expeditious work done was the sinking of three 600-foot wells in one week. The deepest single line of casing driven was 193 feet, in sand the entire distance. The material used for casing is common 2, 3, or 4-inch gas pipe, 5-16 of an inch in thickness. The large majority of the wells have required but one piece of

18 or 20 feet in length. During the last season and this, there have been four other machines in operation here, portions of the time, and one other, the Wilson machine, was in constant operation last season and this, so that the above estimates will but barely include 1-5 of the work which has been done. The West Side Company have been fortunate in securing the services of James Rector, a careful and experienced expert, he having followed the business for a number of years in the State of Illinois.

Sonoma.

ORCHARD DRAINAGE.—*Democrat*: In the 42-acre orchard of Hon. John Markley, near Santa Rosa, there are about 4600 trees from one year to three years old, comprising apple, prune, apricot, pear, persimmon and fig, besides several varieties of nut and ornamental trees. The land is in a high state of cultivation. Mr. Markley has made an experiment, or, rather, has put to valuable account the experiments heretofore made, in the matter of drainage. Looking over his orchard, one may see extensive depressions, in which an excess of water destroyed the young trees in their first or second year's growth, but which being drained by tilting joints leading throughout their extent, terminating in a main drainage canal, have been restored to an equally productive capacity with more elevated portions. Fresh trees planted after putting in the drainage tubes, in place of those drowned out, are as healthy in appearance as the most favored in the orchard. While other parts of the State need irrigation, that which the valley lands of Sonoma county most need is thorough drainage. It is a common supposition that these valley lands are of too low a temperature for the production of fruits; but, properly drained, they prove to be unsurpassed in productive capacity, as regards both quantity and quality.

EVICTING THE VARMINTS.—Between 60 and 70 pelts and scalps of wildcats and foxes have been received at the County Clerk's office during the past week. Most of the animals from which the pelts were taken were killed in the mountains around Cloverdale. Sheep-raisers in that neighborhood say that the bounty ordinance has been the means of insuring to their sheep and lambs a longer lease of life.

Tulare.

VERTEBRATE VERMIN.—*Register*: Tulare county is not a little pestered by fowls of the air and beasts of the field. The coyote is too numerous and makes havoc in poultry yards and among young pigs. Squirrels and gophers need to have unceasing war waged against them. Geese and blackbirds destroy enough wheat every year to fill a warehouse. And there is the jack-rabbit, worse than the plague of frogs and locusts sent upon Egypt. No organized effort at riddance of these pests has yet been made in Tulare, but it is time something were done. The supervisors have authorized a bounty of \$2 for coyote scalps, and our young Nimrods would do well to measure wits with this cunning pest. We believe there is a bounty of two cents on squirrel scalps, but if neighborhoods would join forces it would pay to poison these fellows even were there no bounty. There is no law against poisoning birds except around public parks and cemeteries. The jack-rabbit will have to be fenced out, poisoned or shot, without aid from the county. If the farmers and fruit-growers could only unite and work together for a few days in each year, these pests could be kept in check; but unless some concerted action is taken, the damage to growing crops, young vineyards and orchards will aggregate many thousands of dollars annually, and will increase rather than diminish.

NEVADA.

CATTLE ON THE MEADOWS.—*J. F. Triplett*, Inspector of the Nevada Live-stock Association, has furnished the *Sagebrush Stockman* with a detailed statement showing 10,250 cattle now at pasture on the Meadows. At this time last year, adds the *Stockman*, there were over 14,000 head of cattle on the Meadows, and the decrease this year is accounted for by the fact that most of the hay harvested in the valley has been disposed of to stockmen already here, and other stockmen are deterred from coming for that reason. As it is, the cattle now here will be shipped below much earlier than was anticipated.

THE STOCK RANGES.—*Reno Gazette*, Nov. 29: All kinds of live-stock are doing well on the ranges throughout the State and at the North. The recent storms were not nearly so severe on cattle as the early fall rains of last winter. Cattlemen are feeling quite easy, and go into the winter confident that the predicted hard weather will not prove so disastrous to stock as was at first feared.

Matthew Cooke's Work.

We were glad to see at the recent Fruit-growers' Convention in Sacramento that Matthew Cooke, who has rendered such valuable services in the war against injurious insects, was able to be present and participate in the discussion of the subjects in which he is especially interested. Mr. Cooke has suffered severely from rheumatism for the last year or more, and has not at present the strength he once had, and yet he is working on with vigor and interest in the line he chose when the codlin moth began to bore into the prospects of his box factory. Mr. Cooke is now publishing a handy and neat series of bulletins on entomo-

logical subjects, which he calls "Golden Drops," and which he sends to those who subscribe to the support of his "Bureau of Information." The "Golden Drops" have the latest information about insects and their destruction, and we doubt not that all who feel disposed to aid Mr. Cooke in his work will consider themselves well repaid by the information they receive, beside enjoying the consciousness of helping an energetic and devoted man to carry on a valuable work. Fuller knowledge of this work can be had by writing to Mr. Cooke at Sacramento.

Rain Table for Sacramento, Prepared to 1884 by the late Dr. T. M. Logan and the late Dr. F. W. Hatch, and since 1884 by Sergt. J. A. Barwick. Arranged according to seasons, showing the amount in inches of each month, during thirty-four years, and for each rainy season, to Dec. 1, 1886; also the quantity for every month, and the annual amount of rain.

MONTHS.	1849	1850	1851	1852	1853	1854	1855	1856	1857	1858	1859	1860	1861	1862	1863	1864	1865	1866	1867	1868	1869	1870	1871	1872	1873	1874	1875	1876	1877	1878	1879	1880	1881	1882	1883	1884	1885	1886		
September	0.250	0.000	1.000	0.003	0.000	sp Kite	sp Kite	sp Kite	0.000	sp Kite	0.025	0.063	0.000	0.000	0.003	0.004	0.080	0.000	0.000	0.000	sp Kite	0.000	0.001	0.002	0.000	.....	0.000	sp Kite	0.000	0.230	.....	0.000	0.300	0.570	0.900	0.600	0.080			
October	1.500	0.000	0.800	0.000	0.001	0.000	0.195	0.000	0.195	0.005	0.010	0.000	0.000	0.914	sp Kite	0.000	0.480	0.001	0.000	0.000	0.120	0.230	0.230	0.310	0.228	0.400	0.330	0.680	0.885	1.750	0.000	2.630	0.970	0.100	0.020	0.080				
November	2.250	sp Kite	2.140	6.000	1.500	0.650	0.000	0.750	0.651	0.605	0.147	6.485	0.911	2.110	0.000	6.718	2.327	2.436	3.806	0.774	0.830	0.834	1.230	1.980	1.210	3.801	0.240	0.380	0.450	0.476	0.000	1.730	3.220	0.610	0.000	11.340				
December	12.500	sp Kite	7.070	13.410	1.540	1.150	.....	2.000	6.692	4.329	1.834	4.582	8.637	2.327	1.815	7.867	0.364	9.511	12.850	2.612	1.962	0.971	10.990	6.368	10.009	0.440	3.025	0.000	1.421	0.476	3.685	11.802	3.270	1.160	0.440	10.450	5.760			
MONTHS.																																								
January	4.500	0.650	0.586	3.000	3.950	2.670	4.010	1.375	2.444	0.964	2.310	2.685	15.695	1.733	1.077	4.776	7.689	3.440	6.035	4.750	1.371	2.075	4.040	1.230	5.200	8.705	4.790	2.770	9.476	3.769	1.519	5.930	1.800	2.210	3.430	2.160	7.530			
February	0.500	0.800	0.130	0.000	8.500	0.692	4.801	4.283	3.906	0.931	2.920	2.800	2.751	0.136	0.481	2.910	7.104	3.147	3.650	3.262	1.636	1.690	4.740	4.360	1.856	4.800	4.100	1.400	8.223	3.240	1.763	4.935	2.400	1.340	4.400	0.490	0.230			
March	0.250	1.380	0.130	7.000	3.250	4.300	1.403	0.675	2.878	1.637	0.981	3.320	2.800	2.260	1.303	0.481	2.018	1.010	4.348	1.642	0.950	1.936	0.505	3.050	0.800	4.300	0.800	0.160	3.277	1.215	1.215	3.750	3.400	0.800	2.640	0.070				
April	0.250	1.440	0.130	3.500	1.500	4.320	1.432	sp Kite	1.214	1.057	2.874	0.475	1.863	1.631	1.080	1.130	0.256	1.865	2.270	1.240	1.210	1.454	0.612	0.512	0.000	0.002	0.190	0.185	1.170	3.372	1.288	1.600	1.990	0.700	0.680	1.080				
May	0.250	0.690	0.300	1.450	0.200	1.130	1.413	sp Kite	0.203	0.081	0.068	0.000	0.000	0.355	0.742	0.460	2.552	0.008	0.270	0.638	0.270	0.756	0.260	0.370	0.040	0.100	0.000	0.000	0.130	0.805	0.000	0.350	0.060	sp Kite	0.070					
June	0.000	0.000	0.000	0.001	0.000	0.310	1.033	0.350	0.068	0.000	0.000	0.135	0.011	0.000	0.087	0.000	0.000	sp Kite	0.000	sp Kite	0.001	0.035	0.002	0.000	0.002	1.100	0.000	0.200	0.000	0.000	0.500	0.100	0.450	0.110	0.040					
July	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.030	0.540	0.000	0.000	0.000	0.000	0.004	0.018	0.000	0.000	0.000	sp Kite	0.000	0.015	0.001	0.600	0.210	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000				
August	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.045	0.000	0.000	0.000	0.000	0.004	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000				
Total	36.000	4.710	17.930	36.365	20.065	18.620	13.770	10.443	18.921	16.041	22.626	15.548	35.549	11.579	7.868	22.612	17.924	25.305	32.769	16.614	13.572	8.470	24.052	14.208	22.698	17.697	26.681	9.325	25.449	17.272	26.740	26.134	16.250	13.300	.....	.....	.....			

BETTER.—Col. Webb, secretary of the State Board of Horticulture, is happily relieved of his late gastric affliction, and we are glad to find him again at his office.





### If, Some Day.

[Original—By M. JOSEPH PAGE.]

If, some day, you and I should meet by chance  
Along some crowded street or busy mart,  
How would we grasp each other's eager hands!  
While tears would spring from overflowing hearts,  
And drawing thence, from out the listening throng,  
We two would choose some secluded way,  
Where, in communion low, for one brief hour  
We would recall those forgotten days.

I know 'twould be to me a sad, sweet joy,  
Thus to sit, face to face, in converse low,  
Reviewing all the past and vanished years—  
Sunshine and shadow, with their ebb and flow;  
Recounting vanished joys—for there were joys—  
Albeit so fast, on gilded wings they sped;  
Sorrows and misfortunes that have cast  
Dark shadows o'er the heart, ere they, too, fled.

And softly we would speak of those we loved,  
With the low tremor of the soul's deep flow;  
And dreams and hopes that burnished life's dark  
hours

With the swift splendor of their transient flow.  
Brief meetings, and sad partings that have touched  
Our lives with sweet or painful circumstance;  
The burdened years, with all their memories, dear  
friend,

If, some day, you and I should meet by chance.

Oh! 'tis not, "depth of wave, nor space of earth"  
That severs friends, so long and truly tried;  
But fate, relentless, that with stern decree,  
Two restless lives has rudely sundered wide—  
Here must I pause—must be the song I'd sing,  
Only know this: *I'll ever think of thee!*  
Hast thou no burden thought for friendship's offering  
Across the gulf of silence? *Answer me!*

### A Detestable Old Hen.

"Bab!" There is no reply to the sharp call, and the woman standing in the doorway of the Browns' farmhouse shaded her eyes with her hand as she looked despairingly up and down the road. "That child will be the death of me if she stays long," she murmured, stepping out on the broad stone step. "Never since the first day she came has she been within sight or sound when I wanted her! Exactly like her mother for all the world, always a dancin' and laughin' and happy, when, so far as I could make out, there was nothing to be so gay about!" Perhaps the sharp gray eyes had never looked for the bright things of life that made her niece so happy. It is hard to judge others' thoughts and feelings justly without a glimpse into their hearts, and few ever try to look deeper than the surface to form their judgments.

Again the shrill voice called impatiently: "Barbara! Barbara Grey! O, you're comin', are you? Well, jest run 'round the corner of the house and drive that pestering guinea hen out of the yard! Its everlasting 'potrack, potrack' is enough to drive one wild."

"But where shall I drive it, Aunt Bess?" queried the sweet voice breathlessly, as the girl paused at the gate, swinging her big calico sun-bonnet on her arm by the strings.

"Land's sake, Barbara, haven't you drove it out often enough to know it belongs to Mr. Berry at the next farm?"

"Berry?" repeated the girl, laughing; "is he the old man with the horrible temper, of whom you speak so often? Is he home from Europe? Suppose he should see me and come after me, Aunt Bess?"

"Don't be a fool, Barbara Grey," said her aunt sharply. "Go along and do as I tell you. These are my grounds, and I ain't goin' to have anybody's guinea hens asquawkin' 'round fit to wake the dead!"

"I thought the grounds belonged to Uncle Tom," the girl said mischievously, as she disappeared around the corner of the house in pursuit of their next neighbor's noisy hen.

"Sauce-box!" exclaimed Mrs. Tom Brown, as she turned back into the big kitchen and went on kneading bread; but there was a suspicious twitching around the stern lips as she said half aloud, burying her hands deep in the dough, "If the old bear meets her, she won't get the worst of it."

Barbara Grey was a city girl of 16 summers, with plenty of money to do as she pleased, and being the only child of indulgent parents, she had much her own way. She was a dear little girl, however, with a warm, generous heart, and an impulsive but sweet disposition. Having grown tired of fashionable summer resorts, she decided to spend the summer and fall with her mother's sister, Elizabeth Brown, who lived on a large farm among the Connecticut hills, where she tormented the good-natured farmer and bothered his wife until she often declared she would be the death of her. With light feet Barbara hastened after the speckled hen, waving the big sunbonnet to frighten it away. Such a screaming as the creature set up! It seemed hardly possible that one small hen could raise such a commotion. With flapping wings

and ungainly gait she rushed back and forth, to and fro, blindly, wildly, almost provokingly, while breathless Bab made frantic endeavors to induce her to go out the wide-open gate. But that little bit of flesh and blood, a guinea hen, is the most aggravating creature in existence. Go out that gate it would not, and all Bab's chasing and racing and "shooing" could not make it see the sensible side of the argument. "You hateful, detestable old hen! I wish your owner'd keep his chickens at home, where they belong! Oh, you horrid biped! Wait till I catch you, *won't* you get a shaking!" Evidently the hen intended to "wait," and Miss Bab grew frantic. "I'll pull all your feathers out, see if I don't! I'll cut your wings off; I'll choke you, you detestable old hen!" Still the hen did not take kindly to these promises. Perhaps she did not believe them, for she still drew Bab in hot pursuit.

Finally, tired out and panting, she ran blindly into the blackberry hedge, and perhaps thinking, as the proverbial ostrich does when its head is hidden, no one can see it, the hen paused, and with a last desperate gathering of her remaining strength, Barbara clutched it and flung it over the hedge straight in the face of the next neighbor!

"There, you detestable old hen!"

"Confound you!"

A pause. With wide frightened eyes Barbara Grey stood, sunbonnet in hand, staring into the angry face of the terrible neighbor beyond the hedge.

"Well, Miss, I suppose you are satisfied!"

The voice was cold as ice, and the blue eyes flashed straight down into her soul, Bab thought. But she neither faltered nor fled, but stood bravely in the broad sunlight, motionless, breathless.

"Are you avenged? Have the sins of that detestable hen been wiped out in my face?"

Bab flushed and paled, but her brown eyes met his steadily.

"I beg your pardon," she said gravely, suppressing her inclination to laugh, "but the noise of the hen troubled Aunt Bess and I tried to drive it away. Were you there all the while?"

"I was reading in the garden when I caught the sound of battle and could not well help witnessing the encounter, novel as it was."

He was laughing at her! Barbara drew herself up proudly. "At least the hen did not know any better!" she said.

"And you did?" queried her tormentor.

"Well, let me congratulate the victor, at any rate."

She gave the extended hand a freezing look, and turned away toward the house. "I don't wonder your hens act so detestably!" she flashed.

"Neither do I, with such a pretty neighbor!" was the reply.

"It's a wonder you don't eat them up, you're such a bear!" called Bab, vanishing around the corner and bounding into the sunny kitchen. "I've seen him, Aunt Bess, I've seen him!" she exclaimed, breathlessly, dropping into a chair, and fanning herself vigorously.

"Seen who? What is the matter, child?" and Mrs. Brown actually dropped several specks of flour on the floor in her astonishment. And Bab told her.

They saw no more of the "horrid neighbor" for a whole week, but never a guinea hen found its way over the garden hedge. And one day a grinning black servant delivered at the farmhouse door a basket of exquisite fruit. "For the young lady with the big eyes," he announced. And buried among the luscious grapes and white peaches was a note of apology "for the rudeness offered to her that day when she was so tormented by that detestable hen of his." After awhile that neighbor of the Browns got in the habit of going over to the big farmhouse very often, and one day Barbara told her aunt confidentially:

"He isn't old at all, Aunt Bess! He told me last night he was only 29. And he is real nice looking when he doesn't frown and frighten one half to death." And before she went home, late that fall, she promised to return ere another year passed, and see that Aunt Bess was never again bothered by her husband's "detestable old hens."—*New England Homestead.*

**LOTTERY FRAUDS.**—Our attention has been called to a deception practiced here in the interest of the Louisiana lottery, which shows to what extremes this great fraud will go to gull the people. It was lately found out that a dairyman near San Rafael had drawn a prize of \$1200, and been paid the money, and a man was found who claimed that he was the lucky one, and he treated his friends far and wide on the strength of his good fortune. But it turns out that no such prize was drawn here, and the money for treats, and perhaps a little more, was furnished by those interested in the lottery, merely as an advertising scheme. It is said that San Rafael pays \$500 to \$600 monthly for these worthless tickets, and many of the buyers are not able to pay their honest bills.—*Marin Co. Journal.*

"CATO," says Mrs. Harriet Beecher Stowe to a negro man, whitewashing on her Florida plantation, "now that you are free and can vote, I hope you will use your influence with the colored people, and get me the ballot." "Lor! Mis' Beecher," says Cato, rolling up his eyes, while an incredulous grin broadened his kind-hearted, honest face, "duz you reely belebe that women is got sense nuff to know to vote?"

### Woman Suffrage.

**EDITORS PRESS:**—Have we, as intelligent beings, pursued such a course toward each other, individually and collectively, as to promote the greatest happiness and content in the world? We have the opportunity from the dawn of our education to draw from the treasures of learning of past generations. We have had given us the ability to choose the good and refuse the bad. We have had men and women of wisdom and nobility of soul standing on the outposts of civilization, doing battle in the front rank for truth and justice against a foe almost invincible; and to-day what is the outlook for a better time coming? Is there loosing of the bonds of oppression and wrong throughout the world? Are creeds, dogmas and superstition beginning to lift their dark pall from the human soul? Does woman begin to look with hope for a brighter day, when she shall be utterly and perfectly free as a man is free? When that most unreasonable and obnoxious clause shall be stricken out of the marriage ceremony—"to love, honor and obey?"—no qualifying conditions, no modifying phrase of right or wrong—simply a despotic command to obey! Instead of that should be written mutual love, mutual honor and mutual agreement.

A woman said to her friend: "I am very unhappy. I agreed before the priest to obey him; at the time I was not aware of the import of the vow, but I have learned by sad experience. I have no liberty, no friends permitted except he invites them; clothing made and food cooked to his order." No flowers, no decorations, no pictures, nothing to suit the taste of a woman for the beautiful, but all severely plain, all dictated by the domestic tyrant. All history proves that woman, to right her wrongs, must have some power more potent than she has hitherto possessed. That power we conceive to be contained in universal suffrage. Liberty and the ballot are the heaven that will lighten the whole world. As woman is the crowning glory of the world, for beauty, for virtue and accomplishments, we might look for a mighty change when all the weight of her influence was thrown on the side of justice and humanity. What might we reasonably expect in the course of time but a more homogeneous world, a Congress of all nations, universal language, universal decimal coinage, universal arbitration of all difficulties between nations and individuals, universal disarmament of all armies, and universal peace? The way is preparing by the continual increase of communication between all nations. Who can compute the cycle of time since the dawn of organized beings on earth? Age on age has passed away, bringing the world by slow progress through unlimited changes to our present state of civilization. We look for the time when liberty and equality will be established facts, when no unjust discriminations will be made against woman.

The first result of putting the ballot in her hand would be to teach her to think. Freedom to the blacks compelled them to think and act. Cheap postage made us a thinking people, and the ballot would lead woman by degrees to ask herself: "What can I do with this great power intrusted to me?"

She no doubt would at once become a reformer of many abuses and wrong methods. She would call to her aid all the wisest and best of her own sex and the good and progressive of the other. She could hold conventions to consult on the best laws and the best means of removing all discrimination against herself in regard to ownership of property, making of wills and possession of her children. She would be able to assist in making laws to crush out those dens of pollution that destroy her husband and children. She would cause an utter and radical change in the present mode of conducting political campaigns and elections. The great motive powers that to-day carry our elections are money, whisky and lying. Patriotism is almost extinct. Elections are held in saloons, contrary to law, 9 out of 10 drinking at the bar—many so drunk that their tickets are made and chosen for them, and they led up to vote. She could have laws enacted to secure her home-stead from all mortgages, trust deeds and executions. If she had committed crimes she could be tried by a jury of her peers. She would benefit herself and men in reducing taxes, by reducing the cause of taxation. Whence come the criminal prosecutions and vast expense of court machinery? Whence comes that continually augmenting host of insane, paupers, beggars and tramps? Remove the cause of men being in that condition and taxes will be reduced in proportion. That can only be done by the ballot in the hand of woman, waging determined war on all debasing dens of iniquity.

Who can tell where her almost divine mission would end? Legislation she could use to secure to herself a just share of all clerkships and pay of office. By diplomacy she could assist in modifying the almost hopeless condition of woman in foreign lands. Men respect power from whatever source. The ballot would give her power which would be felt at all times; she could say to the domestic tyrant: "This is my home; I have as much right here as you."

I must hasten to a close. I have been able only to sketch the outlines of this great subject, but I must not forget to thank the Grange for introducing into the Order the free and perfect equality of woman in all its privileges; and I must also thank all the noble band of workers

who seek to elevate woman—for the same power that would improve woman's condition would also improve man's.

MONTGOMERY PIKE.

Routiers, November, 1886.

### Crimes Against Women.

Crimes against women are becoming disagreeably frequent. Almost every day we have the thrilling news of assaults, murders or suicides committed from the revenge of disappointed love. This is, however, a misstatement of the case. It may be pride, or vanity, or passion, or envy, or revenge, but it is never love, which is always a purely unselfish emotion. But the most alarming feature of these cases is the fact that woman is about to be deprived of her ancient privilege to freely dispose of her affections. There was a time when the declaration of an offer of marriage or tender addresses was regarded as a feminine prerogative, which no man ever thought of resenting. It was the one inalienable right that the usages of society had not taken from her. No doubt it required a considerable effort to sustain a cheerful demeanor after receiving the mitten, but a resilient nature would laugh at it as a good joke, while others would persist in renewing the suit, hoping to soften the obdurate heart by persistence. Now and then a mariner on the sea of life would keep his eye fixed upon one single star, and when that ceased to shine, would let go the rudder and fling himself overboard. But a new shape of reprisal is coming into vogue at an alarmingly rapid rate. Disappointed love, as it is called; seeks to drown its passion in the blood of the adored one or the favored rival. The pistol is used to enforce the love-letter. Instead of persistent wooing the hot bullet is sent whizzing through the brain of the inspiring cause of the ecstatic craze. Hopeless love, in all ages, has often sought rest in a suicide's grave, and its sorrows have been embalmed in song and poetry; but who ever dreamed that an era of murder would come in as a solace for pining hearts?

A young man may avail himself of a social opportunity to pay his respects to a young lady who may kindly receive his calls and courtesies in politeness to the friend of a brother or as a pleasant acquaintance, but with no thought of a more tender feeling. It is his privilege to ask her to become his wife. It is her privilege to accept or decline the offer. And yet it has come to pass that the rejected suitor whips out his little pistol and shoots the idol of his heart for not reciprocating the flame that devours him. It is an appalling state of things when a woman is denied the right to refuse what she does not want. What assurance of safety has a single woman from a circle of acquaintances admitted to her home on a friendly footing? She is liable to be menaced by the haunting fear that there may be some pining crank or brutal fool among the number, who, if he cannot possess, will not allow another to enjoy, her charms. The increasing frequency of suicide or murder in courtship is one of the problems that the alienist and social philosopher may well study.

### Advice to Country Girls.

City life is not all that it is painted. It has its pleasures and conveniences, but it also has its serious drawbacks. Before making the plunge into life in the city, country girls should ask themselves what is really to be gained by it.

Perhaps in their quiet, rural homes some stray advertisement has reached them, promising to young women high salaries for light work. Hundreds of these advertisements are framed for the very purpose of deceiving the unwary. They accomplish their purpose, however, and large numbers of young girls rush up to the city, dazzled by the generous profusion of promises.

A girl from the farm answers one of these advertisements. Life may have been slow at home, but there was always good food and in plenty, and there was someone to care for in the old farmhouse. When she goes to the big city she finds that the "light work" consists in working all day in a badly lighted and ill-smelling work-shop, where scores of other girls and women are employed at wages hardly high enough to keep body and soul together.

We know what often comes next. The girl has left home, she is ashamed and unwilling to return, and she must take the consequences, oftentimes one of two things—shame or suffering. Many a girl finds first in the frivolities and next in the iniquity of the streets that excitement by which regrets and remorse may be deadened. If she is too strong in principle, too pure and elevated in tone thus to sink down to one of the pitiable women of the street, she may find herself in some cold garret, lonely, overworked, despondent and miserable.

Better remain at home than risk the failure which attends so many girls who go to the city in pursuit of high pay for light work. It is the saddest of all ventures, forsaking a country home for the illusions and deceptions of a large town.—*Reading (Pa.) Times.*

"SAY (hic), Miss Blanche, shall I sing 'Coming Thro' the Rye?'"

"No, thank you, Captain Biler; at least, not until you get over the effects of it."



## Temperance Instruction in Public Schools.

Nothing so good has ever before happened to the children of America as that they are to be taught about themselves—the greatest empire over which they will be obliged to rule. The wisdom of beginning with the beginners is the crowning wisdom of the plan, and will increase beyond all computation the sum of human happiness. How to be well is no small part of that other problem—how to be good. I would rather teach the primaries than the high-school class, for thus I should be certain of the largest interest on the capital invested.

First of all, I would treat the subject broadly. Hygiene, "system of principles or rules designed for the promotion of health," should be my theme. If possible, I would place a large photograph of Thorwaldsen's Hebe upon the wall behind my desk, and make it my text for many a brief talk. The children should know the myth of Hygeia and get something of the Greek spirit from their study. If I could do no better, they should see and understand a little about the picture opposite her name in the unabridged dictionary. Then I would know as much more than they as might be practicable.

Experiment should enter largely into my plans. I would try to develop a health conscience in my pupils, showing them the sacredness of the temple in which their spirits dwell, and the painless, happy way in which they might live if obedient to God's law, made for their highest good and written in their members. I would organize them into a health club and try to arouse a genuine enthusiasm in them for wholesome, cleanly ways of living. In all respects I would diligently try to be an example to the flock in my own daily life, asking nothing of them in respect to dress, diet, exercise, etc., that I did not myself observe. I would request my pupils to tell me of illustrations noted by them in which the laws of health were violated, and I would try to show them the relation of a sound body to a sound mind and a good conscience. The gospel of purity in word and deed should be discreetly taught, and every effort to impress the motto, "Keep Thyself Pure." In the higher grades I would circulate the white-cross literature, which is singularly exalted in tone and free from hackneyed or technical expressions.

I would teach the unscientific nature of such expressions as, "he drank too much," "he smoked too freely," "he was a moderate drinker," "he indulged to excess," showing that since alcohol and nicotine are the attractive ingredients in all use of intoxicating liquors and tobacco, any use of these things is harmful because both are poisons, notoriously injurious to the tissues of the body and the temper of the soul.

Besides the regular text-books, I would study "The Man Wonderful in the House Beautiful," by Dr. Allen; the lectures of Dr. Benjamin Ward Richardson, and Dr. William B. Carpenter; and "A Study of the Drink Question," by Axel Gustafson. I would write to the *Union Signal*, Chicago, for a bulletin of its publications, and study the juvenile lessons there furnished—all this for the sake of amplitude in fact and illustration.—*Frances E. Willard.*

## A Girl's Idea of a Man.

The following conversation was overheard in a hotel at Weldon, N. C., during the Civil War.

Two young girls were chatting on a sofa, unconsciously drawing the attention of the crowd in the room to their conversation. Said one: "Selina is going to marry Lieutenant F., after all. You know she had broken her engagement with him. But he lost his leg at the battle of Manassas, and what does she do but take the hero into her favor again. I could not marry any one who was not a whole man, could you?"

"Yes," exclaimed the other; "if there was just enough of his body left to hold his soul, I'd marry him if I loved him!"

The applause that followed this speech was tremendous. The soldiers sprang to their feet and vented their feelings in loud huzzas, while the landlord and attendants rushed into the room to see if the "Yankees were whipped."—*Chicago Ledger.*

**THE CALIFORNIAN SHEEP.**—California wool always reminds me of the time when the gold diggings were first discovered in California. At Oxford it used to be the custom at Christmas-time for the butchers to exhibit the prize sheep which they had bred and purchased. One butcher procured a very fine sheep, dyed its wool purple, gilded its hoofs, and exhibited it as a Californian sheep. It seems hardly credible, but numbers of persons went away in the firm belief that all Californian sheep had purple wool and golden hoofs.—*Longman's Magazine.*

**WHAT MAKES VINEGAR SHARP.**—George Adams, in 1747, said that some people have imagined that the sharpness of vinegar is occasioned by the eels striking their pointed tails against the tongue and palate; but it is very certain that the sourest vinegar has none of those eels, and that its pungency is entirely owing to the pointed figure of its salts, which float therein.

## YOUNG FOLKS' COLUMN.

### Tabby's Ride.

For Our Younger Readers.

Tabby was a great traveler. She knew every spot about the house—from attic to cellar—and just where everything that she liked was kept. There was hardly a rat or mouse on the place that could hide from her. She crawled into every dark corner of the barn, could tell the number of eggs in each hen's nest, and often she took long walks through the fields, creeping through every hole in the fence that was as big as her body.

Beside all this, she rode about the farm-yard a great many times. She had merry rides with little Harry in his baby carriage, with Johnny and Fred as horses; she had lain curled up on the great load of hay when Mr. Dorr and the men drove in from the fields, and she had traveled ever so many miles in the empty wagon, when the boys played it was a train of cars. She liked this railroad journey best, but Fred always waked her up at every station by his loud Too-oo-oo-t! At other times she did not know that they were moving, even when Fred said they were dashing along at a terrible rate!

But such a ride as the one I shall tell about, she never had had before in all her life! Indeed, she would never have taken it—but she could not help it. Ponto made her go. You see, Ponto and Tabby were good friends. They lived and ate together; they ran races and played all sorts of nice games; and they liked each other very much. Sometimes they had little quarrels; but they soon forgot their anger and were friends again.

Every evening, when Ponto came into the yard, the two friends would run down one little hill from the house and up another little hill to the barn where Mary was milking. Ponto would keep the pigs out of the yard, and Tabby would watch every hole in the barn floor for a rat or a mouse. Then, when Mary was done milking, she would pour some fresh milk into a pan for Tabby to drink.

But, after awhile, there came a long rain-storm. Ponto had to stay in the yard for two or three days. Tabby did nothing but doze! It seemed as if it never would stop raining! But it did at last; and when Ponto and Tabby ran down the hill again, they saw at the bottom—a pond deep enough to drown them both!

Tabby did not know what to do. In all her travels she had never crossed a pond of water. She was frightened, and would have gone back to the house, but she looked toward the barn, and saw Mary and the pan of milk waiting for her beside the door.

Ponto did not care for the water, for he could swim. So when they came to the edge of the pond, he plunged in and was soon across. Then he looked back to see what had become of Tabby. He thought she would be at his heels.

But no! There she was on the bank where he had left her. Her back was curled up till it looked as if it were broken, and her tail waving over it! What in the world was the matter? She never looked so except when she was angry.

Now, Ponto thought Tabby was a wonderful cat. He had seen her catch rats, and he knew that she could do some things that even he could not. "Surely she can cross that pond," thought he. He did not know what to make of it.

He called to her, with a bark, to "jump in and swim across." But she only replied with a cross "meow," which he did not hear. Then he said again, "It's easy to swim across—come on!"

"As easy as for you to climb a tree," said Tabby in an angry way.

This was too much for Ponto! He could not climb a tree, and Tabby knew it. When he was too rough in his play, she would run up into the apple tree, and there she was safe. So this reply made him angry. Tabby should not have said it—but then, she wanted the milk!

"It is so easy that I can swim across and carry you, too," thought Ponto, and then he plunged into the water again. When he reached the shore, he seized Tabby by the back of the neck with his teeth, and rushed back into the water. Poor Tabby! She thought she certainly would be drowned.

But Ponto knew better. He held his head so high that the water hardly touched her pretty little paws. So she kept quiet and did not struggle. It was not so bad, after all! And besides, there was the milk!

When they landed, Tabby had a stiff neck for awhile, and Ponto had to shake his great shaggy sides until they were dry. Then they ran up the hill as fast as they could go, and into the barn, and almost into the milk-pail before they could stop.

Tabby was very thankful to Ponto for this ride. She said to herself that she would help him to climb a tree the next time that he tried. But as she drank her milk, she was glad that they both could follow Mary home by the long path through the orchard.

Tabby did not forget her strange ride. But she has never taught Ponto how to climb a tree! She has not even helped him up to the lowest limb. Do you think she ever will?

## GOOD HEALTH.

### Insanity in California.

We have received the 34th annual report of the superintendent of the Stockton Insane Asylum, in which we find some interesting facts in regard to insanity in this State, as compared with that disease in other communities. We copy as follows:

Has our State more than its share of insane? There is a prevailing impression that mental disease is spreading among us at an unusual rate; indeed, I have heard the phenomenon explained on climatic and atmospheric as well as other grounds. A few considerations may here be presented to show that this impeachment of the mental stability of our people is unfounded.

First, let it be remembered that the aggregate number of the insane must ever be on the increase in any prosperous, growing community. So plainly is this so that the demand for additional asylum accommodation may generally be taken as an index of the advancement of a State, and a proof of its material and social development. But the repetition of these demands, with the frequent attraction of public attention to the subject, conveys to some the belief that insanity is inordinately active here. California, absorbing a large immigration yearly, yet with capabilities for great future numerical expansion, must expect to be called on to erect a new asylum every nine or ten years for perhaps the next half century.

No definite conclusion as to the prevalence of insanity in a community can be reached except on the basis of population. But what is the present population of California? The Federal census of 1880 placed it at 864,686. A comparison of this with former censuses fortifies the claim upon which most estimates of our numbers are now made, namely, that the State has for many years been steadily increasing at the rate of 100,000 every three years. Accepting this count as probably near the truth, the present population would be something over a million.

On this basis the proportion of insane here is not in excess of that of many other States. There are now 2922 inmates in our asylums, which gives us 1 to every 360 inhabitants. The ratio in New York is 1 in 365; in Massachusetts, 1 in 350; in Australia, 1 in 375; in Great Britain, 1 in 345; in France, 1 in 400; in United States, 1 in 545, excluding idiots, 1 in 300, including idiots.

Again, there is a gradual decrease in the number of persons annually sent to the asylum, in proportion to the population. The number of those attacked with insanity is proportionately less now than it was three years ago, and three years ago it was less than it was six years ago. This progressive diminution in the ratio of those committed proves in the clearest manner the steady decline of insanity in our midst.

While, therefore, it cannot be said that California has a higher insanity rate than ordinary, there are certain peculiar and incidental conditions that tend to keep the rate higher than it would otherwise be. Foremost among them is our unusually large foreign-born population.

It is well known that Europeans coming to this country are much more subject to mental disorder than our native-born citizens. The reasons for this are various. The shock of separation and transplantation, the uprooting of old associations and habits of life, the homesickness, the inability in those who have hitherto always lived in the vicinity where they were born, to adapt themselves and find mental anchorage in new phases of existence—these are some of the explanations that have been offered. The fact was placed in a startling light by the census of 1880. It was found that while one-seventh of the whole population were foreign, of the insane, not one-seventh, as might have been expected, but one-third, were of foreign birth. Thus it appeared that while but one in every 662 of the native population was insane, the ratio among the foreign-born was one in every 250.

Turning to our own State, we find this significant showing repeated and intensified. No State in the Union has so large a proportion of foreign-born, except the neighboring State of Nevada. Over a third of the population of California, in 1880, were born outside of the United States. The number returned as insane in that year was 2503, of whom 1618, or two-thirds, were of foreign nativity. That is to say, one-third of our population (the foreign-born) produced two-thirds of our insane. Or, stated in another form, while one in every 646 of our native-born is insane, the ratio among our foreign-born is one in every 180. Giving these remarkable figures their weight, it will be seen that a low rate of insanity in our State would, under present circumstances, be akin to a miracle.

Another point closely affecting our insanity statistics may be found in the wide scope formerly embraced in the peopling of this asylum. Founded in 1850, it was for many years the only receptacle for the insane on the Pacific Slope. In the absence of other places for their reception, the insane of the Territories north and east of us naturally gravitated to Stockton, where they are to be found, many of them, to this day. They help to swell the large class of chronic insane who have accumulated in our wards, and who, carried on our books from year

to-year, contribute toward giving a wrong impression as to the prevalence of acute insanity in the State.

Idiocy, etc., in California.

Another fact should be considered in this connection. While in other States, imbeciles, dotards, simpletons, fools, etc., are kept in separate institutions, here they are all consigned to the insane asylums and counted in the reports as insane—another source of error into which many, not acquainted with the facts, naturally fall. When these classes of patients are separated, the statistics show that our proportion of idiots, etc., is far below that of other States, but the exact figures are not given in the report before us.

## DOMESTIC ECONOMY.

**TOM THUMB OMELETTES.**—Eight eggs, half-cup of rich milk, salt and pepper, tablespoonful of cheese; beat the eggs light, season, stir in the milk, the grated cheese. Half fill eight patty pans, buttered, and set in a dripping pan with half an inch of boiling water in it; shut up in a quick oven, and as soon as they are "set" turn out on a hot dish. You may vary the dish by substituting minced parsley and thyme for the grated cheese, and, when dished, pour drawn butter over the omelettes. They make a pretty show when garnished with curled parsley, a tiny sprig being stuck in the middle of each mold.

**BOSTON BROWN BREAD.**—Mix two cups of rye flour and one cup of yellow cornmeal. Add one teaspoonful of salt, one heaping teaspoonful of soda dissolved in nearly a cup of molasses; add cold water, and stir and beat very thoroughly till you have a medium stiff batter—not too stiff, as the meals swell, and the bread would come out hard and unsatisfactory. Put in a buttered pan, smooth the top of the loaf, and steam at least four hours; then dry off in the oven for 20 minutes. This amount makes one good-sized loaf. Unbolted rye is the best, but when not obtainable, the rye flour is a fair substitute.

**APPLE PUDDING.**—A good apple pudding can be made by dipping eight thick slices of stale bread in cold water, buttering them, lining the sides of a buttered two-quart dish with the bread, filling the dish with sliced apples, sprinkling a cupful of sugar, one teaspoonful of ground cinnamon and half a cupful of water into the dish, covering the dish with a large plate, and baking in a very moderate oven for three hours. Let it cool for half an hour; then turn out on a warm dish, and serve with sugar and cream.

**PLAIN RICE PUDDING.**—Wash half a cupful of rice in three waters and soak it in cold water for two hours. Drain off the water, and add a level teaspoonful of salt, a slight grating of nutmeg, two tablespoonfuls of sugar, half a cupful of stoned raisins and one quart of milk. Cook in a very moderate oven for two hours, stirring twice in the first half hour. At the end of two hours, add half a pint of cold milk; stir well, and cook for an hour longer. Serve in the dish in which it is cooked.

**JELLIED CHICKEN.**—Boil a chicken till tender, take off skin, cut the meat into small pieces, taking out the bones; skim all the grease off the liquor in a pot; mix a tablespoon of corn starch with a little water, rub smooth and let it boil up good; season well with salt and pepper. Boil eggs hard, peel and slice, lining the bottom and sides of a crock with them, then pour into this the prepared chicken, and set in a cold place to harden. Turn out when cold.

**BROWN BETTY.**—Lay in a pudding dish, first, a layer of finely-sliced apples, sugared to taste, and dusted over with powdered cinnamon; next, a layer of coarsely-crumbled bread, buttered at intervals. Alternate these layers until the dish is full. Let the last layer consist of apples cut in eighths. Pour on sufficient water to moisten the whole. Cover and set in the oven. When the apples on top are tender, remove the cover and cook until brown. Serve hot without sauce.

**FLAKY SODA BISCUIT.**—Mix together a quart of very dry flour, a teaspoonful of baking soda, two of cream of tartar and a saltspoonful of salt; pass through a sieve, then chop in two ounces of butter or lard, and mix quickly with milk to make a very soft dough. Flour the board well, roll out, sprinkle with flour, double it over and roll out again; cut into biscuits half an inch thick. Bake in a very hot oven about 15 minutes.

**APPLE FRITTERS** are easily prepared. One cup of sifted flour, one teaspoonful of Royal baking powder, one pinch of salt, two eggs, one cup of milk. Sift flour, salt and powder together, add the eggs, beaten, the milk, one-half pint of chopped apples and nutmeg to taste. Mix into a batter as for griddle cakes, and drop spoonfuls into lard made hot for the purpose. When a delicate brown, remove. Serve with sugar.

**BISCUIT.**—Sift together three times one quart flour, one tablespoonful corn starch and one teaspoonful good baking powder. Add one tablespoonful of lard, a pinch of salt and a cupful of cold water; mix and bake in a quick oven. This will make eight or nine good-sized biscuits.





A. T. DEWEY.

W. B. EWER.

Published by DEWEY &amp; CO.

Office, 252 Market St., N. E. cor. Front St., S. F.  
Take the Elevator, No. 12 Front St.

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## SCIENTIFIC PRESS PATENT AGENCY.

DEWEY &amp; CO., PATENT SOLICITORS.

A. T. DEWEY.

W. B. EWER.

G. H. STRONG

SAN FRANCISCO:

Saturday, December 11, 1886.

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## The Week.

The rain has come. It fell gently amid a still air at first, and the croakers called it but a delusive shower, but it has improved with age and the south wind found its voice and its legs and started forth over the country in true wintry style. As we write on Wednesday the rain area has spread well over the upper half of the State, and if usual signs avail anything, we shall get as much water from this storm as any one needs for immediate use. The rain will brighten up business affairs, give the farmer a chance to hitch up his idle teams, increase the wives' and children's Christmas portions and make every one happier. Befitting the opening of the season we give on another page the table of rainfall at Sacramento since 1849, which is an interesting study.

We give considerable space this week to citrus fruit matters, and we shall have more in the future. On pages 490 and 491 may be found an interesting essay on orange-growing and the discussion drawn out by it. Sketches of the amounts of Government lands still avail-

able for fruit and the progress which is being made in peopling them are pertinent to the display next week at Sacramento. We are always glad to see any part of the State awakening to a consciousness of its own resources and possibilities. California roses were not born to blush unseen.

## The Rural Press.

We are printing an extra edition this week for distribution at the Sacramento Citrus Fair, as we wish to bring our paper to the attention of all who are engaged in the development of the resources of the State. It is to such work that our publication has been devoted since its establishment 17 years ago, and it is acknowledged to have been an important factor in the advancement which has been attained. We have endeavored to serve the extension of the agricultural interest faithfully by bringing forward, for the use of all, the soundest and most successful local practice which has been adopted by our most intelligent farmers as the result of their experience in this State. By presenting such valuable experience as a guide for newcomers, the RURAL PRESS becomes a handbook of California agriculture, and serves the new-comer to this peculiar State as no distant publication can.

We are not much addicted to indulging in platitudes about the glorious soil and climate, etc., which are well enough in their way, but do not prove of any great advantage to people after they come here and desire to know how to get a living out of the soil and under these delightful skies. We aim to do such people good service, and to give practical advice, which is of value in individual cases. This is rather a humbler field than that in which poetry and rhetoric can be freely used in glorifying the State, but we conceive it to be of more value to a new-comer, who really wants to know what to do after he has cast his lot with us.

In addition to this practical work we endeavor to send out each week a clean paper free from demoralizing sensations, free from disguised exhortations to evil, and full of hopeful and helpful suggestion, ennobling sentiments and innocent entertainment. We believe that any one who desires to labor earnestly and intelligently in California agriculture, who longs to keep his home pure and happy, who yearns for the elevation of his chosen calling, and for a proper recognition of its claims and services in public places, will find in the RURAL PRESS a friend and helper which he can trust and support as a worker with him toward such ends. We have succeeded well in obtaining such a position in the hearts and minds of those who know us best, and we ask each one who looks over our pages for the first time to give the RURAL a trial, though it be but for a short period. All we need is the introduction to your attention—after that the paper week by week pleads its own cause, and seldom fails of a victory.

**VALUE OF THIS YEAR'S WHEAT CROP.**—Despite the lower prices, California tillers of the soil this year will be better off than ever before by larger crops. There will be 70,000,000 bushels of wheat for export this year, which will give an income of at least \$54,600,000, against \$28,000,000 last year. "Our barley crop," says the San Francisco Record, "of 18,000,000 cents will bring in \$16,000,000, as against \$9,000,000 last year. In these two items alone we will have \$72,000,000 where we had in 1885 only \$47,000,000, an increase of over \$35,000,000, or nearly double that of 1885, while the area sown was only a fraction larger. When California became a State, statesmen indulged in the prediction that, being almost wholly auriferous, it would never be able to support a large population because it had no head producing capacity. She is the greatest grain-producer of any."

## Speculation.

We used to be noted for our dash and daring in business and speculation, and we had begun to hope an era of more legitimate and conservative methods had come in. But the present flurry in mining stocks indicates that the taste for this sort of gambling still lingers, like the remains of the dog or savage in civilized nature, as evidenced by the interest taken in slugging and other brutal sports. One of our city papers says: "We think that an era of healthy speculation would be of benefit to San Francisco." That depends on what is meant by "healthy speculation." To purchase with the expectation of a probable advance, and a consequent sale at a profit, is done every day. In this sense, all business may be said to have a speculative element in it. We have a fair example of this sort of dealing in the case of Joseph in Egypt during the seven years of plenty preparing for a famine by buying up all the grain in the land and selling out at an advanced price. He made a fortune out of the necessities of the people, it is true, but he rendered a very good equivalent by furnishing them with food when it was not to be had elsewhere at any cost.

A writer in the North American Review, speaking of the periodical "stock boom," says: "The millions are made by taking them from the pockets of the general public. It is the public on one side and the great operator on the other. The public is an ass. That is, it is an ass sometimes. When it is in the humor to be fooled, the men are there to fool it to the top of its bent. It wants to buy and it will swallow anything they offer, and believe any story about the value of the article it is buying, however preposterous. Woe to the man who rises then to warn the people of their madness! They will tear up the stones of the street to cast at him. The only consolation he has is the reflection that in a little while they will be cursing the men who deluded them into buying securities at twice their value, or securities rotten and valueless altogether." And so we have seen the people of this State in their periodical crazy fits invest in stocks, buying when the prices were rising, buying most freely at the top, while the stock-sharps who had bought before at zero, and started the boom by tricks known to the initiated, were quietly unloading and laughing in their sleeves at the silliness of their victims. Surely it is not this kind of speculation our contemporary hankers after. Why, it is worse than gambling. It is swindling. In gambling, two sharps sit opposite each other to measure luck in a game of chance. They closely watch each other's movements, and are content when fairly beaten. But the thing usually called speculation is where a sharp or ring of sharps take advantage of an unsuspecting public to get up a corner on wheat, pork or lard or mining shares, setting a trap to catch those who have "sold short" and slaughter them mercilessly without rendering any substantial equivalent to the community for what they receive. The less we have of this kind of speculation the better.

Those who raise bees know there are such mean little scamps as thieving bees that do not care to go away into the meadows in quest of honey, but invade their neighbor's hives and steal and carry away the honey to their own cells. The owner of these bees is no better off than before. He has the same amount of honey, only it has been taken from one hive and stowed in another. This is exactly parallel to much that is called speculation. It is property shifted from one hand to another, but there is no more property in the community than before. It has gone from one side of the street to the other, from the vaults of one bank to the vaults of another. One man or ring of men have made a fortune, but the community is no richer. They have not added a penny to its taxable property. It was simply put up to a grand raffle and a few lucky fellows won it all. The bulls bellowed and the bears fought. The "longs" and the "shorts" wrestled in the arena. And this alternation of property from one hand to another, this tumbling up and tumbling down, is what is called speculation, a sort of financial gaming which no morality can justify, no political economy approve, for the apparent reason that it adds no equivalent value to the productive industry of the country, demoralizes legitimate business by getting up a feverish excitement, love of venture and daring risks, and deteriorates character by producing

a morbid desire for sudden wealth which tramples down all scruples and would pawn conscience and the hope of immortality to the devil on a venture.

## Agricultural Experiment Stations.

Prof. Hilgard hands us some circulars he has received from the East, indicating that an active effort is to be put forth this winter to secure the passage by Congress of the bill establishing agricultural experiment stations in connection with the colleges of agriculture. This measure has been popular with California farmers ever since it was first proposed. The California State Grange for the last three sessions has passed resolutions approving the measure. The idea seems to be generally approved, but because there seems to be no interested parties to go to Washington to clamor for the bill it is put aside for other less important matters.

It appears that the present condition of the bill before Congress is this:

Hon. W. W. Hatch, of Missouri, introduced at the first session of the Forty-ninth Congress a measure with this title: "A bill to establish agricultural experiment stations in connection with the colleges established in the several States under the provisions of an act approved July 2, 1862, and of the acts supplementary thereto." This bill is on the House record as No. 2933, report No. 848. On January 7, 1886, it was read twice, referred to the Committee on Agriculture, and ordered to be printed. On March 3d it was reported with amendments, committed to the committee of the whole house on the State of Union, and ordered to be reprinted. On May 6th it was ordered to be reprinted. It was also introduced into the Senate, where it was discussed shortly prior to adjournment, and laid over until the next session.

Thus it is seen that the bill is in good shape to become a law if popular interest enough is shown to cause it to be taken up and pushed forward. If all who have friends in Congress will write asking their attention to the matter, or write to their local representatives to this effect: if all agricultural secretaries will adopt resolutions on the subject and forward them to Mr. Hatch who introduced the bill, it will be made apparent that the people desire to have this much done for experimental agriculture. We are already enjoying the benefits of systematic work of this kind as provided for by legislative appropriation at the State University. But the work should be extended and taken up by the United States Government on a system which will include the whole country. Let those who desire this work ask Congress for it.

## Thanksgiving Grapes in New York.

One of the fruit-packers at R. B. Blowers' vineyard in Woodland put a "few lines" in one of the packages which was destined for Eastern shipment and signed his name thereto. A few days ago a postal card was received in Woodland bearing these words:

Your basket with lines "to a pretty girl," dated Oct. 19, 1886, filled with luscious grapes, was received by me this 25th of November (Thanksgiving Day). Although not received by a "pretty girl," they were eaten with grateful remembrance.—Mrs. A. J., New York, Nov. 25th.

Aside from the death of sentiment which the note announced, the reply shows something of more value, perhaps, than if the message had reached a willing maiden and the affair had resulted as such things usually do. It shows that the grapes were picked October 19th and eaten in New York in good order on November 25th, five weeks afterward. The shipment was by slow freight to Chicago, thence probably by fast freight to New York. It shows what good packing will do and what good shipping grapes will stand. We are not sure what variety of grape was sent—perhaps it was the Emperor; if not, will Mr. Blowers tell us?

**DEATH OF J. F. OSBORNE.**—We regret to announce to the many acquaintances whom he has made in the course of his business, the death of Mr. J. F. Osborne, who has for the last seven years been engaged on this paper in the advertising branch. Mr. Osborne's death is supposed to have been caused by fatty degeneration of the heart, and the event was sudden, while he was alone in his room at his hotel at East Oakland. Mr. Osborne was of English birth and has parents still resident there. He was about 45 years old and unmarried. He was energetic in business, easy in address and successful in his chosen line of work. The funeral services were held in Oakland on Thursday afternoon, Rev. Dr. W. W. McKaig officiating.



## Parry's Native Jujube or Lote Tree (Zizyphus Parryi).

[Written for the RURAL PRESS by DR. A. KELLOGG, of the State Board of Forestry.]

"The trees around them all their food produce,  
Lotus their name divine—nectareous juice!  
Hence Lotophagi called, which whoso tastes  
Insatiate riots in their sweet repasts.  
Nor other home, nor other care intends,  
But quits his house, his country and his friends."  
Homer's Odyssey.

Although mention is made of this native fruit in the State Forestry catalogue of trees and shrubs desirable for culture, nevertheless such a compiled list must needs be very brief to come within due limits assigned; hence further details may become desirable from time to time.

Common perception recognizes the truism that where native families, genera and species of trees, shrubs and plants abound, they furnish the best basis of presumptive evidence—if not always proof—that other kindred and choicer sorts will suit similar situations, climatic conditions and soils, often vastly widening in their range.

With our intelligent culturists and nurserymen, it seems needless to urge that the almost universally preferred practice is to resort to the wilds for the strongest seedlings as stocks for propagating purposes. Therefore, with this in view, as in duty bound by our forestry relations, we offer a short description, with pen and ink sketch, of our own native *Lotus*, in order to facilitate ready recognition and to designate the best-known localities for procurement of the home seed supply. Withal summary suggestions of a few foreign sorts that might well supersede the native *Jujube*, and here and there intersperse a practical hint or so to profit, or of economic and commercial value.

Parry's *Lotus* is a zigzag, branching, thorny bush or small tree, 4 to 16 feet high, seldom over 4 to 6 inches in diameter. The leafy spines are long, stout and straight, leaves entire and small—less than one inch—blunt or notched at the top, wedge-narrowing into a slender, short leaf-stem, 1 to 3-flowered, recurved in fruit, and this 1 to 3-seeded, mealy and nearly dry, oval, one-half to three-fourths of an inch long, apex short-pointed on a curved stem of one-half an inch or so. Mostly a shrub well suited for more eminently useful hedges; abounds in gravelly ravines near San Felipe, San Diego county, also at Rock House Summit, of the same region, and east of San Bernardino.

Before inviting specific attention to the most commendable species for culture it seems requisite to make a few concise remarks on jujubes in general; for out of half a hundred or more we can now only refer to a few, but, if deemed desirable, others may be noticed hereafter.

Jujubes are among the most feasible, if not the best, of fruits in the world for jellies and various preserves, or dried, and for a sort of bread or cakes, pies, or served as desserts like dates and figs; in short, one way or another they are eatable and mostly excellent. It would be safe to say that 400 to 500 trees to the acre—of almost any soil—could be planted, that at two or three years old would yield five to ten pounds to each bush. With any market at all, the fresh fruit would be cheap at a dime a pound for jelling in the rural way; they would thrive well with less care than a common corn-patch—would double, quadruple and quintuple in four or five years at the furthest, and thence onward for ages; would pay better than strawberries, with half the labor and not a tithe of the trouble in harvesting, nor risk of loss; would even utilize the worst land; have the world for a market, of the dried fruit and jelly, with other uses to be noted further on.

Classic Lote Tree (*Z. lotus*). This is a small tree common to Persia, Africa, Sicily and Spain, and is now cultivated in all regions of the olive, the vine and the fig. Tunis was the ancient land of the renowned people known as *Lotophagi*. This sweet fruit is of the size of sloes, with large stones, and is borne on every part of the plant like gooseberries, purple-tinged; the farinaceous pulp—separated from the pits and sun-dried—is set aside for winter use; has the flavor of dates and figs. A kind of wine or beer-drink is made by expression, diluted with a little water, but will keep only a few days; doubtless immoderately appropriated together in this or some similar way may have led to a devoted dissipation akin to the poet's conception.

It should be observed, in a general way, that

this and all the species are eminently adapted to the borders of desert—delight in arid sands, gravelly ravine-sides, and rocky ridges—would preserve embankments and prevent fearful washouts without serious obstruction to railroads or casting a length of blighting shadows; but they will grow in any soil—fruit described of delicious taste in the fresh state; also, after exposure to the sun a few days, they are pounded and made into bread. These paste-cakes are only sun-dried so as to well evaporate the little moisture used in making; it resembles, both in color and taste, what we designate as "gingerbread," noted as excellent food for long journeys.

From the horrent, thorny nature of the *Loti* one might well wonder how the fruit could be collected with facility; but as it is neither tender nor watery and somewhat farinaceous and leathery-like, and the shrub hardiest of the hardy with tough and elastic twigs, a cloth is spread on the ground and the bush beaten with a stick.

This *Lotus* of the *Lotophagi* must not be confounded with the Egyptian *lotus* (*Nymphaea lotus*), nor with the *Lotus* of Homer and Dioscorides, which is a species of (*amatory*?)



PARRY'S NATIVE JUJUBE OR LOTE TREE (*Zizyphus Parryi*.)

*Trifolium*, inciting, if not causing, a similar infatuation, as the one eaten by the natives of the Pacific in their season; nor with the *Lotus* of Hippocrates (*Celtis australis*), nor with the Italian (*Diospyrus lotis*).

Common Jujube (*Z. vulgaris*). This is a small tree of 20 feet, fruit blood-red or saffron, with a sweet granular pulp. In the south of Europe it is mostly served up in the dried state, as a choice sweetmeat of the winter season, known as *Jujube*. The Turks plant these with other trees in front of their coffee-houses that they may enjoy shade, shelter and fruit together.

East Indian Jujube Tree (*Z. jujuba*). Also a small tree of 16 to 20 feet, cultivated in China and Cochin-China, bears fruit of the size of a large cherry, smooth and yellow when ripe. There is, however, a variety of this or perhaps another species that produces an excellent fruit of oblong form, of the size of a hen's egg, known by the name of *Narikellekool*.

Pear-wood Jujube (*Z. xylopyrus*). This tree abounds everywhere in the forests of Coromandel. Cattle eat the leaves, young twigs and fruit; the kernel has the fine flavor of filberts, of which the natives are very fond. The timber of the largest trees is also highly esteemed, is of yellow orange color, very hard and durable, and withal very light. Most timbers combining such rare qualities for many uses prove too heavy.

A kindred shrub (*Palurus*) or one of this genus both equally common in Judea, The Christ Thorn (*Z. Spina-Christi*). Former, cap or crown-fruited; the latter, doubly-thorned with fruit like a *Sloe*. Rival authors refer to the plausible pliability of their exceedingly flexible

twigs—being readily wrought into any form—as having been the one put upon the head of our Savior. But in the light of this New Age would it not be wiser, more worthy, and much more magnanimous to inquire if the evil and the false alike in us, and all mankind, were not wont now—as ever of old—to crown the good and the true with thorns?

Lote trees may be multiplied by cuttings from roots or ripe twigs, with care, from layers and root slips, suckers and seeds. These budded or grafted from a few choice foreign parent trees would soon yield a progeny of many millions, adding to the wealth of the Pacific, and an annual income to California alike counted by unnumbered millions.

Our readers would do well to consult the enterprising Chairman of the State Board of Forestry, of Santa Monica (A. Kinney), himself a cultivator and manufacturer of the fruit product for the market. It is to be hoped the public may also hear from so competent a writer furthermore on this or some kindred topic.

Our pen picture is from a specimen contributed by Dr. Parry, whose name it bears, and by the liberality of the California Academy of

repeat that when an imperative demand is sent up from the farm to our legislative halls, calling for common-sense legislation on this point, that demand will be heard; but so long as farmers hold their peace, just so long will they be plucked and shorn by oily-tongued villains.

## Economy in the Public Schools.

If there is one thing more than another over which the average American is complacent, it is our system of education. One has only to name the common school to make him feel that here, at least, is safe and solid ground for a good deal of Yankee Doodle glorification. And yet it is a peculiar fact that in the United States, teaching does not hold a high rank. The instructor wields a little narrow authority in his school, but outside he is not ranked with the clergyman, doctor or lawyer. Why there should be any distinctions or classes in a democracy is not easy to see, but they exist, and it is plain that instructors do not occupy the rank they should. In a country whose commonplace boast is that education has always been its chief corner-stone, this state of things is not a little surprising. And yet it is true that this profession, which stands at the portals of the temple of thought and shapes the intellectual consciousness of the nation, does not rank with the other learned professions. The State goes to the expense of building costly and elegant structures, handsomely endowed and well appointed for the education of teachers, but 90 per cent of the students never enter the profession, and most of those who do, merely regard the school as a temporary bridge to something else.

Undoubtedly one cause of this unpleasant state of things is the insufficient salaries paid to public instructors. It cannot be expected that a man of ambition, energy and ripe culture will remain in the service when there are so many avenues of business that are more remunerative. He will stay in it until he can find something better, and no longer, and while in it, he will probably be constantly endeavoring to get out of it. In the subordinate positions the salary is too low to enable a married man to bring up a family in a respectable style. This is why the teaching art has so generally fallen into the hands of females, as it is generally assumed that unmarried women can live on very little. A sewing machine woman can earn, as a rule, as much as the average school mistress, fresh from the Normal School, with a first-class certificate, and many a laundry woman can earn more. And yet, the female teacher is expected to possess a fine education, dress well, and move in, at least, a tolerably elevated social stratum. While applications are numerous, there is a great complaint among the school boards of the scarcity of efficient female teachers. It is not strange. Drawing, painting, modeling, copying and other artistic employments draw many of the most gifted; light literary labors take others; some prefer the counter, telegraph office or sewing machine to the thankless wear and tear of nerves in a schoolroom, on a mere pittance at that. But this is not all. Even that meager sum is uncertain, and the teachers are in constant trepidation lest the school board should take one of its periodical fits of reduction. The salary of the preacher may be small, but it is sure, and he is expected to take a good long vacation, too. The income of the lawyer or doctor is what he can make it, and this is a perennial inspiration to hope and effort; but the teacher, with the most ample equipments, scholarship and experience, can only expect to make a bare living, and that little ever and anon liable to be pinched and tolled by close-fisted economists.

LAWLESS HYDRAULICKERS.—The grand jury of Sacramento county, whose report is just published, have this to say about the debris-dumping industry: We have been credibly informed that hydraulic mining is being carried on upon the Cosumnes and American rivers, in this county, in violation of law; and, believing that all classes of citizens alike should be law-abiding, therefore call the attention of the Board of Supervisors to these rumors, and respectfully suggest that the matter be at once investigated, and, if found true, such steps be taken as shall punish all engaged therein, to the full extent of the law.

A GERMAN colony of a large number of families is soon to locate near Kingsburg, Fresno county.

Sciences, this picture is furnished the patrons of the RURAL PRESS.

## Beware How You Sign!

We have repeatedly warned our rural readers to decline putting their names to any documents (however innocuous-looking) presented to them by smooth-seeming strangers. The last number of *Farm and Fireside*, published at Springfield, O., speaks to the same effect under the head of "Fraudulent Notes":

A Tennessee subscriber asks: If a farmer signs his name to a note unknowingly, and can prove that the signature was obtained fraudulently, will he have to pay the note if it is held by an innocent party?

To which we answer yes; and a more flagrant instance of the perversion of justice it would be difficult to find. It is said that this interpretation of the law depends simply upon the decision of some Dogberry of a judge, who held that the "innocent" purchaser of a note obtained by fraud must be protected at any cost. This "innocent" purchaser is in most cases a professional note broker, who has the best of opportunities for ascertaining whether the notes offered him have been honestly obtained, and who seldom fails to improve the opportunity to make a heavy shave upon doubtful notes. These fraudulent notes are obtained in a multitude of ways. A sleek "agent" comes along and offers a farmer the privilege of trying some piece of machinery, if the farmer will but sign his name to a piece of paper to serve as an address; or a pretended State functionary is collecting agricultural statistics, to which he asks the farmer to sign his name as an assurance of their correctness; or a fellow comes into a neighborhood very anxious to buy a farm, and gets the farmer's name to an agreement to sell—these are a few of the traps; but in all cases the farmer's signature comes back to him at the bottom of a promissory note calling for some hundreds or thousands of dollars. Now we



## The Orange In California.

### Its Growth Both North and South.

An Essay by James Bettner, of Riverside,  
With Discussion by Other Growers.

At the recent Fruit-growers' Convention in Sacramento, one afternoon was devoted to the culture of citrus fruits. We take from the forthcoming stenographic report of the State Board of Horticulture, a full account of these matters as specially appropriate to the Citrus Fair edition of the RURAL PRESS:

Mr. Bettner's Essay.

It is difficult at this time to write an article on orange culture in California that shall contain very much original matter, but as the growing of this, the king of fruits, is now attracting more attention than ever before, as new men in new fields are entering upon it, a paper upon the subject may be of interest, though much in it must necessarily be substantially but a repetition of what has been said and written before. To one desiring to grow his own orange trees, from the start, the first step to be taken is to procure good seed—the next to prepare a suitable seed bed.

The seed of the Tahiti orange has generally been used in Southern California, and the plants from it make good stock either for seedlings or to bud upon.

It is important in case the grower should design to plant his orchard, or any part of it, in seedlings, that he should take care to procure pure unhybridized seed.

For the purpose of propagating seedling trees the seed from our California orchards would be improper to be used; limes and lemons are found in or near all our orchards, and multitudes of bees intermix the pollen of the different flowers.

Some worthless "hybrid" therefore might result from the use of native seed.

The seed of the orange must never be allowed to dry before planting. It may be most readily and cheaply obtained by buying a quantity of decaying Tahiti or Mexican fruit from some of the San Francisco commission-houses.

This fruit can be crushed in a tub or convenient receptacle and the seed washed out.

The sour orange of Florida is very hardy and is said to make an excellent stock. Seeds can be had from Florida packed in damp moss.

A quite small piece of ground suffices for a seed-bed; in a space say 12x12, thousands of young plants can be grown.

The ground should be thoroughly spaded, pulverized and moderately enriched with perfectly well-rotted manure. It should be located in a warm and sheltered spot, easily watered, preferably by sprinkling.

The bed should be inclosed with boards 16 or 18 inches high, set on edge, with a cloth covering arranged on a roller. Covering should be utilized to protect the young plants from the hot midday sun, and also at night, when the temperature is likely to fall near the frost point. The seed should be planted thickly and broadcast, and covered from one to two inches. The best season for planting is in the spring, after the ground has become well warmed and all danger from frost is over—about mid-April in Southern California. The ground should be kept constantly moist, but not too wet.

In a year the young plants will be ready for transplanting in nursery rows.

These rows should be far enough apart to admit of a cultivator working between them, say four feet; the plants may be set 15 or 18 inches apart in the rows. The nursery should be lightly manured yearly, and irrigated by running small streams on each side of each row once a month, from the time the plants are transplanted until the succeeding fall. The first three irrigations had better be made at intervals of a fortnight.

In the spring following the transplanting into the nursery, if everything has progressed favorably the young trees may be budded. The earlier the buds can be set after the sap flows freely and the bark of the young seedlings will "peel" readily, the better. These conditions will be quite certain to obtain early in April.

All nursery trees should be protected in winter by building a sufficient "staging" over them to support a good, thick covering of cypress or other evergreen brush, which brush should be securely laid on in such a manner as not to be easily displaced by wind.

Buds a year old (from the bud) and seedlings three years old (from the seed) may be placed in orchard form. Two-year-old buds—but no older—are preferable to one-year-old for this purpose. It is not desirable to plant any trees whose roots are over four years old.

Buds may be set at from 20 to 25 feet apart each way; seedlings from 25 to 30 feet apart. The earlier in the season nursery trees are moved into the orchard (after danger of serious frost is over) the better.

Trees will generally begin to put forth their first growth from the middle of February to the early part of March. When the young shoots of this growth have attained a length of about one inch, is in my judgment the best time for transplanting. Light subsequent frosts will not be injurious, and severe ones later in the season are rare in most parts of the State at all adapted to orange culture. The young trees should be taken up with as large a ball of earth as may be without danger of the earth breaking off and carrying with it the fibrous roots. For

this reason better have your nursery in somewhat tenacious soil. If moving with a ball be impracticable, be careful to preserve as many of the fibrous roots as possible in digging, and if the trees are to be moved any distance, "puddle" them at once on taking up, viz., have ready a thick muddy paste into which dip the roots, and have damp straw or moss in your wagon-bed to pack closely about them.

Have your holes ready dug of more than sufficient size. Previous to digging these, it will be best to run a furrow down your rows the way they will irrigate, and directly on the line the trees will stand.

Your trees being set in the holes on one of these lines, turn a small stream of water down the furrow. It will run in the holes and settle the earth solidly about the newly-planted tree, at the same time thoroughly wetting the ball of old earth, which it is important to do and cannot well be accomplished in any other way. If your trees have been moved without balls, care must be taken to spread out the roots; in either case the ends of the larger of these should be cut off smoothly with a sharp knife. Do not move your trees unless you are prepared to water them directly on planting. A delay of even one day in watering should be avoided.

I think it well to set the trees a little deeper than they stood in the nursery, but an inch, or even half an inch, is enough.

The young orchard should be irrigated fortnightly for three irrigations, subsequently once a month during the first season.

It will be sufficient for the first year to run one furrow each side of the trees, close to them, and allow a small stream to run by for 10 or 12 hours at each watering.

The second season less irrigation will be needed. The same number of furrows will answer, and it will be sufficient to water once every six weeks, or even two months.

For the third year about the same amount of water will be used as for the second.

Beyond this, as the trees increase in size, it will be found necessary to gradually increase the number of furrows between the rows, until eventually when the trees attain the age of 10 or 12 years and are producing good crops, your furrows should be run through the whole space at intervals of about three feet. The water should be run longer after the first season, from 2 to 24 hours, according to the nature of your soil as to porousness, after it has reached the end of each row. The amount of water needed for trees 12 years of age, in good bearing, will not be less than three times the quantity required by the same trees during their second and third years in the orchard.

I have hitherto spoken of but one way of irrigation, the best in my judgment for most conditions, viz., the method by small streams in furrows. Two others are, however, practiced. One of these methods is to run a considerable head of water broadcast down each several row, shifting it from one to another as soon as the stream has run through.

To use this method your ground ought to be quite level, or serious washing is likely to ensue, and your soil ought also to be of rather a porous character.

Another way is to divide your ground into "checks"—squares proportioned in size to that of the trees—with raised sides, the tree being in the center and the soil drawn up the trunk to prevent the water from coming in direct contact with the bark, which might cause "scalding."

These "checks" are connected by a furrow down which you run the water to fill them. Begin with the lowest "check"; close the furrow leading into it. The check next above will then fill, and so on to the top of the row.

This method is a good one, as it economizes water, and completely saves all fertilizing matter the water may contain.

It involves, however, considerable hand labor, though a good part of the work of making the "checks" can be done with the plow. In whatever way you irrigate, the ground should be thoroughly stirred as soon as dry enough, and before it has at all baked.

#### Pruning.

The heads of trees should be formed in the nursery at about three feet from the ground. The first season after placing in the orchard it may be well to let the sprouts that will form on the trunks remain as a protection from the hot sun. The next spring these should be removed, and thereafter all suckers and sprouts should be kept off. This may readily be done by going over the orchard and rubbing them off three times a year, say in May, July and September or October. Beyond this, little pruning will be required for several years. What is done should be confined to the removal of crossing limbs and the shortening of branches that project or "lop over" excessively. In the early years of bearing the lower limbs will produce well, but later will lose their usefulness, and the height of the trunk may gradually be raised by removing them. The inner twigs and small limbs that will die as the tree advances in age should be removed, and the interior of the tree kept sufficiently open to admit light and air freely. Very much lateral shortening in of the branches will be followed by a corresponding loss of fruit. If practiced on young trees, the period of bearing will be delayed (excessive pruning in any direction will have the same effect). If on older ones, the crop will be lessened. The orange bears for the most part on the outer part of the tree.

#### Fertilizing.

It is well to manure nursery stock in order to

obtain good thrifty trees to start with. An orange tree has remarkable vitality, but there is a vast difference—other things being equal—between the results to be obtained by planting an orchard with healthy, vigorous young trees, and poor and sickly ones. The latter will be found dear at any price.

After placing in the orchard, very little, if any, fertilizing is needed in any ordinarily good California soil until after the bearing age has been reached; after that time it will be found judicious, except on very fertile land, to apply a light dressing of manure once a year, preferably in the fall before the rains.

Sheep manure is excellent where it can be had. Common stable manure is good. If applied yearly, a good horse-load of sheep manure will answer to every 12 trees, one of stable manure to every six or eight. All manure should be applied broadcast.

Deep plowing in an orange orchard I consider to be of doubtful expedience. The orange is a surface feeder and fills the upper soil with fine roots. Too many of these are destroyed by deep plowing. Still, repeated irrigations followed by repeated cultivations at a uniform depth will, in many soils, cause a hardpan to form just below the point the cultivator reaches. In time this hardpan may become so hard that water will hardly penetrate it. At intervals, then, it may become necessary to break this crust, which may be done by deep plowing or running a subsoiler through the orchard, but it will be advisable to keep either tool at some distance from the trees to avoid injury to the main roots at least.

#### Protection from Frost.

It will be wise to provide some protection against frost for young trees, particularly buds, for the first two or three years in the orchard. Cypresslimbs may be arranged about the tree held at the base by mounding up the earth a little and by tying at the top and at one or two intermediate points with bale rope; or corn may be planted between the rows of trees and dry cornstalks be used in the same manner. The covering should be put on carefully and securely, but not so tightly as to smother the tree.

I have up to this point endeavored to give briefly an outline of the methods to be pursued in the planting and management of a young orange orchard, necessarily omitting many details. There are some other matters that remain to be considered before entering upon this branch of fruit-growing as a business.

As to varieties; as to general conditions essential to success; as to packing, markets and marketing.

The leading budded varieties now grown in California are in the order of their generally admitted excellence: 1st. The Riverside, or Washington, Navel; 2d. The Australian Navel; 3d. The Malta Blood; 4th. The Paper-rind St. Michael; 5th. The Mediterranean Sweet; 6th. The Large St. Michael; 7th. The Konah.

Besides these there are the fancy small varieties—the Tangerine and Mandler; also a considerable number of standard-size oranges, as the Acapulco, Chuchupilla, etc. There is also a new variety called the Rivers, which promises to be of value as a late orange. The Riverside Navel orange has repeatedly carried off the premium "for the best orange" at the annual California citrus fairs held at Riverside. It is everywhere admitted to be the best orange grown. It is seedless, high colored, sweet and a fine fruit in every respect. The only point that can be urged against it is that it is a rather early fruit and will not hang well on the trees much after March 1st. The tree is healthy and reasonably vigorous, but after bearing begins, its annual growth becomes retarded, and I believe it will never attain very great size.

At present this variety commands a price in the market very considerably above that of any other (except the Australian Navel and Malta Blood); this is probably caused in part by the limited supply. Recent plantings have been made very largely of this kind, and it is likely the margin in difference of price will diminish with increased production in future years.

Second on the list I have placed the Australian Navel, only because at present little discrimination as to price is shown in the market as between it and the Riverside Navel. It is later in ripening than the last named, but inferior in appearance. The tree is a thrifty, strong grower—one of the strongest among the buds—but an unreliable bearer. I would not recommend its propagation.

The Malta Blood is a fine orange, and on account of its high color, fine, smooth appearance and excellent flavor, brings about the same price as the Navel. The tree is of somewhat poor habit and lacks vigor. It bears well in my orchard, and elsewhere as far as I know.

I consider the Paper-rind St. Michael a very desirable orange. It is of small to medium size, from 300 down to 150 in a box (200 to 225 is the size in largest demand in the East), of rather pale color, very smooth, thin skin, uniformly round in shape, sweet, juicy and piquant in flavor, and an excellent carrier. It hangs well and can be shipped as late as June, and even July 1st, to advantage. The tree is a strong grower and a heavy, regular bearer in every locality that I know of, and is one of the few kinds that will carry a heavy crop and at the same time make a good wood growth.

The Mediterranean Sweet is valuable as a good to heavy bearer as well as for being not only a good orange, but the latest-keeping one we have (save perhaps the Rivers, of which

I have spoken). The quality is a little irregular, in some years being finer than in others. The fruit is generally of high color, good shape and flavor, of medium thickness of skin, and contains very few seeds. It reaches its prime here in May or June, after other kinds, excepting the Paper-rind St. Michael and Rivers, are getting overripe, and is a good shipping orange all summer. The tree is of bushy habit, needing more lateral pruning and more removal of lower limbs than other kinds to force it to something of tree form. The large St. Michael is a good orange, but has no special merit.

Some Florida varieties have been fruited at Riverside and elsewhere, notably the Homosassa and Magnum Bonum. These ranked a few years ago as the leading kinds in Florida. In California they have no special qualities to recommend them, and could hardly be distinguished from seedlings grown here.

Other Florida varieties are now being introduced—the Pineapple and Parson Brown among them—kinds very highly esteemed in Florida, but whether likely to be of equal value here may be doubted, judging from our experience with the Homosassa and Magnum Bonum. I should hesitate to plant largely of them to the exclusion of our own tested standard kinds.

To sum up, in setting out a budded orchard to-day, I should plant Riverside Navels, Malta Bloods, Paper-rind St. Michaels and Mediterranean Sweets in about equal proportions. I would not plant Navels exclusively, for two reasons: First, they have been very largely planted of late; and second, they must be marketed comparatively early in the season.

There has been considerable discussion in the past as to the relative value of seedling and budded orchards, and the partisans of the seedling side of the question still maintain their position. They urge that the seedling makes a larger, finer and longer lived tree; that it is much hardier and will endure a much lower temperature than the bud; that it is a prolific bearer; that though the market price of its fruit is below that of some of the budded varieties, the much greater yield in a given number of years will much more than offset the difference; and finally, that many pronounce its fruit of as fine, if not of a more delicate, flavor than that of any of the budded kinds.

On the other hand, it is urged that buds bear earlier; that the fruit is more uniform in appearance and quality; that it sells at a higher price; and finally, that it ships better.

There is truth in all these arguments pro and con. The tendency is undoubtedly in favor of setting out budded orchards, and rightly so, I think. The seedling orange ripens early in the season and ships well until about May 1st; it then begins to lose its firmness, becomes over-ripe and often "puffy," and is liable to considerable shrinkage in shipping long distances. This is the main objection to the seedling fruit; but as there is likely to be no very considerable number of seedling trees planted in future, the supply of this fruit will probably always be in demand for the earlier shipments, and I consider a good-bearing seedling orchard of equal value with any orange property.

#### General Conditions Necessary for Success.

The first of these is a suitable soil and location. Nearly all soils that will grow fair crops of any kind will support the orange. The red soil of the mesas and foothills has proved one of the best. A rich, sandy loam is perhaps quite as good.

It is desirable to consider the working quality of the land, and to avoid, on the one hand, that which is too stiff as likely to bake, unless worked at precisely such a time; and, on the other, that which is too light and porous as requiring too much water and fertilization.

It will be well to examine the subsoil. Lime hardpan is not particularly objectionable, the main fault to be found with it being that it is almost impervious to water, and if within a moderate depth from the surface, your ground will soon dry out and frequent irrigation be necessary. Other hardpans ought to be avoided. Your soil should be well drained and no surface water found nearer the surface than 16 feet. Groves in Florida planted on land with water near the surface are said to be subject to "die back."

There should be a moderate slope to your land to allow of easy irrigation; avoid too much, as running water will wash it or put you to considerable expense to avoid this result. Six inches in 100 feet is slope enough; less will answer. One foot in 100 ought not to be exceeded, viz.: if you expect to irrigate in furrows.

By using checks you can manage side hills of considerable slant, as well as quite level land (by running water enough). On level land you can also use the flooding system.

Your location must be free from killing frosts. I should condemn any spot as unsuitable for orange culture where ice forms once or more in the majority of winters much over one-fourth of an inch in thickness. I remember last winter, after the great Florida freeze, that some cranks down there published an article the drift of which was that the cold snap was rather a good thing, and that by a succession of such the orange might gradually be brought to become a hardy deciduous tree, losing its leaves every winter and coming out in the spring refreshed by its winter rest. This article was copied in all seriousness by some of our leading California papers, and thus given a wide circulation, it is to be hoped to no one's loss. No idea could be more fallacious or mischievous if innocent people be led to act upon it.

Granting that by some process of acclimatiza-



tion a semi-tropical evergreen could be transformed into a deciduous tree of the temperate zones, what would become of the fruit meanwhile? As it is, the fruit of the orange will perish, and must always do so, under a degree of cold much less than will cause any permanent, if indeed hardly any injurious effect whatever on the tree itself. Once I have seen in Southern California a large part of the crop quite ruined by frost while the trees themselves showed hardly a trace of its effect.

Remember this fact, that your climate must not only be free enough from frost to grow the orange tree, but it must also not be cold enough to freeze the fruit. One night in a winter will do it. Do not plant orange trees where ice half an inch thick is known, as a general rule, to form once in a winter. Besides having a location secure from liability to freezing cold, you must select one that enjoys a sufficient degree of heat. The climate of California in the neighborhood of the coast is for this reason unsuitable for orange culture. Water is an essential that I do not think can be dispensed with anywhere in this State in cultivating the orange for profit. Without it you may be able to get some kind of a tree and perhaps some fruit of some kind, but you will, in my judgment, never pay the expenses of working your grove.

Remember that the orange tree, with its dense foliage and heavy crop of fruit which it requires almost the whole year to mature, is constantly drawing heavily on the soil for water. In spring you will find the soil of a deciduous orchard full of moisture containing all, or nearly all, that has fallen during the winter; but in the orange grove a great part of the rainfall at a corresponding time has already been drawn upon by the tree.

The deciduous tree ripens its fruit in comparatively a short season, most kinds before the hottest summer weather. In August and September the orange is drawing most heavily upon the soil to supply the water it must have to develop the fruit. Many localities in Southern California produce the finest crops of deciduous fruits and of grapes without irrigation, and this on dry mesa lands. But nowhere that I know of can a profitable crop of oranges be grown without irrigation. How much water is needed is a question whose answer must indeed vary as to conditions of soil, rainfall, etc. For a bearing orchard I should place the safe minimum of supply at one inch per 10 acres. This, where there is an annual rainfall of 15 inches or more, and your soil is not of too porous a character. I should place the necessary maximum at not less than one inch to five acres; this, where the annual rainfall is under 10 inches and in the hot, dry air remote from the coast.

In speaking of an inch, the quantity produced by a stream flowing constantly through an aperture 1 inch square for the 365 days of the year under a mean pressure of 4 inches, is meant. But it must be borne in mind that this water cannot be used pro rata through the year, but that almost all of it will be required in the six months from April 1 to October 1. If you have not reservoirs to store up the waste winter flow, the figures I have given should be doubled. Successful orange-growing requires intelligent and constant care and watchfulness. The introduction of insect pests must be guarded against. If you obtain your young trees otherwise than by growing them yourself, take care that you do not buy with them the red or cottony cushion scale. If you should discover either of these pests in your orchard, confined to a few trees, use no half-way measures, but burn the infected trees where they stand. If either of these scales becomes scattered through the orchard, you must then make up your mind to wage a systematic warfare upon them. By spraying your trees three times a year you will be able to keep them well in subjection; but so far as present experience goes to show, you can hardly hope to exterminate them.

Mr. Bettner closed his essay with suggestions concerning marketing of oranges which will be published in full in the Report of the State Board.

#### The Discussion.

Mr. Hatch, of Solano: It seems to me that this question of the growing of oranges should especially interest the people of this part of the country, as they surprised themselves last year and intend to do it again at the Citrus Fair next month; doing so much better than they supposed was possible for them to do, they waked up to the fact that it was possible for them to produce oranges in this and in many parts of Northern California.

Mr. Wilcox, of Santa Clara: It is true the California orange was exhibited at the World's Fair and there took the highest premium; but there was no fruit of this kind that was so exhibited that was free from insect pests. It is not strictly true that the orange will not grow north of a certain thermal line. I recollect of reading in the history of the sugar-cane nearly 30 years ago, in *Harper's*, the statement that the sugar-cane grown on the Mississippi river was taken there from the West Indies. There is no doubt that a tree grown in a very hot climate where the weather is extremely warm will suffer greatly when it becomes extremely cold; yet I believe the orange will grow north of Riverside. In Los Gatos, in my county, you can see the orange tree and the oak shake hands across the street; oranges have been grown there for 20 years. You will see now on the trees some green, some ripe. I am bound in a candid spirit to say that there is something in this acclimating of trees so that they may be grown further north than is stated. It is true that in Florida the cold destroy-

ed their trees and the crop; that only proves that those trees had been accustomed to a very hot climate, though all the evidence we have got here in the last five or ten years shows that the orange bud will not freeze at the degree of temperature that it was formerly supposed it would.

Mr. Hatch: In reference to acclimating of trees, it has been found that in planting there has been more success in a colder climate than in the climate from which that seed came. I have found that so in almonds. I take the seed and plant them, and the trees that grow from those seeds are more sure to raise their crops than the parent tree; so might it work even with trees not deciduous, that trees which grow from the seeds would stand more frost than the tree from which the seed was taken.

Mr. Milton Thomas, of Los Angeles: I do not think it is absolutely necessary, where there is good, strong, rich soil, to irrigate orange trees until they come to bearing. I refer to Dr. O. H. Conger, of Pasadena, who raises very fine oranges on mesa land, some 60 feet to water. He did not irrigate his orchard for many years. He only irrigated a little, and for some four or five years he did not irrigate at all. About the time they commenced to bear, then he irrigated once or twice a year. I think the principal thing in orange culture is how to cultivate. I remember a man in Pasadena five or six years ago who planted his trees, plowed his land and never irrigated at all, and the second year he obtained fruit from them; and I think if you plow deep and cultivate thoroughly they will need but very little irrigation until they commence to bear. It is the same with all other kinds of fruit. I am opposed to irrigation, although I have irrigated. The trees I planted last spring I do not irrigate at all. One thing I want to criticize in regard to the Riverside name of oranges. Suppose Sacramento, a few years ago, sent to Washington to obtain a few buds. You might just as well call it Sacramento or Red Bluff, or any other place. The proper name for that orange is the Washington Navel, and that gentleman wants to tack on the name Riverside. I do not approve it and do not believe there is one that does outside of that place.

Mr. Klee: I suppose that Mr. Bettner's remarks on the subject of irrigation of the orange were written from a Riverside standpoint. The rainfall varies so much all over the State that it is almost impossible to lay down any rule as to how much we shall irrigate. There is a fact well known to a good many, I think, that orange trees have been growing without irrigation in a number of places in this State. Your attention has been called to a certain orange orchard at Los Gatos; I think the one to which Mr. Wilcox referred is the only one of any size in that section of the country. I have visited that orange orchard once or twice, and I know from my personal knowledge that it never received any irrigation until it came into bearing; whether it has received any since or not I do not know. The trees are growing on rolling land, on rather a stiff soil on some hills above Los Gatos. I think there is something like 15 acres of them, and they have been thoroughly cultivated; the trees are good-sized and very healthy in their appearance. I think that last year they bore quite considerable of a crop, and in fact they must be considered quite a success for that section of the country.

#### Irrigation and Fertilization.

Mr. A. S. Chapman, of Los Angeles: On our ranch near San Gabriel we mix sheep manure and run it in with the water on our trees. There is considerable fall to our land and plenty of water, and the water is run into basins which are arranged around the trees so that when the basins are full we have from 6 to 12 inches of water in them. As to cultivation, I do not plow all summer; but I plow in the winter and spring after the growth is somewhat matured.

Mr. Cooper: I should like to ask Mr. Chapman whether he thinks it is necessary to irrigate?

Mr. Chapman: It is absolutely necessary to irrigate on our land; ours is gravelly soil. We could not begin to irrigate in the way that Mr. Bettner does—running water in a furrow; that would require less water, but he would find that a sufficient flow of water would wash the soil away, and a small stream would run right into the ground like a sieve; so it becomes necessary to irrigate with a large head of water. If my soil was very sandy and I would run clear water on it, it is my idea that I would wash away clear beyond the reach of the plant; so I think that the system that is pursued in Riverside would be detrimental.

Mr. Cooper: Do I understand you that you make a sort of an emulsion of sheep manure and water?

Mr. Chapman: Yes, sir.

Mr. Cooper: You make a basin throughout the orchard?

Mr. Chapman: Every tree has its basin. The stream runs right in the middle of the rows, each way, and the basins are filled from this stream. Plowing as I do, I believe that a hardpan will never form. I have observed an orchard where they plow after every irrigation and a hardpan has formed there, and I have seen an orchard next to it where the owner would let the weeds grow and plow only occasionally. There the trees are more healthy than where they took so much care to keep the orchard perfectly clean. This is a question that we have discussed at great length. My idea is that you have to supply the vegetable matter

to the soil. It is a well-known fact with soil that has been cultivated for several years, that if you then wet it, it will run to rock; that is my idea of what produces a hardpan, and I know of no other reason.

Mr. B. M. Le Long, of Los Angeles: Mr. Chapman spoke of an orchard that is never cultivated as Mr. Bettner recommends, but where the weeds are allowed to grow for awhile. I know this to be a fact; two years ago it produced a larger crop than any in its neighborhood, and the reason is that the land became better fertilized than any of the others. Now, I know another orchard next to Governor Stoneman's that produced absolutely nothing; the growth of the trees was checked. The result was, that there was comparatively no vegetation whatever. Mr. Graves manured it heavily and did so for four years. Last year the trees that once were stunted and small have made a very large growth, and there were about 2200 boxes taken off of 1200 trees. This year there were over 5000 boxes from those same trees, and it is now considered the healthiest orchard in San Gabriel valley. One thing about Riverside: Riverside has a different kind of a soil. In one part it is hard, in other parts it is gravelly, and in other parts it is of a sandy loam. They run a furrow that the water flows down, and by the time that they get to the end, the trees at the end get too much water. The others do not get enough. The plan adopted by Mr. Chapman at San Gabriel seems to work better because each tree appears to get just so much. The water being conducted to this basin, it gets so much and with the fertilizer at the same time. Another thing, the water will also carry soil from the head of the orchard to the lower end. I know of one instance in this Graves orchard in San Gabriel, where the trees were buried at the lower end for four feet. When this was stopped it was necessary to clear away this soil right under the tree; because they were covered with soil they would not grow. They were dying, and those trees are the only ones that show any difference in appearance on account of this moving of the soil. Now you plant a small orchard. For 4 or 5 years it grows very nicely. The roots seem to be very healthy, and it takes up so much moisture from the ground, it does not require so much fertilization nor so much irrigation; but when it is grown up these roots get up into a solid mass, and you can plow only in the center of the row when they are planted 24 feet apart. In Riverside they trim the tree very high and plant right up to the trunk of the tree, and that cuts all these little fibrous roots, and the tree loses strength in a short time by taking them away. In San Gabriel they leave their limbs right close to the ground. In irrigating them in basins after the tree gets so much, they use a fork under the tree instead of hoeing them. The trees are never plowed near the trunk (I do not believe they are plowed nearer than four feet), and in that way they require less irrigation; that is, the limbs reaching down close to the ground keep the soil moist, and they require less irrigation and look better than any others there. Where they plow near the tree and the limbs run up high, the sun bakes the ground, the roots will plow up and the tree suffers, and wherever the orchard is raised in that way you will see yellow trees.

Gen. M. J. Vallejo, of Sonoma: Nearly 50 years ago I planted in the Sonoma valley the first trees that were raised in this State, from seeds that were brought from Acapulco, and succeeded in getting about 15 or 20 trees. I planted them at my residence near the old plaza. For four years they were very small; I then transplanted them. At nine years old the trunk was about three inches thick and they commenced to bear nice and very sweet fruit; I do not say better than from other localities, but very fine oranges, for which I have had premiums awarded at fairs in Marysville, San Jose, Sonoma valley and San Francisco. For nine years the trees growing slowly, the main root grew deep and several branches quite thick like wood, but after nine years they began to create a kind of a blanket of roots, which was very thick. Before that you do not need any irrigation. After they begin to get so very thick it is necessary to dig and clean away and cut out that mass of small roots, and then you begin to put some water there. I have had experience for years; I have some 200 or 300 trees that I planted for experiment so as to get an idea of what we can grow in this section of the country. In our localities here in the north our climate is good enough in general, but not so even as San Diego and the more tropical regions where they make a business of oranges. I think it would be better for us to let them have their oranges there, and plant other kind of trees.

Mr. Shinn: The claim has been and is made by the growers in the northern part of the State that they cannot grow the citrus fruits, as it is said it would not do to attempt to grow oranges where there may be ice once during the winter half an inch thick. I suspect, as Mr. Wilcox said, that the general climate of a country has much to do with that question. We know that in Florida last year, and about every 10 or 15 years, they have a very severe winter, with ice half an inch thick, or perhaps more, that destroys the trees almost entirely. That is probably because during the remainder of the year the climate is so warm that the tree is too tender and not prepared to resist a frost. In Alameda county, where I reside, some 15 years ago I planted some orange trees. They were from Tahiti, and after they grew to be several years of age some of them were grafted and budded with several varieties from Riverside,

Washington Navel as well as others, and they have been exposed to all the frost we have had there. The location is some three or four miles from San Francisco bay, and about 30 miles from that city, and at an elevation of not more than 15 or 20 feet above the bay. The frost has never injured them; they would be green and bright all along, and many of them have borne fruit for four or five years, yet I have seen frost and ice in my water troughs a good deal nearer an inch than a half an inch more than one winter. I suspect that where trees grow in a climate that is not so extremely warm all the year round they are better prepared to stand more frost in winter. I had one year some seedling orange trees that were growing very rapidly and grew very thick, and we had a very sudden frost, and while it did not affect the other trees I have been speaking of, it cut the tops off of these seedling trees, I think because they had a very rapid growth.

Mr. Le Long: I want to say one word more. Some people take and cultivate trees, irrigate them and keep on irrigating them all through the fall, but very little is done all through the spring and summer. In that way the tree is forced out in the fall and certainly does not thrive so well. In regard to the variety, Mr. Bettner refers to several varieties there; now I have been very well posted in regard to varieties and those that stood the highest test and those that stood the best in the market and stand more transportation, and I would not recommend anything more than the Washington Navel and Mediterranean Sweet. The Washington Navel is what Mr. Bettner refers to as the Riverside Navel; there is no such thing as the Riverside Navel. The Valencia late, though next to the Washington Navel, is not considered much, because the tree does not come into bearing soon enough. The Homosassa, I simply refer to that as another orange, if a person desires to set out other varieties; the Malta Blood there are several varieties of; the Satsuma is an early orange, it will ripen in November; is ripe now. There is one man who has grown it extensively. The Tangrine, you all know, I would not plant them myself nor would not advise them to be planted. They are dwarfs; if a person wants a dwarf, they are the trees to plant.

Mr. Peck, of Placer county: In regard to this question of irrigation, I think it all depends upon location and soil, and while we may learn from each other, we have got to depend upon our own judgment and experience in growing oranges as well as all other kinds of trees. The first orange that ever ripened in Placer county, ripened upon my place. I planted the seed in the fall of 1861, never expecting to hear from it again. I gathered fruit from it in 1872 and every year since. It has had plenty of irrigation, and the frost has never harmed that tree yet. I have never protected them from the frost, in Placer county.

Mr. W. H. Aiken, of Santa Clara county: There is one matter in connection with orange-growing that I have some knowledge of; the orange orchard at Los Gatos in Santa Clara county is very peculiarly situated; it is in the mouth of a canyon where the air never rests, there is a continual draft, and frosts of course cannot settle at all. Very often it is not the latitude nor the longitude, but it is the peculiar location which affects temperature. The characteristics of location, the soil and the climate must be considered.

Mr. Hatch: The same rule which Mr. Aiken has just mentioned, holds good in the beautiful South. I remember of being there three years ago last March, when in many localities they were digging up their lime hedges, their lemon trees had been killed by frost; in other special spots it was not so and the lime trees were all right, their lemon trees were all right, and their orange trees; but in the majority of places in the beautiful sunny South that year their oranges were caught, and their lemon and lime trees were dying or dead.

Mr. Peck: I want to say a word about the frost. I came to California and lived for awhile in Los Angeles, that beautiful city, and in the month of December, 1855, I saw as thick ice in Los Angeles as I have ever seen in the town of Ophir, Placer county.

Gen. Vallejo: The gentleman spoke a moment ago of Santa Cruz. I was born 15 miles from Santa Cruz, and I have been in California 79 years, and have been in every locality from San Diego to Shasta. I have studied every ravine, every river, every lake, and I am familiar with the climate. I have had experience in my place in Sonoma over 50 years, and I tell you if you get good soil not exposed too much to the north wind, only sheltered a little bit, they grow everywhere. Perhaps on the flats they will not do very well where wind strikes them, but I have lemons on my little place equal to those they grow anywhere, and oranges as sweet as any.

Mr. Le Long: I do not believe that any of us deny that we have had frost in Los Angeles; but there are parts of Los Angeles county where there has never been frost. There is also a difference in the soil. There seems to be a difference at the lower part of the valley; for instance at Duarte, in Los Angeles county, there is no frost, and then you see some frost down the valley toward Colton. It is the same way in the San Luis Obispo valley. You see frost in some places every year. I have seen one orchard where the trees on one part of the orchard were planted on high ground and the trees of another part planted on lower ground. Those planted on the lower ground are subject to frost mostly every year, and so throughout



the county. In reference to protecting the trees from frost, I believe that it is essential to treat the tree so that it will stand through the winter—that is, cultivate it through the spring and summer. In the fall and winter do not do it, but simply cultivate them with a fork. If you cultivate them spring, summer, winter and fall, you will have new shoots that cannot bear the cold. There are also winds. Once in awhile we have a wind; of course we do not have much of it, though at Riverside they do—a wind that takes the leaves off of the young shoots. If you take the leaves off, it may make them die back.

Mr. G. M. Gray: I do not know anything about raising oranges, but I want some one to say a word for Oroville; there they are raising very fine oranges with very little irrigation; they are on high ground and not troubled with frost, and, as the last speaker said, the frost settles on the lower ground.

Mr. Williamson, of Sacramento: The facts stated by Mr. Hatch are true—that there are certain parts of Los Angeles where it is unsafe to grow them, and there are other places where it is quite safe to grow them. As to Oroville, I do not live there, though I have been there frequently, and I have been all over the southern counties and at Riverside, and I have never seen a grander success of finer oranges than I have seen at Oroville. So in Placer county and all our foothills here for a distance of 300 miles, at an altitude of 600 to 1200 feet oranges can be grown successfully on the right land. As to irrigation, I have had little experience with the orange tree, but I know at our orange orchard, at Penryn, I have killed some trees by irrigating them too much, and I tried others without irrigation. I find my experience is that an orange tree wants a deep, loose, rich, kind soil, and if you want to get the best results you want to give it a moderate amount of moisture, but not too much. As to the name: I understand that there are two Navel oranges cultivated in this State; one came from Australia, afterward another came from the city of Washington, sent out here by the Department of Agriculture; hence the name Washington Navel, and that one coming from Washington is the superior of the two in quality and size and bears larger crops than the other.

#### Hunting Trophies at the London Exhibition.

An agreeable feature of the American Exhibition in London (May to October, 1887) will be the loan collection of American hunting trophies contributed by English gentlemen as an evidence of friendly interest. As generally known, there are large numbers of fine heads of the larger American game animals and many specimens of birds in England, in the hands of sportsmen who have hunted in the Rocky mountains and other parts of America.

A committee of these Nimrods has undertaken to secure and take charge of a loan exhibit of these trophies, and a collection has been secured that will probably prove the finest ever brought together.

The movement is in the hands of the following gentlemen: Gerald Buxton, Esq., Knighton, Buckhurst Hill; E. N. Buxton, Esq., M. P., chairman London School Board; A. Penardarves Vivian, Esq., James street, Buckingham Gate; H. Seton Karr, Esq., M. P., No. 11 Queen's Gardens; Moreton Frewen, Esq., M. P., No. 19 Chapel street, Mayfair; W. Baillie Grohman, Esq., Belgrave Mansions, S. W.; and J. E. Harting, Esq., Natural History Museum, South Kensington.

These gentlemen have issued a circular letter asking for contributions, in which they express the hope that the collection may be enriched by fine examples from this country. American sportsmen willing to loan their trophies can obtain further information by addressing Burnet Landreth, Esq., United States Director American Exhibition, No. 702 Chestnut street, Philadelphia, Pa.

#### Orange-Cleaner in Chicago.

Fortunately California oranges do not all require cleaning, for their pure, bright color is everything that could be desired; but there are some who have to market smutty fruit or else polish off the fungus. On some accounts, no doubt, it will be better to subject such fruits to treatment after shipment overland, and we note with interest the introduction of adequate cleaning contrivances in Eastern fruit houses. Amory Bigelow, jobber and commission merchant at 105 South Water St., Chicago, writes us that he has had constructed in his storehouse an improved apparatus for cleaning smutty oranges and lemons the coming season. He claims that it does the work effectually, without the least injury to the keeping quality of the fruit, and will add fully one dollar per box to its market value. This cleaner has a capacity for treating two carloads per day, and the fruit may be shipped in bulk or barrels (as is done with a great deal of that from Florida), which is a considerable saving in freight, and the consignee supplies the boxes at 15 cents each, and the grading and packing are done by expert hands in his employ.

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#### A New Railroad Era in California.

There is just at this time a most unusual degree of activity in railroad building in this State. At no time since the completion of the Southern overland line has there been such an unwonted degree of activity. Railroads are being constructed in both the northern and southern sections of the State, and in the central coast portion as well. Many roads are also in active contemplation. It is estimated that during the present and next two years fully 30 per cent will be added to the total mileage of the State. These improvements will also add vastly to the value of property. The Southern Pacific is especially active in this work, not only in its own proper locality, but in the northern counties as well.

There is now a gap of only 90 miles between the Oregon and California lines of road, and a heavy force is actively engaged in closing up this space; but as the work is very heavy it is expected that about 18 months will be required to make the connection—after which time the iron horse will have full sweep from San Diego to the Columbia. In the mean time the Southern Pacific Coast line is being rapidly extended southward from Soledad via San Luis Obispo, Santa Barbara and Ventura, and thence eastward to Newhall on the present line of road. About 90 miles of this road has already been completed since work was commenced upon it in July last. This road will fork at San Miguel, the eastern branch starting from San Miguel will push its way eastward over the Coast Range into Kern county and strike the main southern road at Lerdo. Crossing that, it will pass on still further to the eastward and open up the rich agricultural country to the north and east of Bakersfield.

These roads, both north and south, will open up to convenient and rapid communication immense regions of country, which have hitherto been of little value on account of their isolated conditions. All this land will be fully or more than doubled in value by this improvement. The road from Soledad and its eastern branch will be about 360 miles in length.

Still other roads are projected in this central portion of the State—the San Joaquin valley. A road 145 miles in length will be started and probably completed during the coming year along the west side of the San Joaquin valley, from Tracy, on the main line, southward to Huron, in Fresno county, at or near which point it will again connect with the main line. This branch will develop a valuable grain country. Another road will be constructed on the east side of the main road, and paralleling the same for a distance of 30 or 40 miles. Several other feeders are in contemplation in that region running to and skirting along the foothills. It is the determination of the railroad people to open up the entire San Joaquin valley to good railroad facilities.

Other roads have also been projected and independent companies organized to construct needed railroads in Solano, Colusa and Lake counties. One of these roads will reach the timber regions of Mendocino county; Humboldt county will also soon be placed in railroad communication with the rest of the State, and Klamath, Tehama, Modoc and Lassen counties all come within the scope of projected railroads.

Los Angeles county is especially active in railroad extensions and new lines. The Atchison & Topeka road has entered upon quite an extensive line reaching from their main line at San Bernardino to the sea coast, via the San Gabriel valley and Los Angeles. The coast will be reached at the new harbor now in process of construction at La Ballona. Another road will be built in another year for Colton via Riverside, the Temescal mountains to Anaheim. The Anaheim road will be extended at an early day along the coast to San Diego. It is estimated that at least 1000 miles of new road will be built in California within the next three years. The railroad people evidently see good times ahead in the near future, for this State, and are determined to be ready to do the increased business of transportation which is sure to come. In their improvements not less than \$20,000,000 will be distributed in California alone for railroad material and labor—itsself a bonanza for the State.

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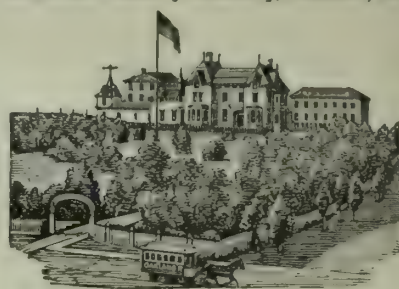
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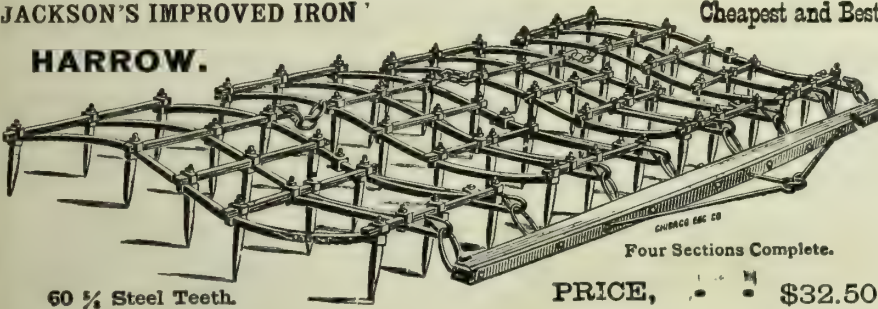
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Beats anything of its kind yet invented,  
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This Harrow was introduced to the farmers of the Pacific Coast, during the season of 1881. Since then, hundreds have been sold, giving entire satisfaction. I have made the malleable iron clamps heavier, and strengthened them, making this the **Best Iron Harrow**. The frame is indestructible, made entirely of iron and locked firmly together by the teeth passing through malleable iron clamps, and having screw-threaded shanks on their upper ends, which bolt the frame-work securely together. This mode of constructing a harrow frame dispenses with drilling or punching holes, thereby securing much greater strength and durability. **It is indestructible. No shrinking, swelling and rotting of frame-work.** It is constructed in narrow sections, each acting independently; will adapt itself to any uneven surface of the ground, and will cut the soil better and more evenly than any other Harrow. Constructed on correct mechanical principles; each section has a center draft, and each tooth cuts a separate track. No one tooth in line with another. The safety-hook prevents unhooking when turning round. Four different sizes to suit customers. **STRONGEST AND BEST HARROW MADE!**

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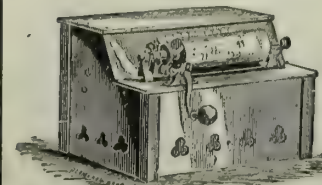
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It plays the songs of England, Ireland, Germany and France.  
For Church or Social Meetings, for a Concert or a Dance.  
'White Wings,' 'The Quilting Party,' 'Climbing up the Golden Stairs,'  
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It makes a pretty ornament, although it is no toy,  
And the music it produces is a never-failing joy.  
No paper strips are needed and the tones are full and sweet.  
For the Rollers are all perfect and the parts are all complete.  
The most renowned Musicians who have tried them all protest  
That "The Roller Organ" is beyond comparison THE BEST.

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## POULTRY YARD.

## Notes on Care of Fowls.

"Robin Railroad" continues his notes on raising chickens in the Los Angeles Mirror as follows:

I know of no better way to show new beginners how to care for their young poultry than to give them a little of my experience. I raised 200 one fall, winter and spring, when I divided my time between them and my vineyard and orchard, and I certainly could have raised 100 more if I had had the spare time. I did it thusly: I made a dozen nest boxes of inch boards, about a foot square and a foot high, roofed like a house, with back gable closed up so that the rain could not blow in on the setting hens; left the front open half way down so that the hen could get in and out easily, so as not to break her eggs by jumping down on them; put in bottom of nest a gallon of dirt, hollowed into a good nest, and covered with straw. I put 13 eggs in when I found a hen wanted to set. At night I took up the nest gently and set it outside the poultry yard, and that prevented the other hens from molesting the setting hen. I made this a standing rule, because the other hens will be most sure to lay in with the setting hen, if it is a possible thing. I gave those setting all the corn and water they would eat, because corn is the best feed to keep up the heat of the setting hen, which will enable her to hatch 24 hours sooner than a hen half-fed on poor diet, and her chicks are much stouter than those of a hen half cared for. I found out by experience that there were two advantages in doing this in the fall, winter and early spring instead of summer. The chicks will thrive and grow faster than they will in the hot weather in summer-time, and next fall, when eggs are the best price of all the year, my early pullets would be in full laying. In the winter-time I was not troubled with vermin. Water is death on hen lice; so is kerosene oil; so is sulphur or grease. In the summer-time, when I undertook to raise chicks, I did just as I have stated here, but I watched the nest closely, and if I saw signs of vermin on the eggs or hen I got a new nest, washed the eggs in warm water and put them in the new nest, after wiping them dry with a cloth, set the new nest where the old one sat, and threw the old one into water, which in a day or so cleansed it of vermin and their eggs. The nests being exactly alike, I found no difficulty in getting the hen to set in the new nest just the same as she had in the first one. I have done this thing twice before the hen would hatch, but her chicks came out all right. But I have been defeated at other times. The vermin sucked so much of the blood and life out of the poor hen that the setting fever was all gone and she would leave the nest and quit clucking.

To take good care of the chicks after they were hatched was the next thing in order. To do this I built a dozen makee coops, after this fashion: I took four boards, two feet long and one wide, nailed two of them together with a lath, put the top together at right angles, and nailed them tight, sided up the back part with shakes or thin boards, so the rain could not blow on the young chicks; nailed on these laths in front and next to the ground, far enough apart for the chicks to pass in and out till they were as large as quail, and from then up made it as tight as I could, so that rain would not blow in from that side. I had one awful long fight with rats, polecats and skunks about that time. Killed 33 polecats and four skunks, but the rats were too many for me and I fought them in another way. I took two boards, a foot wide each, and sawed them off about one inch shorter than the coop was long, and over this I placed the coop, which answered two purposes; the ends of the coop extended over the floor; so that if it rained ever so hard the water dripped on the ground and the floor kept dry. I set up a board in front as high as the open slats, and that kept out rats and polecats. After I had devised that little floor business I lost no more chicks by rats or polecats. If I wanted to let the hen scratch and flutter in the dust, I raised the coop just a little and walked her off on the ground, and then washed off the floor, and at night walked her back again, and thus I kept the coop sweet and clean, which is very necessary for the health of the chicks. When a hen hatched I put her into a coop and kept her there for six weeks. Then she couldn't draggle her chicks in the wet alfalfa, and her chicks never had the "gapes." This looks to me at first like sacrificing a hen, but it didn't do any such thing.

The best feed I found for chicks is milk curd mixed with scalded crushed corn or barley. Next to that is cornbread crumbs; but as soon as the chicks are big enough to eat wheat they need no other feed, besides that which they find in vineyard or orchard. I never put my chicks in the poultry yard till they were big enough to roost in the trees, but set their coops near the house so that we could care for them easily.

I made it a rule never to keep a hen till she is two years old, except for setting hens. We could see when hens were gentle and kind to little chicks the first time they brought off a brood, and those hens we kept; but the ill-natured, fighting hens went to market. A hen does her best laying the first year and a quarter of her life, as a general thing, so I found it to my advantage never to sell any pullets; but

young roosters and last year's hens go as soon as they are fit for market. It may seem rather expensive to prepare so many nests and coops, and yet it is not, for they will last many years if taken care of when not in use. When prepared in this way with plenty of nests and coops, new beginners will save themselves a great deal of trouble in caring for their young chicks early on dewy mornings or when it rains. Where my lady friends have a large run for their fowls, and when they can keep more than four dozen hens, they will be obliged to prepare more nests and coops than I used.

**DURING DOGS WITH A HUMBLED HARE.**—There has been some talk among owners of greyhounds in the vicinity, says the Record-Union, about procuring one of the imitation hares recently used so successfully at the Bay, and having some dog-races at Agricultural Park. The "bogus hare" is described as a new contrivance, got up to swindle honest dogs and amuse sporting men. A long wire is stretched across a field, to which is fastened a stuffed hare, with a wiggle attachment for a tail, and a propelling power, by means of another wire and windlass, that snatches the little deception over the course with the velocity of the wind. Perched upon the springy wire, the dummy takes the natural jump of a live hare, and deceives the dogs. When everything is in readiness the dogs are allowed to sight what they suppose is a live hare; the word is given and the race begins. The speed of the dummy is too great for the dogs, but the one that passes first under the wire drawn across the track, at the close, wins the race. Old coursing men claim that while there is lots of fun it will ruin the dogs for genuine coursing; but there is little danger from one or two trials of speed, and they are very interesting, as the dogs run a quarter of a mile at a terrific gait.

**CAPPING ARTESIAN WELLS.**—In charging the grand jury at San Jose on the 29th ult., Judge Belden said: There is a law on the statute-books intended to prevent the waste of artesian waters. It requires that wells be capped and defines waste. In a large measure the law is obeyed, most of those who have such wells having conformed to its requirements. Some, however, do not obey it, and those who do respect the law are thus partially thwarted in their purpose of preventing waste. No man desires to invite the ill-will of his neighbors, and hence those who obey the law are slow to lay information against those who infract it, feeling a delicacy as to presenting such matters to the attention of the court. The actions of the grand jury are secret, and therefore the matter may be handled without embarrassment. The law should operate uniformly, if at all. The jury may proceed by information or indictment—a summary process that is not to be commended—or it may recommend that the district attorney take such action as will constrain obedience to the law.

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Are a bitter or bad taste in mouth, pain in the back, sides or joints, often mistaken for Rheumatism; sour stomach, loss of appetite, bowels alternately costive and lax, headache; loss of memory, with a painful sensation of having failed to do something which ought to have been done; debility, low spirits, a thick yellow appearance of the skin and eyes; a dry cough, often mistaken for Consumption.

Sometimes many of these symptoms attend the disease, at others very few; but the Liver, the largest organ in the body, is generally the seat of the disease, and if not regulated in time great suffering, wretchedness and death will ensue.

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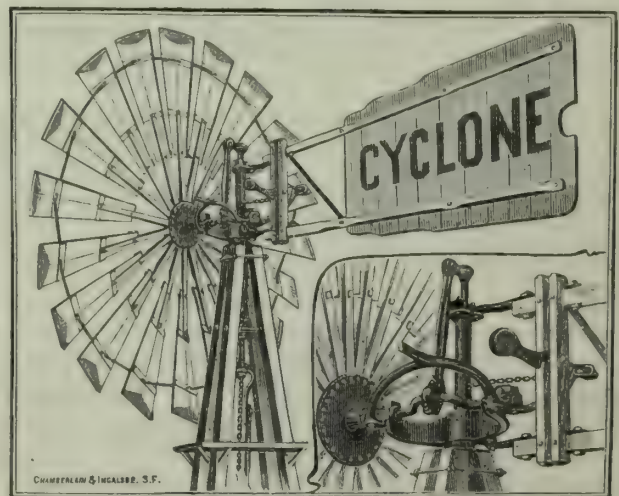
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These Mills are the Best, Cheapest, Strongest and Lightest, and are Self-Regulators.

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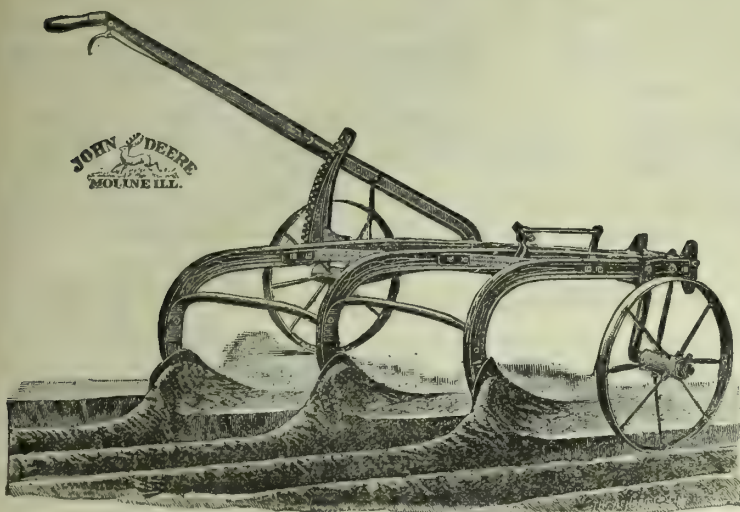
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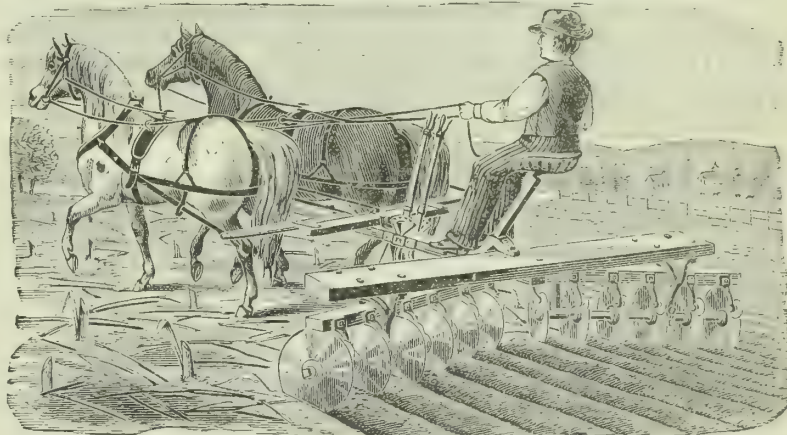
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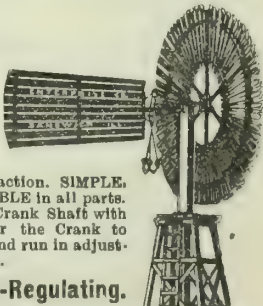
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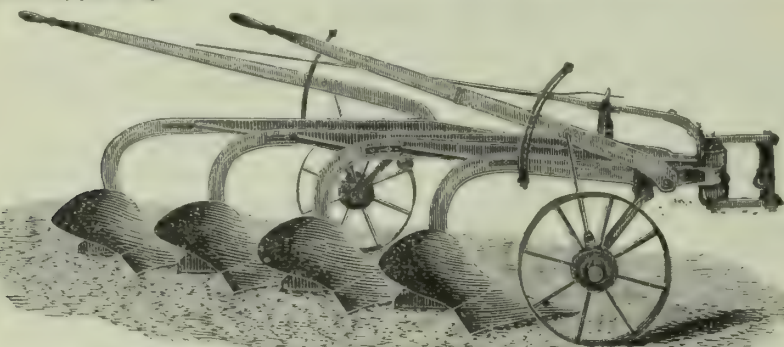
IMPORTERS, MANUFACTURERS, AND DEALERS IN

## Hardware and Agricultural Implements.

### "PERFECT" Gang Plows

ARE THE ONLY BEAM GANG PLOWS OF THE BENCH BEAM SERIES OF PLOWS THAT WILL NOT CLOG IN HEAVY STUBBLE OR WEEDY LAND.

They are so constructed that there is ample space under the beams and between the bottoms to let the stubble and weeds freely pass through.



MOLDBOARD VIEW OF "PERFECT" GANG PLOW.

THESE PLOWS ARE NOW MADE WITH BOTH LEVERS ON THE LEFT, OR LANDSIDE SIDE OF PLOW, AND THE 4-GANG ARE MADE SO THEY CAN BE CHANGED TO A 3-GANG BY TAKING OFF THE REAR PLOW.

#### PRICE LIST:

No. 1-3 Gang, 8 inch, with set extra shares.....	\$75 00
No. 2-3 Gang, 10 inch, with set extra shares.....	80 00
No. 3-4 Gang, 8 inch, with set extra shares.....	80 00
No. 4-4 Gang, 10 inch, with set extra shares.....	90 00

"Perfect" Gang Plows are made with three or four bottoms or plows, each cutting eight or ten inches, securely ganged together, making a Gang Plow unequalled for lightness of draft, strength, durability, and good plowing qualities, and is in reality a "Perfect" Gang Plow.

The "Perfect" Gang Plow will plow in any soil, as the bottoms are shaped after patterns that have been found to work equally well in adobe and free soils. The moldboards are made of the best iron center steel, chemically hardened, and well polished.

Hubs and Boxes of carrying wheels are detachable, and when worn out can easily be removed to put new ones in their place.

Each carrying wheel is provided with its own Regulating Lever, by which the driver can easily adjust either side of the plow to make it run level and true.

The Regulating Levers are very long and securely bolted to the steel frame of the plow, and coupled to the crank axles by a heavy piece of round iron, which is adjustable to the regulating levers at three different holes, enabling the driver to adjust his plow so that he can handle it with the greatest ease.

The "Perfect" Gang Plow is also provided with a long Land Gauge Lever, by which the driver can adjust his plow to take more or less land as he may desire.

There is no danger of breaking the crank axles of the "Perfect" Gang Plows, as they are made of heavy 1 1/2-inch round iron, and are fastened to the frame by wrought iron brackets.

If you contemplate purchasing a Gang Plow, don't fail to call and see the "Perfect" Gang before you purchase.

### IMPROVED GRANGER GANG PLOWS.

Simplicity, Durability and Cheapness Combined. All Parts are Made Interchangeable, Indispensable to the Economical Farmer—Making Every Man His Own Blacksmith.

WITH ONE EXTRA SHARE TO EACH BOTTOM.



Granger Gang Plow, with Detachable Steel Moldboards and Cast Cast-Steel Share and Cast Landsides.

No. 11. Three-Gang, 8-inch.....	\$60 00	10-inch.....	\$65 00
No. 12. Four-Gang, 8-inch.....	65 00	10-inch.....	75 00
No. 13. Five-Gang, 8-inch.....	75 00	10-inch.....	85 00
No. 15. Six-Gang, 8-inch.....	85 00	10-inch.....	90 00
No. 15. Seven-Gang, 8-inch.....	90 00	10-inch.....	100 00

Extra Molds, 8-inch, \$2.50; 10-inch, \$3.50. Extra Shares, \$1.25 and \$1.50 each.

#### IMPROVED GRANGER GANG PLOWS.

With the Celebrated Gale Chilled Iron Bottoms, with One Extra Share to each Bottom. Granger Gang Plow, with Detachable Moldboards, Shares and Landsides.

No. 11b. Three-Gang, 8-inch.....	\$52 50	10-inch.....	\$62 50
No. 12b. Four-Gang, 8-inch.....	60 00	10-inch.....	70 00
No. 13b. Five-Gang, 8-inch.....	70 00	10-inch.....	80 00
No. 14b. Six-Gang, 8-inch.....	80 00	10-inch.....	85 00
No. 15b. Seven-Gang, 8-inch.....	90 00	10-inch.....	95 00

Seed Sowers, Attached When Ordered, for Either Front or Rear Sowing.

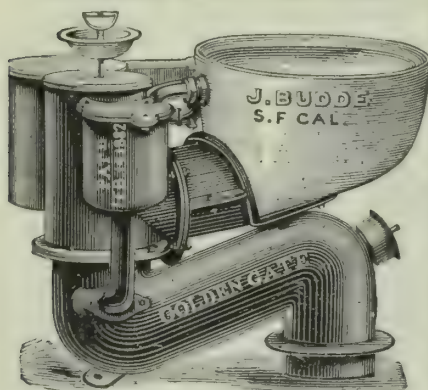
3 Gang Sower attached in front.....	\$6 50	Sower attached in rear.....	\$ 8 00
4 Gang Sower attached in front.....	7 00	Sower attached in rear.....	9 00
5 Gang Sower attached in front.....	8 00	Sower attached in rear.....	10 00
6 Gang Sower attached in front.....	9 00	Sower attached in rear.....	11 00

#### EXTRA FOR HARD WOOD FRAMES.

For Three Gang.....	\$5 00	For Five Gang.....	\$ 8 50
For Four Gang.....	7 50	For Six Gang.....	10 00

The above Gangs are made only by the Benicia Agricultural Works, Benicia, Cal. See that you get the genuine and take no other. Every one warranted to be as represented.

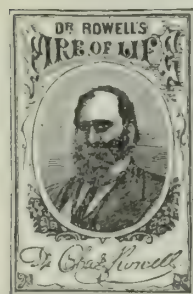
### THE GOLDEN GATE PLUG CLOSET.



The only secure-locking device to keep sewer gas entirely away from dwelling houses.

JOSEPH BUDE, Manufacturer, 43 Fremont Street,

At All kinds of Water Closets, Slop and Waste Hoppers Always on hand. Write for information



### A MAGIC CURE

—FOR—  
Rheumatism, Neuralgia, Pneumonia, Paralysis, Asthma, Sciatica, Gout, Lumbago, and Deafness.

Everybody should have it.

G. G. BURNETT, Ag't

327 Montgomery St., S. F.

Price, \$1.00. Sold by all Drug

gists. Call and see

DR. CHAS. ROWELL.

Office—428 Kearny St., San Francisco.

### American Exchange Hotel,

SANSOME STREET,

Opposite Wells, Fargo & Co.'s Express, one door from Bank of California, SAN FRANCISCO.

This Hotel is in the very center of the business portion of the city. The traveling public will find this to be the most convenient as well as the most comfortable and respectable Family Hotel in the city.

Board and Room, \$1.00, \$1.25 and \$1.50

PER DAY, ACCORDING TO ROOM.

Hot and Cold Baths Free. None but most obliging white labor employed. Free Coach to and from the Hotel.

MONTGOMERY BROS, Proprietors.

## FRESNO COUNTY.

### BRIGGS' SELMA TRACT.

This most desirable tract, comprising 1280 acres of first-class gray ash and sandy loam land (situated one and one-half miles from the fast-growing town of Selma, the second in the county, and two miles from Fowler, both being S. P. R. R. towns), has been subdivided and will be sold in 20, 40, 60 or 80-acre farms. The distributing ditches are now being constructed, and convenient roads are laid off. The main canal is 60 feet in the bottom.

#### THE WATER RIGHTS,

Consist of stock in the canals and entitle the owner to one-eighth of 2 feet 6 inches of water, being 2 1/2 times the usual amount supplied to colonies. The owner of the water stock has a pro rata vote in the management of the canal, and the expense per year is about \$3.50 on a 20-acre lot.

A school-house is to be erected on the land this year, and it has two within two miles of it at present. Fresno, Selma, Fowler and Kingsburg are good local markets for produce. Opportunities to labor with or without terms are abundant, and land can be rented for wheat-growing in the neighborhood. The health of this region is perfection, and, in common with the plains generally, is an excellent sanitarium for persons affected with pulmonary and rheumatic complaints.

The best raisins in the world, wines unsurpassed, the finest grapes, the best peaches, apricots, plums, prunes, nectarines, figs and olives, and in fact all the choicest fruits and vegetables of the world are grown in this favored region. Raisin vines three to six years old yield per acre from four to seven tons, and increase to eleven. Wine grapes three to six years old yield from four to eleven tons per acre. Alfalfa is cut from four to six times a year, and yields from one to two tons per acre at each cutting.

Two good cows and 100 hens furnish more than half the living for a family, and can be kept, with a team, on three acres of alfalfa, the growth of which is incredible in this favorable combination of soil and climate.

A comfortable house for a small family can be built for \$150.

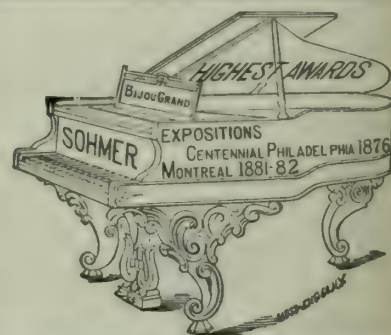
The low price, taking into consideration water and transport facilities, should especially recommend this to seekers of homesteads.

Price, \$25 to \$37.50 per acre, on very easy terms to actual settlers.

For further particulars call on or address

O. J. WOODWARD, FRESNO, CAL.

L. SHARPE, SELMA, CAL.



### SOHMER & CO. PIANOS.

PEEK & SON PIANOS.

BYRON MAUZY,

SOLE AGENT,

922 Market Street, San Francisco, Cal.

SEND FOR CATALOGUE.

### MACHINISTS, ATTENTION!

AN OUTFIT FOR A MACHINIST.  
Good Tools, Patterns and an Established Business

FOR SALE AT A BARGAIN,

If applied for immediately.

Address, B. A. W.

Care of this Paper.



Patented July 21, 1885, May 18, 1886, August 3, 1886.

The only practical machine in use that makes the fence in the field wherever wanted; makes the best, strongest, and most durable fence for general use and farm and stock purposes; weaves any size picket and any size wire. The fence will turn all stock without injury to same. For catalogue and full particulars, address

M. C. HENLEY, Sole Manufacturer.

Factory, 523 to 533 North 16th St., Richmond, Ind.



## Immigration Association of California.

The annual meeting of the Immigration Association of California was held at its office, in this city, Tuesday, Dec. 7th.

The president, Arthur R. Briggs, said in his report: The association has now closed its fifth year, and its work may be regarded as an established feature in the development of the State. The experimental period in promoting immigration and in the usefulness of this organization has passed. Thousands of new homes have been established on Government land that before was regarded as valueless for general agricultural purposes; large private holdings have been subdivided and improved; new railroads have been built and new towns have been established.

As illustrating the growth throughout the State, the report mentioned that 71 new post-offices had been established in less than a year, viz.: from December 1, 1885, to September 29, 1886. These were distributed with reference to counties as follows: San Diego 9, Los Angeles 6, Fresno 5, Modoc, Tehama, Shasta, San Bernardino and Humboldt, 3 each; San Luis Obispo, Kern, Tulare, Santa Barbara, Contra Costa, Sacramento, Placer, Butte, Mendocino and Sonoma, 2 each. The others were scattered largely in the northern portion of the State. The population of the State was now 1,000,000 persons, exclusive of Chinese. This indicated an increase since 1881 of 175,000. Growth had been more marked in some of the extreme southern counties of the State than in other districts, as the mere mention of Southern California was suggestive of orange groves and a semi-tropical climate, while in the minds of Eastern people, ice and snow were associated with the term northern. The raisin crops in the Sacramento valley and the citrus fruits that grew in that section, however, afforded practical proof that the northern counties were not seriously affected by frosty rigors.

As a demonstration of the rapid growth of the State during the past five years, figures were given showing that on August 1, 1882, the assessed value of property, real and personal, in the State, was placed at \$645,471,066, while the assessed value for this year was \$810,478,634, a gain of \$165,016,568.

The number of acres of land filed on and entered during the year aggregated 1,862,917 acres. Making due allowance for entries for speculative purposes, and for such as were not for actual settlement, there still remains sufficient acreage to establish the fact that the association had accomplished a good work.

The counties which, according to the report, exhibit the most rapid growth among those reached from the office of the association are San Luis Obispo, Monterey, Shasta, Placer, Santa Cruz, Fresno, Tulare, Tehama, Mendocino, Lake and Humboldt. The most striking of all, perhaps, were the settlement of lower Monterey and San Luis Obispo counties. Three new towns, viz., San Miguel, Paso de Robles and Templeton, had within a few months been located along the extension of the S. P. C.'s line, south of Soledad. A few years ago this district was thought to be suitable only for grazing. Now the population was estimated at between 5000 and 6000, and the production of wheat last season aggregated about 1,000,000 bushels, and of barley about 400,000 bushels.

In conclusion, the report called attention to the fact that the acreage of desirable Government land convenient to railroads is growing less each year. There is still a great deal of unoccupied Government land suitable for agricultural purposes, but situated at a long distance from the railroads and transportation lines, and it was difficult to obtain settlers for it. During the last few months there had been a great demand for improved farms in the neighborhood of schools and churches, and the people desirous of settling upon such lands were of a most desirable class. A large immigration into Santa Clara, Santa Cruz, Marin, Alameda, Contra Costa, Sonoma, Napa, Sacramento, Solano, Yuba, Placer counties and others can only be stimulated and promoted by furnishing information in respect to improved lands, and measures for effecting this end were suggested and recommended.

The report urged the necessity of a wise and equitable distribution of the waters of the State for the purpose of irrigation, without which 15,000,000 acres of land must remain to a great extent unproductive.

The report was adopted.

Secretary Street's report showed that the association had been instrumental in settling about 3,000,000 of the 5,000,000 acres filed upon and entered during the past five years. There remains about 38,000,000 acres unentered, of which 13,000,000 is suitable for agricultural purposes, 15,000,000 for mining and lumbering industries and 10,000,000 in lakes, bays and lands steep, rocky, or otherwise unproductive.

Merchants, bankers and others had contributed \$5645.55, and the sum of \$2387.18 had been given to the association by the S. P. R. R. Co. The disbursements during the year amounted to \$8670.63, and there was a cash balance on hand of \$1871.29.

During the year there were 3063 homestead and 4832 pre-emptions filed, embracing 1,182,962 acres, one-third of which was probably for speculation.

The secretary's report was adopted.

Resolutions offered by J. R. Kelly looking to the enlargement of the association's activity as suggested by the President, and by Captain

Merry favoring the restriction of Chinese immigration, were adopted. The election of the directors for the ensuing year was postponed until the next meeting, which will be held on Wednesday, the 15th inst.

## Plows and Plowing.

The coming of a wide-reaching rainstorm will bring in the general plowing season. Although there is hardly a week in the year in which plows are not running in California soil, the heavy plowing follows the first drenching rain. The enterprising manufacturers and agents who offer the farmer the latest-improved plows are alert to the opening of the season, and bring upon our pages this week very attractive advertisements of the designs they offer and which they are prepared to advocate with satisfactory testimonials of those who use them. It is impossible for all men to agree on the question of superiority in plows. There are many men of many minds, and to meet this condition of the human intellect there are good plows of many kinds. Those who offer good plows for sale recognize this fact, and so they are enterprising enough to use the advertising pages of the RURAL, and thus call the attention of plow-buyers to their implements.

In this issue there are four large advertisements of plows. The largest is that of the Oliver Chilled Plow Works, at 37 Market St., S. F. They offer the Casaday sulky and gang plows and a full line of single plows, for which the Oliver Works have achieved a world-wide reputation. The catalogue of the Oliver Chilled Plow Works is a very interesting pamphlet which gives full description of the manufacture of these implements and the materials used.

Half-page advertisements are filled by Baker & Hamilton, the Hawley Hardware Company and Truman, Isham & Hooker, all well-known firms of this city. The intending purchaser should carefully examine all these statements and learn as far as possible which pattern is best adapted to his peculiar soils, for there is much in that in selecting plows. We have heard good reports of all the implements advertised by these firms. If you have time to come to the city and carefully look over the different patterns, it will be well; if not, these firms have a reputation for fair dealing which would make it very probable that full satisfaction can be had on orders by mail.

## Complimentary Samples.

Persons receiving this paper marked are requested to examine its contents, terms of subscription, and give it their own patronage, and, as far as practicable, aid in circulating the journal, and making its value more widely known to others, and extending its influence in the cause it faithfully serves. Subscription rate, \$3 a year. Extra copies mailed for 10 cents, if ordered soon enough. If already a subscriber, please show the paper to others.

MEDITERRANEAN SWEETS FROM BUTTE.—We saw at the rooms of the Immigration Association Tuesday afternoon a score of large, handsome, deep-hued Mediterranean Sweet oranges, grown at Oroville. (They were sent by E. Tucker, but we could not learn whether or not they were grown by him.) Of the 5000 trees set by the Citrus Association and individual citizens last spring, Mr. Tucker writes that not five per cent were lost, and all those alive are growing nicely. They expect to put out 10,000 to 15,000 more the coming season.

## Never Open Your Mouth

Except to put something to eat into it, is an excellent motto for the gossip and the sufferer from catarrh. But while the gossip is practically incurable, there is no excuse for any one's suffering longer from catarrh. Dr. Sage's Catarrh Remedy is an unfailing cure for that offensive disease. It heals the diseased membrane, and removes the dull and depressed sensations which always attend catarrh. A short trial of this valuable preparation will make the sufferer feel like a new being.

Don't take that "cocktail in the morning" if you have a "swelled head," nauseated stomach, and unstrung nerves resulting from the "convivial party last night." The sure and safe way, to clear the cobwebs from the brain, recover zest for food, and tone up the nervous system, is to use Dr. Pierce's "Pleasant Purgative Pellets." Sold by all druggists.

The only reliable cure for catarrh is Dr. Sage's Catarrh Remedy.

## RED POLLED CATTLE.

For Milk, Butter and Beef; of a beautiful red color; no horns for mischief; just the Cattle for the Farm, the Dairy and the Family.

Imported, bred and for sale by L. F. ROSS, Iowa City, Iowa.

Send for Catalogue.

## PALACE Dye Works,

638 Market St., under Palace Hotel, San Francisco, Cal.

All kinds of Ladies' and Gents' Garments Cleaned and Dyed. WE EXCEL. Send for information.

CHARLES J. HOLMES, Manager.

## List of U. S. Patents for Pacific Coast Inventors.

From the official report of U. S. Patents in Dewey & Co.'s Patent Office Library, 252 Market St., S. F.

FOR WEEK ENDING NOVEMBER 23, 1886.

353,118.—CAR COUPLING.—J. J. Bogard, Tehama, Cal.

353,050.—LAWN TENNIS NET POLE.—Emilie G. Booth, Berkeley, Cal.

353,211.—PISTON PACKING.—J. W. Dudley, Portland, Ogn.

353,133.—PATIENT'S ELEVATOR AND PERAMBULATOR.—Margaret Hammond, Port Madison, W. T.

352,920.—SULKY GANG PLOW.—J. W. Holland, Pomeroy, W. T.

353,073.—WASHING MACHINE.—Jos. La River, Haywards, Cal.

353,079.—HARROW.—J. G. Owen, Covello, W. T.

353,083.—DISCHARGING CARGOES.—James Reid, Portland, Ogn.

353,160.—CAN TOP AND COVER.—F. A. Robbins, S. F.

352,936.—PLOW.—J. T. Senteney, Blocksburg, Cal.

352,985.—PROPULSION OF CARS BY COMPRESSED AIR.—Jas. M. Thompson, S. F.

353,187.—GAS BURNER.—J. S. Wethered, S. F.

353,043.—MANTEL GRATE.—E. W. Williams, S. F.

NOTE.—Copies of U. S. and Foreign patents furnished by Dewey & Co. in the shortest time possible (by mail or telegraphic order). American and Foreign patents obtained, and general patent business for Pacific Coast inventors transacted with perfect security, at reasonable rates, and in the shortest possible time.

PRANG'S HOLIDAY CARDS.—L. Prang, of Boston, is again ahead of all other art publishers in the originality and rare perfection of design and finish of his large variety of Christmas and New Year's cards. Every lover of true art will find pleasure in examining Prang's American holiday presents for this season. Their real merits guarantee the purchaser lasting satisfaction.

## Inducements to Subscribers.

To favor subscribers to this paper, and to induce new patrons to try our publication, we will furnish, to those who pay fully one year in advance of date, IF REQUESTED, the following articles (while this notice continues), at the very greatly reduced figures named at the right:

- 1.—The Agricultural Features of California, by Prof. Hilgard, 138 large pages, illustrated, cloth, with colored maps (full price \$1)..... \$0.25
- 2.—World's Cyclopaedia, 794 pages, 1250 illustrations; (exceedingly valuable)..... .50
- 3.—Dewey's Patent Elastic Binder (cloth cover), name of this paper stamped in gilt..... .50
- 4.—Niles' Stock and Poultry Book for Pacific Coast, pamphlet, 120 pages, illustrated..... .25
- 5.—Kendall's Treatise on the Horse and Diseases, 89 pages, instructive illustrations..... .05
- 6.—To New Subscribers, 12 select back Nos. of the RURAL PRESS, "good as new"..... Free
- 7.—Any of Harper's, Frank Leslie's and most other first-class U. S. periodicals, 15 per ct. off regular rates.
- 8.—Pacific Coast and Eastern Dailies, Books and Periodicals, except special publications, we can usually give 10 to 15 per cent off advertised retail rates.
- 10.—March of Empire, by Mallie Stafford..... .25
- 11.—Life Among the Apaches, 322 pages, stiff cloth..... .25
- 12.—\$1 worth of choice seeds, to be selected from a list of 107 flower and 82 garden seeds, as previously published, or which list we will send on application..... .25
- 14.—Dewey's Pat. Newspaper Fileholder (18 to 36 in.)..... .25
- 15.—European Vines Described, 63 pages..... .05
- 19.—Webster's Dictionary, 634 pages, with 1500 illustrations; very handy and reliable..... .50
- 23.—Architecture Simplified, 60 pages..... .15
- 24.—Mother Bickerdyke's Life with the Army; patriotic and ably written; 166 pp., cloth, \$1.00..... .75
- Beautiful Poetic Review, entertaining and instructive 35 pages (a handsome and pleasing present)..... .25

NOTE.—The cash must accompany all orders. Address this office, No. 252 Market St., S. F.

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Send for any further information desired.

12 Lovely Hidden Name Cards, with name covered by hands holding flowers, etc., IMPORTED FROM GERMANY, for 15 cts. 12 extra fine Gold Bevel Edge Cards, with name, 15 cts. Agents' Outfit sent free with each order from this ad. provided you cut out and return me the ad. and agree to act as my agent. G. W. TUTTLE, Pasadena, Cal.

Ligent husbandman and rural household in the Pacific States. The subscription is low at \$3 a year for so large, clean, attractive and reliable a publication. Its painstaking market reports are a profitable feature to all its readers. Mailed on trial for any term desired at 25 cents per month, postpaid. Six back Nos. mailed to any address, as samples, for 25 cents. Office, 252 Market St., San Francisco, Cal. DEWEY & CO., Publishers.

**PRICES:**

8-ft. wheel.....\$25 00  
10-ft. wheel..... 30 00  
12-ft. wheel..... 35 00  
14-ft. wheel..... 40 00

**PUMPS.**

2-Inch.....\$15 00  
2 1/2-Inch..... 15 50  
3-Inch..... 16 50  
3 1/2-Inch..... 17 50  
4-Inch..... 20 00

These Pumps are complete and will work in wells of any depth and force water to any height. TOWER, complete, \$15 00.

**BONDS' PRICE, \$25.**

**ECONOMY WINDMILL**

Is the cheapest ever offered to the trade, and as efficient and durable as the most elaborate self-regulators. It is intended to run constantly, and turns on the stand facing the wind, from whatever direction.

The wearing parts are few and cheaply replaced. Requires little or no attention. Will raise 25 per cent. more water than any "self-regulator" of same diameter of wheel. Anyone can put it up.

Write for Circulars to

**BYRON JACKSON 625 6TH STREET SAN FRANCISCO.**

**THE JACKSON VINEYARD HARROW**

Rotates either way, at the will of the driver, and by driving the slow side next to the vine or tree, there is no danger of hurting it, as the Harrow will roll gently around the tree or vine.

It has half-inch steel teeth, and is made to rotate either way by simply changing the cast-iron weight from one side to the other. The Harrow weighs 170 lbs., and can be taken down and packed closely for shipment.

**STEAM ENGINES, STATIONARY ENGINES, Upright and Horizontal.**

**PORTABLE & TRACTION ENGINES.**

**IRRIGATING MACHINERY A SPECIALTY.**

Pumps for Irrigation and Reclamation.

**HARVESTING MACHINERY, WINDMILLS, HAY STACKERS and RAKES, IRON HARROWS, Etc.**

**WRITE FOR CIRCULARS TO BYRON JACKSON, SAN FRANCISCO.**



## Breeders' Directory.

Six lines or less in this Directory at 50c per line per month.

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W. C. DAMON, Napa, Wyandottes, W. and B. Leghorns, P. Rocks, L. Brahmas, Pekin Ducks.

MRS. M. E. NEWHALL, San Jose. White and Brown Leghorns, Langshans, Plymouth Rocks, Light Brahmas, Pekin Ducks and Bronze Turkeys.

JAS. T. BROWN, 18 Georgia St., Los Angeles, Cal. Breeder of Thoroughbred Poultry of the leading varieties. Send for circular and price list.

CHOICE LAND AND WATER FOWLS for sale at all times of the most popular and profitable varieties. Please inclose stamp for new circular and price list to R. G. Head, Napa, Cal.

T. D. MORRIS, Sonoma, Cal. Toulouse and Embden Geese, Bronze and W. Holland Turkeys, and all leading varieties of Thoroughbred Poultry.

D. H. EVERETT, 1616 Larkin St., S. F., importer and breeder of Thoroughbred Langshans and Wyandottes.

AXFORD'S IMPROVED INCUBATOR. 400 eggs, \$10; 150 eggs, \$5. Guarantee satisfaction. For particulars address, I. P. Clark, Mayfield, Cal.

J. N. LUND, Box 116, Oakland, Cal. Wyandottes, Langshans, L. Brahmas, P. Rocks, B. Leghorns, B. R. Game Bantams, T. Guineas, Homing Antwerp Pigeons.

D. D. BRIGGS, Los Gatos, Cal. Fancy Poultry breeder O. J. ALBEE, Santa Clara. Thoroughbred poultry.

E. C. CLAPP, South Pasadena, Cal. Light Brahmas and Plymouth Rocks. No fowls for sale. Eggs from first-class stock, after Nov. 1st.

CALIFORNIA POULTRY FARM, Stockton, Cal. Send 2-cent stamp for Illustrated Catalogue.

### HORSES AND CATTLE.

E. J. TURNER, Hollister, Breeder of Percheron-Norman registered Horses and Roadsters.

FRANK H. BURKE, 401 Montgomery St., S. F. Holsteins—all ages and strains. Berkshire Hogs.

E. W. STEELE, San Luis Obispo, Cal., breeder of Thoroughbred Holstein and Jersey Cattle.

SETH COOK, Danville, "Cook Farm," Contra Costa Co., breeder of Aberdeen Angus, Galloways and Devons (Registered). Young stock for sale.

PETER SAXE & SON, Lick House, San Francisco, Cal. Importers and Breeders, for past 16 years, of every variety of Cattle, Horses, Sheep and Hogs.

WILLIAM NILES, Los Angeles, Cal. Thoroughbred Poultry, Cattle and Hogs. Write for circular.

J. R. ROSE, Lakeville, Sonoma Co., Cal., breeder of Thoroughbred Devons, Roadsters and Draft Horses.

THE BEST HERD OF JERSEYS, all A. J. C. registered, is owned by Henry Pierce, San Francisco.

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ONTARE RANCH, three miles west of Santa Barbara, Santa Barbara county, California. Coach Horses, Draft Horses, Trotting and Road Horses and pure Hessian-Friesian cattle. Young cattle and mules always on hand. Francis T. Underhill, Proprietor. C. F. Swan, Manager.

COTATE RANCH BREEDING FARM, Pages Station, S. F. & N. P. R. P. O., Penn's Grove, Sonoma Co., Cal. Wilfred Page, Manager. Breeders of Short Horn Cattle, English Draft Horses, Spanish Merino Sheep and Berkshire Swine.

P. S. CHILES, Davisville, Yolo Co., importer and breeder of registered Shorthorns of the best families.

STINSON & MARSH, Dayton, Nevada. Registered Shorthorns of choice breeding strains.

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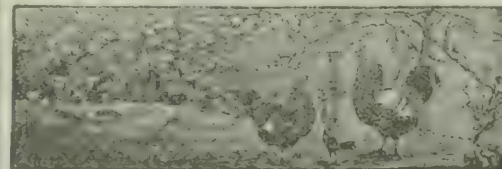
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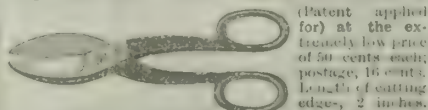
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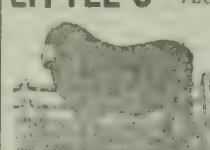
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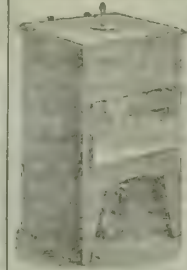
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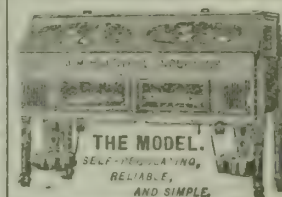
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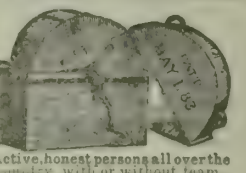
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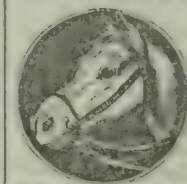
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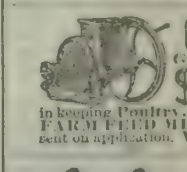
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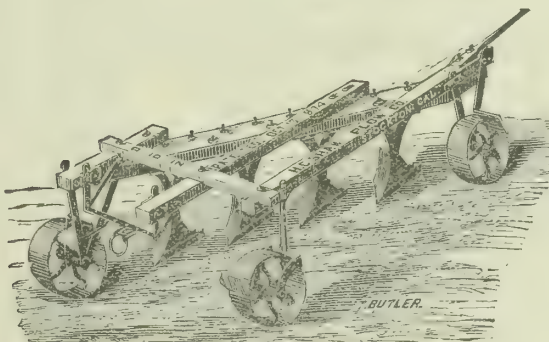
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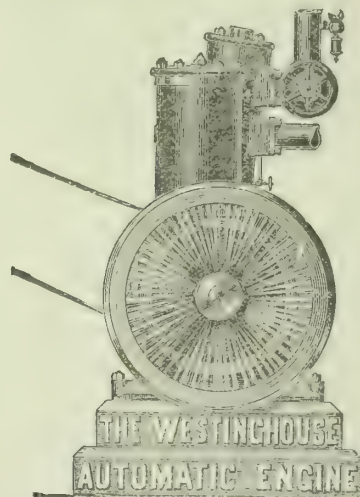
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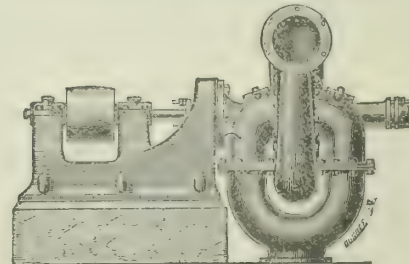
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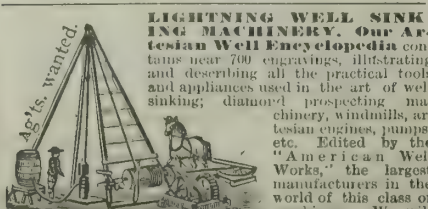
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Barley, feed, cbl.	1 00 @ 1 10	SEEDS.	
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do Coast.....	90 @ 1 45	Clover red.....	12 @ 13
Buckwheat.....	1 00 @ 1 20	do White.....	17 @ 18
Corn, White.....	20 @ —	Cotton.....	20 @ —
Yellow.....	1 05 @ 1 15	Flaxseed.....	2 1/2 @ 2 1/2
Small Round.....	1 10 @ 1 20	Hemp.....	4 @ 4 1/2
Nebraska.....	97 1/2 @ 1 05	Italian Rye Grass.....	25 @ —
Oats, new.....	— @ —	Perennial.....	7 @ 9
Choice feed.....	1 35 @ 1 40	Millet, German.....	4 1/2 @ 5
do good.....	1 27 1/2 @ 1 32 1/2	do Common.....	1 @ 10
do black.....	1 20 @ 1 25	Mustard, white.....	3 @ 2 3/4
do Oregon.....	1 25 @ 1 45	Brown.....	2 25 @ 2 75
Rye.....	1 10 @ 1 25	Rape.....	1 @ 1 1/2
Wheat milling.....	— @ —	Ky. Blue Grass.....	12 @ 13
Gilt edged.....	1 55 @ —	2d quality.....	11 @ 12
do Choice.....	1 52 1/2 @ —	Sweet V. Grass.....	75 @ —
do fair to good.....	1 50 @ —	Orchard.....	20 @ 25
Shipping choice.....	1 52 1/2 @ —	Red Top.....	15 @ —
do good.....	1 48 1/2 @ 1 50	Hungarian.....	8 @ 10
do fair.....	1 45 @ 1 47 1/2	Lawn.....	30 @ 40
HIDES.		Mesquit.....	10 @ 12
Dry.....	— @ 18	Timothy.....	5 1/2 @ —
Wet salted.....	8 @ 9 1/2	TALLOW.	
HONEY, ETC.		Grude, lb.....	1 1/2 @ 4
Beeeswax, lb.....	20 @ 22	Refined.....	3 1/2 @ 6 1/2
Honey in comb.....	8 @ 10	Wool, ETC.	
Honey in comb.....	— @ —	SPRING—1886	
fancy.....	11 @ 13	Humboldt and	
Extracted, light.....	33 @ 4	Mendocino.....	22 @ 25
do dark.....	34 @ 32	Sact'o valley.....	17 @ 20
HOPS.		Free Mountain.....	17 @ 20
Oregon.....	20 @ 27 1/2	N'ern defective	— @ —
California.....	20 @ 27 1/2	3 Joaquin short.....	14 @ 18
ONIONS.		do long.....	— @ —
Pickling.....	— @ —	Cava'v & F'th'l.....	— @ —
Silverskin.....	75 @ 1 40	Oregon Eastern.....	17 @ 22
NUTS—JOBBER.		do valley.....	23 @ 25
Walnuts, Cal., lb.....	12 1/2 @ 13 1/2	Southern Coast.....	13 @ 17
do Ohilo.....	— @ —	FALL—1886	
Almonds, hdshl.....	5 @ —	Southern, free.....	17 @ 19
Soft shell.....	13 @ 15	Northern, free.....	20 @ 23
Brazil.....	10 @ 11	do defective.....	15 @ 20
Pecans.....	9 @ 11	Middle free.....	18 @ 21
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WEDNESDAY, Dec. 8, 1886.			
Apples, bx com.....	50 @ 75	Nectarines.....	8 @ 10
do choice.....	90 @ 1 10	do evaporated.....	5 @ —
Bananas, bunch.....	1 50 @ 3 00	Peaches.....	8 @ 12
Blackberries, ch.....	— @ —	do pail.....	18 @ 22
Cantaloupes, cr.....	— @ —	Pears, sliced.....	5 @ —
Cherries blk.....	— @ —	do qtd.....	— @ 2 1/2
do Royal Ann.....	— @ —	do evaporated.....	8 @ 10
Cherry plums.....	— @ —	Plums, pitted.....	7 1/2 @ 8
Crabapples.....	1 50 @ 1 75	do unpitted.....	3 @ 4
Crabapples.....	7 00 @ 9 00	Prunes.....	5 @ 6
Currants chest.....	— @ —	do French.....	— @ —
Figs, bx.....	40 @ 1 10	Zante Currants.....	8 @ —
Grapes.....	— @ —	RAISINS.	
do Rose Peru.....	— @ —	Dehesa Clus, icy 2 65 @ —	
do Muscat.....	— @ —	Imperial Cabin.....	— @ —
do Tokays.....	— @ —	et, fancy.....	1 90 @ —
Isabel.....	— @ —	Crown London.....	— @ —
Wine, Zinfandel.....	— @ —	Layers, fcy.....	1 70 @ —
do Mission.....	— @ —	do Loose Muscatels.....	1 60 @ —
Limes, Mex.....	5 00 @ —	do Loose Muscatels.....	1 50 @ —
do Cal box.....	— @ —	Cal. Valencia.....	1 50 @ —
Lemons, Cal., bx.....	2 50 @ —	do Layers.....	1 50 @ —
do Sicily, box.....	7 00 @ —	do Sultans.....	1 50 @ —
do Australian.....	— @ —	Fractions come 25, 50 and 75	
Nectarines, box.....	— @ —	cents higher for halves, quarters	
Oranges, Cal., bx.....	1 50 @ 4 00	and eighths.	
do Tahiti, bx.....	— @ —	VEGETABLES.	
do Mexican, M.....	— @ —	Artichokes, doz.....	— @ —
do Panama.....	— @ —	Asparagus box.....	— @ —
Peaches, bx.....	— @ —	Beets, sk.....	1 00 @ —
do basket.....	— @ —	Cabbage, 100 lbs.....	50 @ 75
Crawfordis, bx.....	— @ —	Jarrots, sk.....	25 @ 35
do basket.....	— @ —	Caruliflower, doz.....	— @ —
Pears bx.....	60 @ 1 00	Celery, doz.....	— @ —
do Bartlett, bx.....	1 00 @ 1 50	Cucumbers box.....	— @ —
Persimmons.....	— @ —	Eggplant.....	— @ —
Jap, bx.....	1 00 @ 1 50	Garlic, lb new.....	— @ —
Pineapples, doz.....	4 00 @ 5 00	Green Corn.....	— @ —
Pomegranates, b.....	— @ —	small box.....	— @ —
Plums lb.....	— @ —	do large box.....	— @ —
Prunes bx.....	— @ —	Green Peas, lb.....	5 @ 7
do Egg.....	— @ —	Lettuce, doz.....	10 @ —
Quinces bx.....	— @ —	Lima Beans lb.....	— @ —
Raspberries ch.....	— @ —	Mushrooms, bx.....	— @ —
Strawberries ch.....	5 00 @ 6 00	do cultivated.....	— @ —
Watermelons 100.....	— @ —	Okra, dry, lb.....	10 @ 12 1/2
DRIED FRUIT.		do green box.....	— @ —
Apples, sliced, lb.....	3 @ 3 1/2	Paranips, cbl.....	1 50 @ —
do evaporated.....	8 @ 9	Peppers, dry lb.....	10 @ 60
do quartered.....	1 1/2 @ —	do green, bx.....	40 @ 60
Apricots.....	12 @ 13	Pumpkins pr ton 12.....	00 @ 15 00
do evaporated.....	20 @ 22	Squash, Marrow.....	— @ —
Blackberries.....	9 @ 10	fat, ton.....	7 00 @ 12 00
Citron.....	28 @ 30	do Summer bx.....	25 @ 40
Dates.....	9 @ 10	String beans lb.....	7 @ 8
Figs, pressed.....	5 @ 6	Tomatoes box.....	40 @ 50
Figs, loose.....	3 @ 4	Turnips cbl.....	75 @ 1 00

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200 Imported Brood Mares  
Of Choicest Families.

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All Ages, both Sexes,  
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JOHN L. HOWARD,  
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R. E. JACK,  
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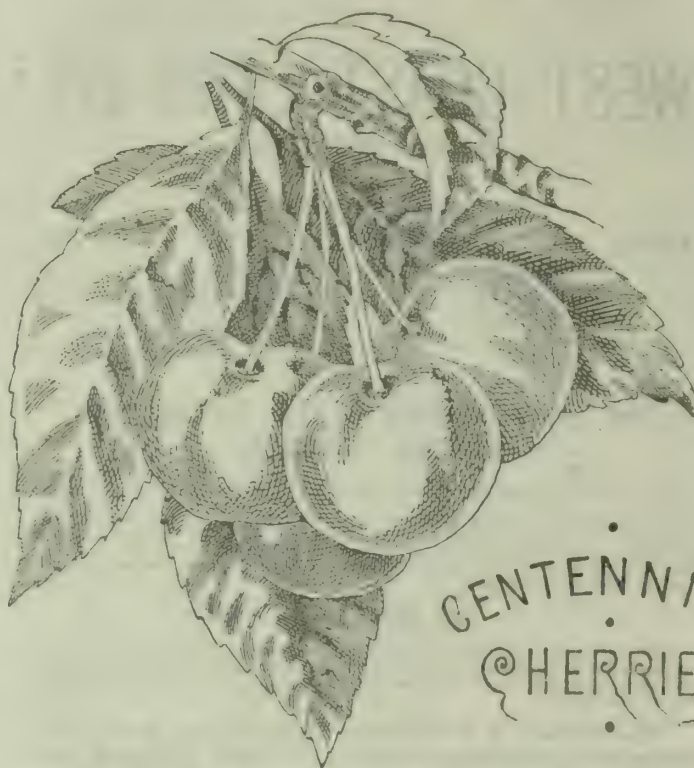
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NO SCALE—I wish particularly to call the attention of Fruit-growers to this fact. I have repeatedly had my nursery examined by experts, and upon no occasion have they found any scale or any indication of scale. The nursery is isolated from orchards, both old and new, and as I take every precaution in importing new varieties to get only clean stock, I feel perfectly warranted in guaranteeing every tree sold by me free from scale and other pests that are proving so disastrous to the fruit interests of the State. SEND FOR CATALOGUE.

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This is to certify that we the undersigned have this day thoroughly inspected the Stockton Nursery; that we found no Scale or indication of Scale, and that to the best of our knowledge and belief the Stockton Nursery is free of this dreaded pest.

WM. H. ROBINSON, Quarantine Guardian San Joaquin Fruit District,  
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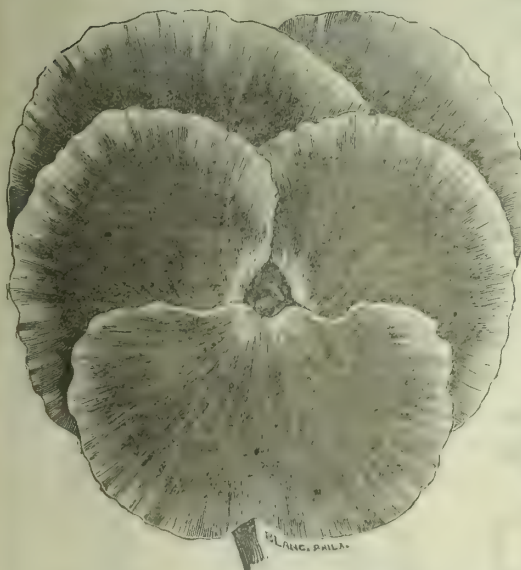
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It has been our ambition for years to supply our customers with a superior strain of these lovely flowers, which, on account of their many varieties and charming shades, are especially desirable for the Garden. We have this season obtained from a noted grower in Belgium, seed of all of his exhibition Flowers, including almost every shade of color, exquisitely spotted and blotched, flamed and fancy varieties, a strain so beautiful that no description or praise can do it justice. In Europe these fancy varieties are grown under glass for exhibition in the fairs, but in California they can be grown in the open garden the same as the common varieties.

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OUR SPECIALTIES THIS SEASON ARE:

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**ADRIATIC FIGS, NEW OLIVES & SABALKANSKY GRAPES**  
IS THE FINEST AND LARGEST IN THE STATE.

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**SEMI-TROPICAL and GENERAL NURSERIES.**

**300,000 TREES. 1,000,000 ROOTED VINES.**

**FOR THE SEASON OF 1886-7.**

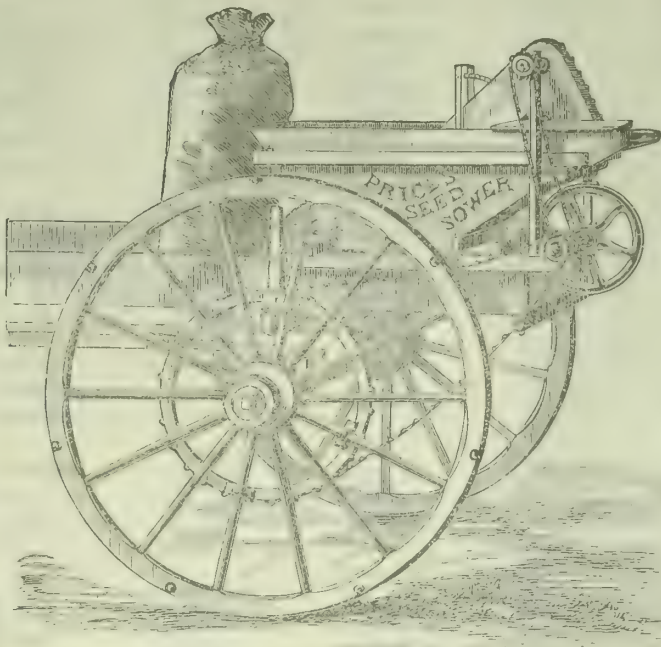
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Kieffer's Hybrid, Le Conte and P. Barry Pears, at Reasonable Prices.

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Sows a strip 100 feet wide at each passage (working width in wheat, 80 feet). Sows as evenly as a Force-feed Drill.

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BY THE DOZEN, 100, 1000, or 100,000.

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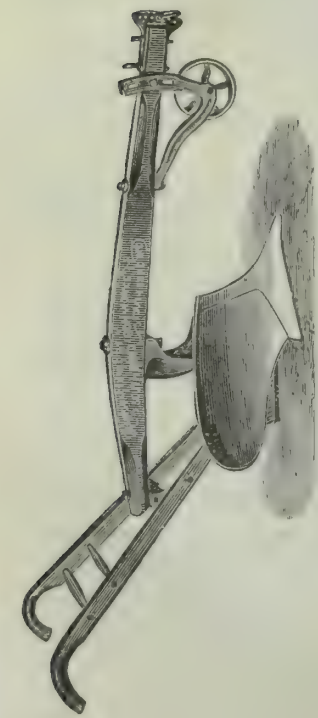
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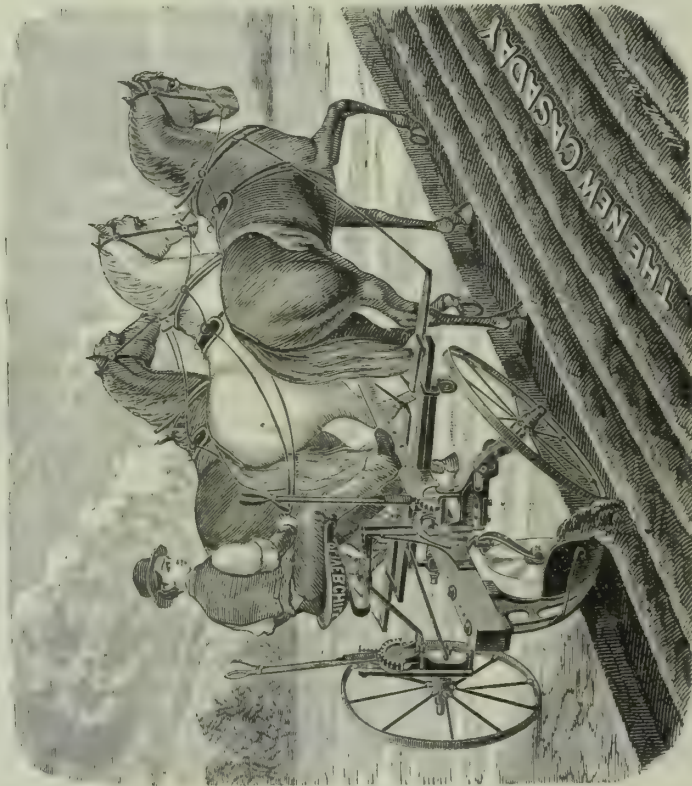
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# PACIFIC RURAL PRESS

TWENTY-PAGE EDITION.

Vol. XXXII.—No. 25.

SAN FRANCISCO, SATURDAY, DECEMBER 18, 1886.

\$3 a Year, in Advance  
Single Copies, 10 Cts.

## A Fine Stallion.

There is, perhaps, at the present time no subject more fully discussed among the breeders of fine horses than the question of superiority between the two contending trotting families,

of our breeders are more fortunate than others, having a compound of both the strains of vaunted blood; they are almost sure to win.

In presenting the cut on this page we give to our readers a type of the combined pedigrees referred to, in a true likeness of a fine horse,

ed throughout all his parts. His owner has wisely deferred training him while so young, on account of his size, but like his near relations on both sides, he is a natural trotter, and without any track-culture can show a high rate of speed on the road. His

*Tempest* was sired by Carr's Mambrino, by Mambrino Patchen, by Mambrino Chief, by Mambrino Paymaster by Mambrino, and he by Imp. Messenger. *Tempest's* first dam was Bluegrass, by Rysdyke's Hambletonian, by Abdallah, by Mambrino by Imp. Messenger. His second



TEMPEST (Foaled May 5, 1882)—PROPERTY OF CAPT. BEN E. HARRIS, OF SAN FRANCISCO.

Mambrinos and Hambletonians. There are many able writers and advocates on either side, and certainly both parties are well supplied with abundant material for debate, and in the event of a final verdict for either, the defeated can boast of a well-fought battle, and patiently await the performance of some of their promising equine stars, which may then change the statistical record and turn the scale of superiority in their favor. In this respect some

by our well-known artist, Mr. E. Wyttenbach, whose autograph is considered a sufficient guarantee of its correctness. It represents the four-year-old stallion *Tempest*, raised and owned by Capt. Ben E. Harris, of San Francisco. In color, he is a rich mahogany-brown, without white, standing 17 hands, and turning the scale at 1300 pounds. In point of form, finish and style, he is indeed a grand horse, with immense bone and muscle proportionately distrib-

wonderful style and long-sweeping trotting action render him a model carriage horse.

Farmers and stock-raisers in this country have long felt the need of just such a sire, and with his breeding and symmetrical form he cannot fail to prove his value in the production of a class of all round horses, and when he shall have attained the proper age for work, barring accidents, we predict for him a bright future and great popularity.

dam was by Grayfoot, a thoroughbred son of imported Grayfoot.

THE Immigration Association reports the arrival in the State, last week, of 735 immigrants, most of whom came to this city. Parties will be sent to Monterey, San Luis Obispo, Tehama, and Shasta counties. A number of families, having considerable money among them, are expected shortly from Texas.



## CORRESPONDENCE.

Correspondents are alone responsible for their opinions.

## Napa County Notes.

**EDITORS PRESS:**—Much seed sown soon after the light showers of four or five weeks ago, still unspouted, awaits heavier rainfall, promises of which, though not a few, have not been fulfilled. A good heavy downpour is desired by farmers and others, though much work is being prosecuted on farms that rain would interfere with. Feed in pastures is now very short, and stock have to be fed in order to keep them in good condition. A longer continuance of the dry weather would cause hay—of which there is a large quantity stored in this county—to appreciate in price, and other farm products as well—circumstances devoutly wished for by many who have considerable produce to sell just now. [We presume the late rains have settled matters somewhat.—EDS. PRESS.]

Pruning was begun in some vineyards last month not a great while after the second crop of grapes was harvested. Since the days when our farmers raised nothing but wheat or barley, they have not so much leisure time as formerly, as, where mixed crops are raised, something or other demands the husbandman's attention during every month of the year. There is no idle season; odds and ends have to be attended to after the main crops are harvested, and preparation made for the next season. Not only are our climate, soil and products like those of Palestine of old, but upon us descend, yearly, the blessings vouchsafed that land in olden time, when the thrashing reached unto the vintage, the vintage until sowing time.

## Under-draining.

Of late years increased attention has been paid to under-draining, excellent tile for this purpose being made in Napa City. Vineyardists some years ago became aware of the great benefits resulting from properly draining the low places in their vineyards, and in not a few vineyards miles of tile have been laid with the best results. There is much land here, as in many portions of our State, that would be greatly benefited by draining. Year by year the advisability of thus improving low land is becoming more apparent, though it will be many years before our farmers pay as much attention to draining as do their Eastern brethren.

## Planting More Fruit.

Evidently there will be many fruit trees planted in this county this season, as well as grapevines, of the finest varieties. Already our local nurserymen and those from abroad are preparing for the demand they are sure to have, and have already taken many orders. From present appearances olive culture will, at no distant day, become a prominent industry here, as at the present time a large number of trees, some of them four or five years of age or more, are rapidly growing. This tree seems to do very well in our county, and, it being hardy, flourishes where other fruit trees would make poor growth. Olive trees have fruited here, in a few places, for many years, excellent oil having been made, in a crude way and on a very small scale, eight or ten years ago. The demand for good California olive oil, excellent now, will certainly continue for long years to come.

## Citrus Fruits.

Gradually it is dawning upon the minds of residents in this portion of the State that many semi-tropical fruits will flourish here as well as in the southern counties. This new awakening is due, in a great measure, to the citrus fairs inaugurated at Sacramento last year, the second one to open at an early date, at the same place, preparations for which are now being made by several of our citizens. A committee, composed of fruit-growers and others interested in our county's progress, has been appointed, and they will doubtless see that Napa county's exhibit will be a creditable one. Though oranges and nuts are not extensively raised here, it has been demonstrated that they will thrive and be a source of profit, especially within the confines of the thermal belt that extends along the hillsides of Napa valley, at an elevation of a few hundred feet, and in the smaller and warmer valleys of the county. Here excellent fruit is raised, and the trees bear at an early age.

On the asylum farm, oranges and olives thrive. The success attending their growth will induce Dr. Wilkins, the resident physician, to plant more in the future. The portion of the premises where these trees do the best is near the hills that constitute a part of the farm. The entire farm is carried on in a systematic, scientific and profitable manner, every detail of which is carefully studied by the resident physician. Large quantities of vegetables—of a score or more varieties—fruit from orchard and vineyard, as well as the smaller fruits; beets for the cows and swine, hay for the cattle, and other produce, comprise some of the returns of this successful husbandry. Most of the labor is performed by patients, under the direct supervision of capable attendants. The dairy, the poultry yard and other departments are models in their way. A thorough inspection of the farm would surprise many and interest all.

## A Horse Disease.

For some time past horses throughout the county have been troubled with a distemper or

influenza that has become an epidemic, and accounts from other counties in the State show that this affliction is widespread. In fact, like reports come to us from the East. The horse loses his appetite, becomes dumpy, matter forms in and issues from the nasal passages, and often a large abscess forms under the lower jaw. If this breaks, the horse is at once relieved and quickly recovers; but if the poison in the system does not thus, or in some other way, find an outlet, the animal fares badly and sometimes succumbs to the disease. Poulticing the throat; burning coal tar under the nose; a thorough course of physic, followed by appropriate tonics—these and other remedies are used with success. Yet sometimes it is the case that horses that receive no definite treatment get along nicely, and if the matter gathers in an abscess and escapes therefrom, recovery is almost sure to follow.

## New Railroads

There is always some railroad talk in one portion or another of our county, though, to our disappointment, some projected lines are only talked of, even when their construction seems assured. Thus it is with the line from Rutherford to Lake county via some of the smaller valleys of this county. Several miles were graded at considerable expense, and there the matter ended—apparently. Now, there is the possibility of a railroad connecting Sonoma and Napa counties, joining the C. P. at or near Napa Junction. This will be a much-needed outlet for Sonoma county, as over it fruit, wines and other produce can be shipped to the East without rehandling. Running along the edge of the tule land bordering Napa county on the south, this road will, if constructed, cause contiguous farms to appreciate in value. Residents of Sonoma seem to be in earnest in this matter, and probably another year will see the final consummation of the scheme.

## Growth of Napa City.

The many and varied improvements that have been made in Napa City during the last year indicate the prosperity of the whole county, for, indeed, substantial improvement is confined to no one particular locality. Farmers, manufacturers, mechanics, and in fact all classes of our population, look for and anticipate a prosperous season the coming year. Fruit-growers are especially confident, new life having been infused into this industry of late. Grape-growing is on a substantial footing, manufactures are increasing or enlarging, especially in Napa City, which, by reason of its favorable location, is destined in coming years to be noted far and wide for its varied and successful industries. Desirable real estate—city lots and fertile farms—is offered for sale in different portions of the county, transfers of which are frequently made. Not a few of the purchasers are persons from the far-away East, the rigorous climate of which section loses its charm for most any one who spends a few months, especially those of winter, in our favored county. The spirit of improvement is discernible, go where one may, in this county, and a notable fact is that it assuredly is permanent. To persons from the East seeking temporary or permanent homes in our State, and there are many such within our borders now, or will be in the next few months, we, as residents of one of the loveliest portions of the State, extend cordial greeting. The hospitality of our people is well known far and near, which the Knights Templar and the Grand Army of the Republic take pride in praising in no feeble manner. R. Napa, Dec. 6, 1886.

## Yolo County Notes.

**EDITORS PRESS:**—It has been a long time since I have attempted to write for your valuable paper. I say valuable, for so it is to me. I get many a useful hint on horticulture, which many times pays the subscription price. I never expect to be too old to learn.

Well, we have gathered another harvest. The cereals promised finely in the early part of the season, but a heavy norther shelled the grain badly and farmers generally bought too many sacks. Peaches and apricots were a light crop. Prunes and plums did well. Grapes did finely and the crop is about packed and shipped. The clear, dry weather this fall has greatly facilitated the curing of raisins, and if the output is not good to choice the fault can be charged to the management.

Fruit trees of every description that show blossom buds in the fall give promise of a heavy crop next year, as they are budded very full. The season has been a long, hot one, but the heavy rainfall of last winter so saturated the ground that the trees held their foliage till frost, which ripened the fruit buds finely.

Many are pruning now, which will do well enough for young orchards, but old ones of peach and apricot should have been pruned in September, especially if they are in bearing. From what I have seen, winter pruning produces heavy growth the following year, while fall pruning ripens the fruit buds and produces fruit on the peach and apricot—of other varieties I know but little. Of course I do not claim a patent on the idea, as it has long been practiced upon in Vacca and Pleasant valleys; but I think it is a matter that cannot be too often repeated, seeing there is such a hap-hazard way in orchard culture, one trimming in summer, another in fall, another in the winter and another next to none at all. What we want is

an intelligent understanding of the matter, and a unanimity of action, which alone can secure us success.

It is very satisfactory to hear of the demand for California raisins in the East, and it is to be hoped that the producer can be made to see that it is to his or her interest to properly cure, grade and pack their fruit, in order to hold what we have gained in the Eastern markets. The writer tried raisin-making this fall on a small scale. Am not prepared to report yet, as I shipped to the East and my returns have not come. I learned many things by chance and from others. I did not pick my raisins until they were fully ripe, till the skin that was exposed had turned a little yellow. I was not aware that it made any difference till I had them dried and compared with others, and then I found that it did. One man told me he learned that when it was too late for this year, and that he was not going to put his name on the boxes, but ship and sell for what they would bring; that he would know better next year.

I think mixed farming in the fruit business is commendable, for several reasons: One is that by so doing we can furnish ourselves employment for the whole summer. We should have peaches that run from June to October; apricots for June and July; prunes and plums for July, August, and September if possible; and shipping and raising grapes for the fall months, planting in such proportions that one or two men can take care of the whole, if on a small scale; or if on a large scale so that the hired hands will have an all-summer job—which will go a great way toward solving the labor problem on this coast.

I might add to the list Bartlett and Winter Nelis pears for summer and fall. They are all good if the locality is suitable to all kinds.

Such beautiful weather as we are now having is unknown east of the Rockies. I work every day out of doors without coat or vest. A coat is very comfortable in the morning, but the sun soon warms the air, so it is not needed. The usual blizzard has made its appearance in the East, and all we can do for our cousins there is to sympathize with them. It makes me shiver to think of that cold. Here what cold we have is regular, and so it does not inconvenience us as it does there.

Farmers are doing a good deal of dry plowing for volunteer to catch the early rain. Stock is looking well on the dry feed, as the little rain we had did not destroy the feed in the fields. More anon. J. R. SPRINGER. Woodland, Cal., Nov. 29, 1886.

## THE APIARY.

## Pollen.

**EDITORS PRESS:**—Pollen is a dust-like substance, produced by those parts of a flower called the anthers, which are borne by the stamens. It serves to fertilize the seed germs, and to effect this it must come in contact with and adhere to the central part of the flower, the pistil. This is accomplished in many different ways, often by the wind, but most frequently by insects, and principally by the honey bees. As no flower-bearing plant can produce fruit without this fertilization, Nature has provided two distinct inducements for the bees to aid in its accomplishment; first, by secreting in the flowers honey for the sustenance of the bees themselves; secondly, by making pollen necessary in the preparation of food for the brood. It will be observed that a pollen-gathering bee generally confines herself to one kind of flowers while she is making up a load, and to avoid in and in breeding and thus insure sound and healthy fruit the bee unavoidably deposits some pollen of one flower on the pistil of another, and thereby unconsciously carries out Nature's design.

While the majority of plants contain in their flowers both the male and female elements, in some the pollen-bearing anthers do not mature at the same time as the pistil, so that it is absolutely necessary that each flower becomes fertilized by the pollen from another flower. Some flowers are so constructed that it is impossible for the pollen to reach the pistil without the aid of insects. Certain plants, as the corn, the willows, etc., have distinct male and female flowers, while still others, as the palms and some of the strawberry plants, have each sex of flower assigned to different individuals. Many and extensive experiments have been conducted to ascertain the real benefit of bees and other insects in the fertilization of flowers. I quote from the *American Bee Journal* of 1884, p. 389: "In the course of the late Darwin's numerous and valuable experiments, he found that 100 heads of red clover, when grown in the open air in the usual way, produced 2700 seeds; but the same number of heads, when protected from bees, did not produce so much as a single seed." Harbison mentions in his book on bee culture a hot-house in Russia, where the peach trees, although thrifty and bearing numerous flowers, never produced fruit until a hive of bees was placed within the house. After that there was an abundance of peaches. In New Zealand the red clover never produced seed until humble bees were imported for that very purpose.

## Color of Pollen.

Pollen from different plants is of various colors, such as white, red, brown, blue and

green, and of different shades, but yellow is the prevailing color. This has, no doubt, originated the erroneous idea, entertained by many who have seen the bees carry something yellow on their legs, that they gathered wax from the flowers.

## The Pollen Basket.

The worker bee has on the middle joint of the hind legs a spoon-shaped cavity, surrounded by long, stiff, and curved hairs. This is called the pollen basket. Neither the queen bee nor the drones have this development. If you closely observe a bee, when she is gathering pollen, you will notice that after she has left the flower she hovers for a moment near it, and with the front and middle feet she transfers the pollen from her mouth to the pollen baskets, where it accumulates, until it forms two balls or pellets, about the size of the bee's head. The front and middle feet appear, under this operation, to be curved in under the body, and move with such exceeding rapidity that the eye can hardly follow them. As soon as the pollen is transferred to the pollen baskets the bee darts off to another flower. Just why she should confine herself to one particular kind of flowers while gathering a load of pollen is not well understood, but it has been suggested that perhaps pollen from different plants does not pack well together.

## Storing the Pollen.

By means of an observatory hive containing a single comb, with glass on both sides, I have seen repeatedly a worker bee enter laden with pollen. At first she runs over the comb in all directions, putting her head into different cells, as if undecided where to deposit her load, until she finally stops at a cell which perhaps contains some pollen of the same kind as that which she has brought. (In breaking up old combs it is, however, frequently found that a cell contains several layers of different-colored pollen.) Having found the cell suitable, the bee now puts both hind legs into the cell, and rubbing them together pushes off the two pellets in the pollen baskets. She then brushes off any pollen which may adhere to other parts of her body, and having also pushed this into the cell, she leaves the hive in search of another load. One of the young bees who attend to the interior management of the hive now puts her head into the cell, remaining there for some time, and when she finally withdraws, the loose pollen left there by the other bee will be seen to be nicely packed up against the bottom of the cell or against the pollen previously deposited there. When the cell is nearly full and the pollen not wanted for immediate use, a little honey is placed over it to exclude the air and the cell is then sealed. When pollen is stored in the hive it is frequently called "bee-bread."

## Use of Pollen.

Pollen, in conjunction with honey and water, is taken in by the nurse bees and partly digested, forming a thick, milky-white substance, chyle, which is disgorged and fed to the brood in the larval state. Without pollen or its equivalent, no brood can be reared. In cold climates, where it is desirable to have the bees breed up in time for the first honey harvest, and where there are in early spring no flowers from which the bees can gather natural pollen, bee-keepers are in the habit of placing meal of different grains, principally rye and oats, in some sunny, sheltered place, where the bees can help themselves to it. But as soon as the flowers appear in sufficient quantity, the bees leave the meal and confine themselves to gathering pollen from the flowers.

WM. MUTH-RASMUSSEN.

Independence, Cal.

## THE FIELD.

## The Wheat Yield for 1886.

The latest Government estimate of the wheat yield of the United States for 1886 is set down at a total of 80,000,000 bushels in excess of the last year's yield. With the three exceptional years of '80, '82 and '84, the present year has produced, in the United States, the largest crop of wheat in our history, while circumstances seem to render it probable that it will be a fairly profitable year to the wheat-grower. The National Bureau of Agriculture estimates that this year's yield amounts to about 457,000,000 bushels, or 100,000,000 more than last year. From 1870 to 1880 the average annual yield of the country was 31,052,728 bushels, and since then the yield has been as follows:

	Bushels.	Bushels.
1880	438,449,865	512,793,900
1881	380,280,196	357,112,000
1882	504,186,470	457,000,000
1883	421,086,160	

To the yield of the present year should be added the amount of surplus wheat and flour—reduced to bushels—brought forward from last year, amounting to 70,000,000 bushels, which makes the total quantity available for 1886, 527,000,000 bushels. The price of wheat has advanced of late, and almost coincident with this, though beginning a little earlier, has come a largely increased demand from abroad.

It will be interesting to estimate the amount which we can spare to supply the foreign demand, made larger by crop failures, war preparations and an almost settled belief that troubles times are impending in Europe. We need more wheat ourselves this year than last, on



account of an estimated increase of 1,700,000, at the average rate of growth, in our population. To supply this home demand it is thought 270,000,000 bushels will suffice, to which add 59,000,000 bushels for seedling, making a total of 329,000,000 bushels needed at home. Subtract this from 527,000,000 bushels and we find available for export 198,000,000 bushels. We will not probably have much of a surplus to carry forward.

The Bureau of Statistics reports that in July, August and September, when wheat prices were about five per cent less than the same time in 1885, the value of our exports of breadstuffs of all kinds, chiefly wheat and flour, was \$40,967,033, against \$25,439,474 in the same period of 1885. In September exports were \$14,282,528, against \$9,007,013 in September, 1885. The advance in the market has taken place since these figures were issued, and if it is remembered that the heavy increase of exports was at a time when prices were less than during the period compared with last year, some idea may be formed of the rapidity and extent of the growth of our export trade in wheat and flour. There is little fear of a surplus production at any time to cause material embarrassment. As our product increases, so does our population and the foreign demand, and it is a safe assumption that the two latter will usually equalize the former. From whatever standpoint it is viewed, either for this year alone or in the near future, our wheat and flour outlook is very satisfactory.

### Corn is King.

Notwithstanding the immensity of the wheat yield of the country, corn is king among the cereals. The corn crop will aggregate nearly or quite 2,000,000,000 bushels. These figures are of great significance. Such a crop of that cereal which is indigenous to American soil, and is nowhere else in the world grown in such perfection as in our Northwestern States, is a fact which means much. It means plentiful and well-conditioned beef and pork for home use and foreign trade. If only a tenth of the crop is moved to the seaboard, it means 6,000,000 tons of freight for our land and water carriers. Estimating the value of the crop on the farms at only 30 cents a bushel, it adds \$600,000,000 to the wealth of the country. If a tenth part of the crop be shipped, it will pay to the carriers \$20,000,000. Sent abroad, it will be one of the greatest items of our export trade. Other nations may crowd us in the wheat market, but the growing demand for corn, America alone can supply. Corn is not yet king of our export trade; cotton still holds that regal post; but in total value at home and abroad, corn is the great crop. The figures given indicate an early return of business prosperity. All wealth comes from the soil, and the country cannot prosper when the earth withholds her increase. But, on the other hand, the country cannot fail to prosper when the earth yields such a bounty as this greatest of all corn crops. The farmers are everywhere happy, and the commercial outlook is propitious. If the world does not need any one of our crops, or is unwilling to pay our price for the same, we have others to offer, which generally they must have, and we can hold on to the one not wanted until another year comes round. We have the broad expanse of a continent with all the varied soils and climates of the world, and a far more diversified system of agriculture than can be realized in any other country. We can furnish the markets of the world with wheat, corn, cotton, fruit, beef and gold.

California is only slightly interested in corn. It is grown in some of the southern counties, but our soil is so much better adapted to wheat and fruit that it is hardly likely that corn will ever become one of our staple products. Considerably over one-half of the total corn crop of the country is raised in the great Mississippi valley of the interior, viz., in the five States of Illinois, Iowa, Missouri, Kansas and Nebraska. The value of the corn raised in these States is greater than that of all the wheat grown in the United States, and very much greater than the total value of the cotton crop. But the great bulk of it—say 94 per cent of the whole—is consumed at home, only about six per cent of the crop being exported. Thus, in the tables of our foreign trade, corn cuts a much less prominent figure than the real value of the crop would lead one to expect.

When the sod was first broken in the five States above named it was not unusual to harvest a crop of 60 bushels of corn to the acre. This product has now been reduced to an average of 22 bushels. If the yield continues to diminish the price must rise, and populations which now live on cornbread will begin to consume a larger proportion of wheat in flour. This, again, will tend to reduce our surplus of wheat available for export. Whichever way we look at it, the conclusion is inevitable that at no very distant day in the future the agricultural lands of the United States will be taxed to feed the American people and will have little to spare for the foreign world.

NEW-COMERS from the East are flocking into the State, and many land sales in small lots are reported from San Bernardino, Los Angeles, San Luis Obispo, Sacramento, Placer, and other counties.

## SWINE YARD.

### Home-Made Products.

An Ohio woman tells, in the *National Stockman*, how she manages these by-products of the farm-slaughtered pigs as follows:

In making sausage we make use of most of the lean of pork, adding some beef if we have it. We like them best in casings, which have to be well cleaned, and turned and scraped with a dull knife, and soaked three days in salt water, changing it every day. Stuff with the prepared meat—which every one seasons to suit themselves—using a tin stuffer, and pricking with the fork to let out the air. Make them in links by taking a twist in the casing every 8 or 10 inches. Pack them in a keg and pour brine over and they will keep until warm weather.

Another way, which some will like better, is to make casings of cloth, in which the meat is stuffed, making them about three inches in diameter. When wanted for use the cloth is peeled off and the sausage cut in slices; these are nice, but will not keep unless packed and covered with lard. Still another way is to pack the meat in jars and run lard over them.

Head cheese may be made as follows: Take a hog's head, split open, remove the eyes, brain, etc., chop off the snout and part of the jaw bones containing the teeth, and clean thoroughly; soak in salt water an hour or two to remove the blood. Boil these together until the bones drop out. Chop all fine in a wooden bowl, carefully removing all bits of bone. No definite rule can be given in regard to seasoning, as some like it more highly seasoned than others. Dip out into crocks (milk crocks are the best, as they are handy to slice out of when cold) and press down with a heavy weight. Those not wanted for immediate use may have lard run over them and set away in a cool place. When wanted for table, slice and fry a light brown or eat cold.

Cut off the lower part of the pig's feet, scrape and singe them well, and boil until tender, adding a little salt and pepper. They are good this way when cold or when pickled together with the tongue, which is prepared by boiling whole in salt water, then peeling off the thick skin which covers it, and pouring cold vinegar either spiced or plain over them.

Before I stop I will tell you my way of baking sparerib. I take half a rib, chopped through the center, so I can double it together. This leaves a space between them which I fill with dressing, the same as I would with any fowl. Then tie together so it can be turned in the baking pan several times. Sprinkle with salt and pepper, and, if you like, sage; dredge with flour and bake an hour or so, according to the thickness of the rib.

### Home-Cured Bacon.

A few weeks ago the *Modesto Daily Republican* had a long editorial on the blue outlook for hog-raisers in the central and southern portion of the State, on account of the low prices ruling for pork. The editor advanced no suggestion toward meeting the crisis, and our attention was called to this item by a visit from John Burton, of the Norris ranch, in San Ramon valley, who was in town Sunday. A few years ago Norris & Luelling went extensively into the pork business, and stocked the ranch, comprising nearly 3000 acres, with porkers; expensive sheds, etc., were erected, and operations were conducted on an extensive scale. They had fully 1500 hogs as a starter, but after awhile it soon became apparent that the experiment was a failure, so far as raising hogs to be sold to the butcher was concerned. The cholera soon after carried off fully 600. Then they studied over the subject, and at last concluded to kill the hogs on the ranch and cure their own bacon. It is well known that country-cured bacon is worth a cent more a pound than city-cured, and being in possession of a valuable receipt for sugar-curing bacon, they at once prepared suitable quarters for their new departure, and are now capable of disposing of 50 hogs a day. The expense attached to it is trifling, and there is every reason to believe that it is the true solution of the pork question on this coast, and is a business that will pay any farmer, for there is an unlimited market for California bacon. Besides the pork business Messrs. Norris & Luelling are extensive cattle-raisers, and only lately shipped a large number of fine young mules from Texas. They are fully aware that to depend entirely on farming would before many seasons nearly swamp them, but with two adjuncts, like stock-raising and the bacon business, they will undoubtedly realize handsome returns.—*Haywards Journal*.

### Hogs at the Chicago Show.

EDITORS PRESS:—A careful study of the hogs exhibited at the late American Fat Stock Show proved very conclusively that light jowled hogs are not necessarily narrow on the back nor light in ham. The judges on live hogs preferred, as a rule, other things being equal, those having the least jowl or throatiness; but when it came to awarding the carcass prizes, another set of

judges gave the preference to the heavy jowled hogs.

Breeders are therefore still in doubt as to what is most certain to win at a fat stock show. If all markets were alike the butchers would doubtless more nearly agree, and the awards would seem less like riddles than now. The practical breeder and feeder may, however, rest assured that a well-hammed hog with good back and side and a medium jowl will find ready sale at a fair profit if rightly fed and fattened, since there is not the universal demand for jowl meat that there is for good hams and sides.

Springfield, Ill.

PHIL THURFON.

## FLORICULTURE.

### Pruning Roses.

EDITORS PRESS:—I was gratified to have you receive my note of inquiry so kindly, and espouse the cause of floriculture with such earnestness.

In a recent issue of the *PRESS*, Helen Conant, of Santa Cruz, brings up the question of pruning roses. I submit the following clipping: "Roses must be pruned back with a lavish hand, cutting out all the old wood and weak branches, so as to increase the shoots from the roots, and to encourage the number of flowering shoots. Last season, says an enthusiast in the *Springfield Republican*, an old moss rose was cut back most vigorously because the previous year it had bloomed very sparsely. The effect was soon seen in the strong shoots sent up from the ground, and the clusters of mossy buds were very numerous. This season all the old growth has been cut out and only last year's shoots left to flower, and the shoots from the roots are now very luxuriant and filled with buds."

"Hybrid perpetuals will bloom in great beauty in September if all the old wood is cut out after June flowering, and no flowers left to bloom upon the bushes and exhaust their strength by going to seed. Cut back most of the shoots but those springing from the roots, and let new wood form, upon which large clusters of buds will appear in due season."

"Monthly roses cannot endure quite as much pruning as their stronger sisters, yet they will respond in fresh buds and flowers if the scissors are used to clip off all the branches that have borne roses and the weak shoots, and thereby stimulate fresh shoots to put forth in renewed beauty."

May there not have been some other cause for the failing of the bushes? In an English book on flower culture I find the following on the

### Fertilizing of Fuchsias.

"They grow freely in a mixture of vegetable earth or peat, sandy loam, and a little well-rotted manure, which must be kept moist, but by no means sodden."

Your correspondent in Ventura county said nothing of fixing a standard of value which would insure mutual satisfaction in the exchange of the seeds, etc. Would it not be necessary? *San Mateo, Cal.* MRS. G. W. PHELPS.

[Standards of value in free exchanges must be left to each one participating. Let each one state what she will give and the rest of the arrangement must be made by direct correspondence.—EDS. PRESS.]

### The Asphodel.

EDITORS PRESS:—I am much pleased with your kind offer in the *PACIFIC RURAL PRESS* of December 4th, in response to M. W. Mason's communication. For one, I am anxious to lend a hand in the cheap distribution of flowers, and, to that end, submit my list of what few varieties I have accumulated in a year's residence here. [List is given under Exchanges. Correspondents will please write the "exchange lists" on separate pieces of paper, so they can be easily grouped.—EDS. PRESS.]

Can any one give me information regarding the "Asphodel"? Years ago, through the kindness of my valued friend, Thomas Meehan, of the *Gardeners' Monthly*, I became the possessor of a bulb, but in some unaccountable manner it disappeared ere a bloom rewarded my longing eyes.

Sutter Creek, Amador Co.

C. MILLIKAN.

### Exchanges.

Mrs. L. M. Brandt, Fish Rock, Mendocino county, Cal., has White Polyanthus, Narcissus and Campernel or great Jonquils; single and double fuchsias and geraniums of several varieties of each; to exchange for Marechal Niel and other nice rose slips, begonias or abutilons.

C. Millikan, Sutter Creek, Amador county, Cal.—Callas, perhaps 50 small bulbs; Chinese chrysanthemums, pale straw color and pink; Pompon chrysanthemums, pink, bronze and white; Japanese chrysanthemums, bronze and pink, from "Peter Henderson's."

KEROSENE OIL STAINS.—Kerosene oil spilled upon the carpet will often entirely disappear if the room is kept free from dust. If the spot still remains, a thick coating of powdered French chalk put over the spot and occasionally heated by laying a piece of brown paper upon it and passing a hot iron over it will generally remove the oil.

## THE STOCK YARD.

### The Cattlemen and the Railways.

We have printed the action of the Cattlemen's Association with reference to the freight rates on cattle shipped East. It seems that in Nevada there is an issue between the stock-growers and the railways which is exciting much interest. The *Sagebrush Stockman* of December 8th, alluding to a letter of W. H. Mills, land agent of the C. P. R. R. (which it says was recently published, but which did not come to our notice), says:

The letter of Mr. Mills admitted of but one interpretation, and that is that an endeavor will be made by the railroad company to have laws enacted which will prove disastrous to our leading industry. There should be no half-way measures adopted in the fight to be made, but every man engaged in the stock business, as well as those who have the welfare of the State at heart, should at once put forth his strongest endeavors to defeat the deep-laid scheme of the insatiate monopoly which is, and has been, sucking the life-blood of the State ever since the scream of the locomotive was first heard within her borders.

The herd law will not do for Nevada. Wherever such a law has been put in operation it has proved a failure, of benefit to a few and to the detriment of the many. According to Mr. Mills, it is the great desire of the railroad management to populate the State, and in order to effect that desired end a no-fence law is essentially necessary. Such an effort would be commendable, if in earnest, but we have yet to hear of an instance where the company has endeavored in any way to benefit Nevada, except where its own interests were paramount. If the railroad would establish reasonable passenger and freight rates, instead of the exorbitant toll now demanded, we might put some faith in the ingeniously-worded promises Mr. Mills has embodied in the communication referred to, and not until then.

The coming Legislature must either allow the question to remain in *statu quo* or enact a fence law, or capital will be driven out of the country and our now great industry reduced to nothing. As an agricultural country it has been demonstrated that Nevada can never have any claim; as a stock country it is without a peer on the American continent. Blot out this industry and Nevada will be reduced to such a condition that the revenue derived from taxation would be totally inadequate to carry on the State Government.

### Mr. Crutcher's Letter.

E. W. Crutcher, president of the Nevada Livestock Association, has a communication in the *Winnemucca Silver State*, from which we excerpt the following:

I inclose you a letter from Robert Beverly, president of the Farmers' National Congress, which adjourned at St. Paul about the 30th of August last subject to the call of the president. I having been appointed by his Excellency, Gov. Adams, as one of the delegates from this State, is the cause, perhaps, of my receiving this communication. Having received the report of this convention at St. Paul, I observe they passed some resolutions on subjects which we of this State are vitally interested in, and which our legislators should take cognizance of when they meet the coming January. Among them are these:

That the Congress of the United States pass an act creating the office of Secretary of Agriculture; that the Government extend the benefits of the Signal Service to all stations or portions of the United States accessible by telegraph for the benefit of agriculture; that the Congress of the United States appropriate the necessary amount of money for the stamping out of all contagious diseases among domestic animals; and that the Legislatures of the several States be requested to enact such laws as are necessary in supplementing the acts of Congress for the extinction of contagious diseases.

Now, Mr. Editor, in connection with the above, I wish to say one thing more to Nevada stockmen in reference to our fight against the railroad company—I mean the herd-law scheme. Such a law would utterly ruin the State. It would blot out the stock industry and give nothing in return, and I am surprised to see so little attention paid to it by our local papers; seemingly, this is not their kettle of fish. If we intend to be heard and respected, it is time we were showing our teeth. Our legislators must understand that we will not have the railroad company dictate to us the laws they wish enacted. We must combine and stand together as one man in defense of our interests, and not be driven under the crack of the whip in the hands of a monopoly that is seeking its own selfish ends.

Another matter of vital importance to the cattle industry is a law prohibiting the importation of diseased cattle. Pleuro-pneumonia is not a scare. It is a living reality, and we do not want it. I am informed that there are two small herds being quarantined in Montana on the range, they having come in contact with a shipment in Dakota, which subsequently have been slaughtered. I hope our cattlemen will be on hand when the Legislature meets and devise and enact such laws as will guarantee security in the future.



## PATRONS OF HUSBANDRY.

Correspondence on Grange principles and work and reports of transactions of subordinate Granges are respectfully solicited for this department.

## Woman's Legal Right to Vote.

The current number of the *Forum* contains a rather unique and forceful article on the legal right of woman to vote. That the right exists by virtue of her being a federal citizen. The writer states the question as follows: "My proposition is, that in the United States, and under the Federal Constitution, suffrage, whether for men or women, is an attribute of their federal citizenship; that it is one of the essential privileges of a citizen of the United States, inhering in the status or condition of such citizenship." That, "inasmuch as, by the Fourteenth Amendment of the Constitution, 'all persons born or naturalized in the United States and subject to the jurisdiction thereof, are citizens of the United States, and of the State wherein they reside,' then it follows as an unanswerable logical sequence that 'As all native or naturalized persons are declared by the Amendment to be citizens regardless of sex, the same are necessarily suffragists, regardless of sex.' In that case 'women citizens of the United States, who are now disfranchised by State laws, legally have the right to vote for federal officers, because they are federal citizens.'"

This proposition was directly submitted to the Supreme Court of the United States, in the well-known case of *Minor vs. Happersett*, 21 Wallace, S. C. Rep. The Court said: "The Constitution does not define the privileges and immunities of citizens. In this case we need not determine what they are, but only whether suffrage is necessarily one of them. It is certainly nowhere made so in express terms. The United States has no voters of its own creation. The elective officers of the United States are all elected directly or indirectly by State voters." This decision is the only existing bar to woman suffrage, at least the right to vote for federal officials. But in this case the Court admitted that "if the right of suffrage is one of the necessary privileges of a citizen of the United States," then the Constitution and laws of a State confining it to men are in "violation of the Constitution of the United States, as amended, and consequently void." Now it is well known that this tribunal is not infallible. Its path is strewn with absurd and contradictory opinions. This is clearly one of them, and the Court should reconsider its decision for consistency sake. It is in direct conflict with the decision rendered in the celebrated *Slaughter-house Cases*, 16 Wallace Rep. In that case the Court held that "the negro, having, by the Fourteenth Amendment, been declared to be a citizen of the United States, is thus made a voter in every State of the Union." Now the reader will notice that in this decision the United States citizenship of the negro makes him a voter in every State of the Union, while in the former case the United States citizenship of a woman is of no avail. Here is a palpable conflict of opinion. The Court blows hot and cold, giving the suffrage to one class of citizens and taking it away from another.

The dictum of the Supreme Court, that "the United States has no voters of its own creation," is contrary to fact. Mr. Madison says, in the 52d number of the *Federalist*: "The definition of the right of suffrage is very justly regarded as a fundamental article of a republican government. It was incumbent on the convention, therefore, to define and establish this right in the Constitution. To have left it open for the occasional regulation of Congress would be improper, for the reason just mentioned. To have submitted it to the legislative discretion of the States would have been improper, for the same reason, and for the additional reason that it would have rendered too dependent on the State Governments that branch of the Federal Government which ought to be dependent on the people."

But this is not all. That special clause of the Federal Constitution in which, Mr. Madison says, the right of suffrage is established, is as follows: "The House of Representatives shall be composed of members chosen every second year by the people of the several States; \* \* \* and the electors in each State shall have the qualifications requisite for electors of the most numerous branch of the State Legislature." In connection with this clause, it is well to remember that the Supreme Court in the case of *Scott v. Sanford*, 19 Howard Rep., decided that the words "people of the United States" and "citizens" are synonymous terms and mean the same thing. That "every citizen is one of this people, and a constituent member of this sovereignty." The conclusion inevitably follows that the right to vote, so far as the members of the House of Representatives are concerned, is established by the Constitution and not turned over to the States, and that every citizen is a voter.

A remarkable case was tried in the Circuit Court of the United States for the southern district of Illinois, in June, 1882, before Judge Harlan. The style of the case is "*United States v. Kellar*." The defendant was indicted for violating a federal law, in voting without having a lawful right. He and his mother

were both aliens by birth, natives of Prussia. The mother came to the United States and married a naturalized citizen. Her son was a minor when she came. "Having become a citizen of the United States, she transmits federal citizenship to her son, and the citizenship thus transmitted carries with it the right to vote. Thus, the mother transmits a right which she herself does not possess, while the effect of her naturalization is declared to be retroactive, enfranchising a child who was born when she was an alien. Here, then, is a case of federal citizenship and federal suffrage, pure and simple, with which the State had nothing whatever to do. If the mother can do this for one child, why not for another? Why not for a daughter, as well as a son? Why does she not possess the right herself? The clause of the Federal Constitution establishing suffrage has not a word about the sex of the electors."

## Anniversary Day at Sacramento.

EDITORS PRESS:—Sacramento Grange observed the anniversary of the Order at their hall, and performed some work with exercises suitable for the occasion. Members of sister Granges mingled with us, making the day one of social as well as intellectual enjoyment. Bro. and Sister Johnston with their daughter graced our meeting with their presence, having arrived that morning from the session of the National Grange, all in good health, and glad to reach their home. The Grange conferred the third and fourth degrees on a class of three sisters. Then the ladies chose their partners and all marched into and filled the banquet-hall, where an hour passed in free conversation, making all hearts happy, as one family of Patrons on our anniversary day.

Having performed the duties of strengthening the inner man, all were better fitted for the intellectual exercises of the afternoon. The W. M.'s gavel fell and he made a few introductory remarks pertinent to the day, and read the first toast: "Our National Grange—The medium through which the hatred of the South and the animosities of the North were turned to fraternal affection and love."

Responded to by W. M. S. G., Wm. Johnston, who spoke of the sessions of the National Grange. As they grow older, each passes a notch higher, and the last goes far in advance of the previous one. Members were at first raw, requiring training to smooth off the rough edges and polish thoughts, which, when brought about, makes the business of the day run in an easy manner. The school of training in the Grange has brought many to the front, and now no Order can show a finer class of men than the husbandmen of our land.

In his varied remarks he referred to the pleasure had in greeting so many, gathered from scattered parts of the Union, now interlocked in links of brotherly love, and bringing forward such business thought as will work to the greatest good of the Order at large. He spoke of the sadness of links broken, the vacant space left silent, and the silver tongues no more heard in the sessions to give words of cheer and endearment to their brothers and sisters; also, of the parting, when the business had been brought to a close—the last grip, expressions of face and word; the good-by and God bless you—all returning to their homes, north, south, east and west—some, perhaps, never to meet again.

The brother referred to the fine farms he had had the pleasure of seeing. Among all he had ever seen, those in the Cumberland valley, Penn., took his eye and were pronounced the finest in the U. S., with stock, improvements and manner of farming. He said California doesn't know what hard times are. Eastern farmers are not looking for fortunes as their brethren do here. If they make ends meet they are contented and happy, but their social relations surpass ours. Being so thickly settled, many Grangers come together during the winter and pass the evenings to their good and derive benefits thereby. He stated that the California Granges were farther ahead in the work than any others in the Union, which is quite a compliment.

Sister Johnston was called, and made some pleasing remarks in regard to the California exhibit of fruits which the W. M. gathered to present the N. G. She had the entire charge of them there, labeled them by numbers, from whom, where grown, and devoted most of her time to explaining and telling all that was of interest to those who sought information. The exhibit proved a success, and she trusted a more extended display may be furnished by the next Master. Referred to the four oldest Grangers of the Order present—one, Bro. Thompson—and the finest giving of the sixth degree of any session. The sister was welcomed back by her many friends.

Second toast: "Our State Grange—The farmers' high school, where manly and matronly worth is manifested and fraternal ties grow into affection, and where the best Steele has been made brighter by contact with our polished and shining Flint."

In response, W. S. L., Daniel Flint, spoke of the advantages of the Grange, complimented the W. M. and lady, and took Education in the Grange for his theme.

Third toast: "Our Sister Granges—May they increase in numbers, in membership, happiness and prosperity." Bro. M. Toomy, of Enterprise Grange, reviewed each Grange,

commencing with the first organized in the county, and made some happy hits.

Fourth toast: "Our Order—May the noble precepts of our Order be introduced into every household, and may it be strengthened and enlarged until we become a power in the land." W. O., Walter Greer, spoke of the National Grange, Washington, its growth, declaration of purposes and so forth. The Order is equal to any other in point of education, and advanced beyond others by the admission of the sisters. We appeal to the young members. Our brother was in his happiest mood, and considered by its members the Cicero of the Grange.

Fifth toast: "Our fair Sisters—God's best gift to man. May His richest blessings ever rest upon them, and may man ever appreciate them at their true worth." Response by W. L., E. F. Aiken.

Sixth toast: "Our Brothers—May they always continue to speak words of endearment to their better halves, and be prompt in keeping their purses well filled." Responded to by Sister D. D. Hull.

Then followed an instrumental solo by Sister Stevens and remarks by Sisters Ewing and Jones, of Pilot Hill Grange, Brothers Krull and Wilson, Enterprise Grange, and Brothers Hull, Welty and Flint, Sacto. Grange.

The day was happily spent, and all left hoping for many more such, to the entertainment of all good Patrons.

G. T. R.  
Sacramento, Cal.

## Swindlers.

A couple of weeks ago a man came to Wheatland and remained at the hotel for a week or so. He made a great many inquiries about people and their property, and after gaining all the information he could, he rented the vacant store next to Bennett's jewelry store, and put on exhibition an arrangement which he denominated a hydro-carbon burner. He told all who inquired regarding it that it was cheaper than wood, and that it was an arrangement for burning water and oil. The first man was joined by another in a few days, and soon the king pin of all, Thos. E. Hall, came to town. Hall was exorbitantly pretty, and seemed to know it, too. He always looked into the glass doors and windows as he went by to see his reflection, and had a newspaper put behind the glass door in the store they had rented, and would pose opposite it whenever he had the time, and oblivious of all that was going on, would admire his shadow therein. Hall made numerous trips to the country, and visited several farmers to induce them to accept the agency of his burner. Among those he induced to act as agents were C. W. Beilby and Mr. Woodworth. He got them to sign four papers, and said they were contracts for the protection of all concerned. Mr. Beilby said he signed one and Hall pushed it up and told him to sign the other. Beilby asked him if they were all the same and he said they were. He signed the balance of them, as did Mr. Woodworth, and a number of persons whom we do not remember now. One of the four papers turned out to be a note for \$300 payable next September, at 10 per cent interest, which Hall cashed at the Farmers' Bank at a discount. Beilby and Woodworth were in town on Monday and this was the first they knew of the note. They admitted their signatures, and are willing to pay the \$600 to the bank, the managers of which will, no doubt, give the notes back for what they paid for them. Hall and his confederates skipped as soon as they got the cash. We hope our exchanges will warn their readers of this gang.—*Wheatland Graphic*.

## Grange Elections.

ALHAMBRA GRANGE.—Elected Dec. 4: Dr. J. Strentzel, M.; E. B. Smith, O.; B. R. Holliday, L.; E. B. Barber, S.; James Kelly, A. S.; T. A. Griffin, C.; H. Raap, T.; Mrs. M. B. Lander, Sec.; George W. Bailey, G. K.; Miss Mary Bartola, P.; Miss Sarah Young, F.; Mrs. E. B. Smith, Ceres; Mrs. A. Boss, L. A. S.; L. C. Wittenmeyer, Trustee.

SACRAMENTO GRANGE.—Elected Dec. 11: W. Walter Greer, M.; Jos. Holmes, O.; Alice Greenlaw, L.; Chas. E. Mack, Jr., S.; J. H. Beach, A. S.; Mrs. Phoebe Johnson, C.; George Rich, T.; Frankie M. Stevens, Sec.; Daniel Flint, G. K.; Lizzie Aiken, P.; Ida Flint, F.; Nettie Klotz, Ceres; Lulu Rich, L. A. S.; M. Sprague, Trustee; Gussie Wilcox, Org.

SANTA ROSA GRANGE, No. 17.—Elected Dec. 11: E. W. Davis, M.; Mrs. M. S. Saxton, O.; Chas. Gamble, L.; J. Copius, S.; C. D. Bonner, A. S.; John Strong, T.; Miss Martha Lumsden, Sec'y; Mrs. E. A. Rogers, C.; Will Rogers, G. K.; Miss B. Dena Lottman, P.; Mrs. S. T. Coulter, Ceres; Mrs. E. J. Wright, F.; Miss Emma Mills, L. A. S.

TWO ROCK GRANGE.—Elected: H. Andrews, M.; A. P. Martin, O.; S. Q. Barlow, L.; C. Nason, S.; J. R. Doss, A. S.; Sister L. E. Barlow, C.; W. D. Freeman, T.; J. C. Parvine, Sec.; S. M. Martin, G. K.; Sister M. A. Doss, P.; Sister Celia J. Parvine, F.; Sister N. M. Martin, Ceres; Sister M. L. Hinshaw, L. A. S.; E. O. Hinshaw, Trustee.

JOINT INSTALLATION.—Eden Grange has invited Temescal to participate in a joint installation of officers, at Haywards, on Saturday, Jan. 8, 1887.

## December 4th, in Alhambra Grange.

December 4th, 10 o'clock A. M., found Alhambra Patrons on their way to their hall, not only to choose their banner-bearers for the ensuing year, but to celebrate the twentieth birthday of our Order. Fraternal ties hold in closest bonds our Eastern brothers and sisters, and our hearts go out to them in commiseration and regret that we cannot, on this day at least, give them, from our plentiful sunshine and genial warmth, enough to dissolve the snowy wrappings that muffle and envelop not only person but surroundings. Nature smiled on us, not even veiling her sunlit face with the faintest gauzy veil, though her breath was sharpened with frost-crystals, thus making the warm stove the center of attraction.

We of California pride ourselves on climate, fruit and flowers; forgetting that not many years ago this now favored land was to us, as it is now to our Eastern friends, a country of almost oriental fabulousness; and in bursts of thankfulness for our own happy translation, we are apt to commiserate our (as we think) less favored neighbors. However, Grangers amid the snow and ice of the Atlantic seaboard, and Grangers amid the sunshine, fruit and flowers of the Pacific Coast, clasp hands across the continent, and in the light and promise of hope and perseverance, work for the same great principles that on December 4th, two decades since, took root in our National Capital, and now bloom in keeping with our liberty tree, its fragrance wafted upon the wings of the west winds, even through the canyons and valleys of the high Sierras.

As usual, I ramble; but come back with me to Alhambra's Grange-room. Worthy Master Strentzel sounded the gavel about 11 o'clock, gave the first and second degrees to two young ladies, or rather Worthy Master Loucks, of Valley Grange, did, for our Master was really not able to preside, after which came the usual harvest-feast. Our zest for this duty, namely, eating, seems as unflagging as is our zeal in sowing and reaping.

Election of officers passed off in all harmony with several changes in the count, enough, we hope, to spur those left in the traces to quicker steps of progress. Installation Jan. 15th; meet 10 o'clock, with lunch. Grangers will be cordially welcomed, as they always are.

Contra Costa stands firm in the Grange line, and although in our last county election Granger was pitted against Granger, so that Grangers were elected and perforce Grangers were left, still Grange-room harmony is intact and her politics still aim at the "greatest good of the greatest number."

Even as I write, Walnut Creek and Valley Granges are counting their newly elected officers, and so the good work goes on. "So mote it be." Fraternally,

MRS. MARIA B. LANDER,  
Secretary of Alhambra Grange.  
Martinez, Dec. 11, 1886.

OHIO TO CALIFORNIA.—The *American Grange Bulletin* sends this greeting to the Grangers of the Golden State: The farmers of California are to be congratulated upon their noble struggle at the late election. They send a number of farmers to the Legislature—from all parties, but true, honest and tried farmers. This work must go on until, as farmers, we have such a representation in Congress and Legislatures as our numbers and interests demand.

BRO. CHESTER, of the *Patron*, was confined at home for several days by an attack of sciatica; but we were glad to find him on Wednesday sufficiently relieved from the painful affection to be at his desk again.

## A Hint to Our Friends.

Last week a lady in Stanislaus county wrote us this friendly note, inclosing the addresses of three of her neighbors:

EDITORS PRESS:—I take the liberty of sending you several names of persons to whom sample copies of the *RURAL PRESS* might be advantageously sent. And not altogether in the interest of the *PRESS*, but because I am sure the persons themselves would be greatly benefited thereby.

A few days ago, Mr. — (her husband), having business with Mr. J., put in his pocket the *PRESS* for Nov. 20th, as he wished him—Mr. J.—to read your market report on hay. He told me Mrs. J. became quite absorbed in the paper, so that she did little else but read during his stay of several hours.

Mrs. J. was one of those whose addresses were inclosed. Now, friends of the *RURAL*, if you have neighbors who you think would find our paper helpful and pleasant in their homes, why not go and do likewise yourself? It would be a kindness all around.

OROVILLE ORANGES.—Thos. A. Garey, the veteran nurseryman of Los Angeles, made us a call the other day. He had been reconnoitering a few days in Central California, and was homeward bound. He took from his pocket a fine specimen of Mediterranean Sweet orange, which he had cut with his own hand from a tree in Oroville, and says that they not only can, but do, raise fine oranges in the northern half of the State, and no mistake.

SAN DIEGO IMMIGRANTS.—It is claimed that the arrivals in San Diego, for the 11 months ending Nov. 30th, exceed the departures by nearly 11,000, and quite one-half of these people have settled in the interior.



## PUBLIC AFFAIRS.

## Regulation of Railways.

We noted, two weeks ago, that Mr. Reagan, of Texas, who has achieved a national reputation for his efforts at Government regulation of railways, was a candidate for election to the U. S. Senate from his State. It appears by the Washington dispatches that some progress is being made toward legislation of the sort proposed. The following account of the progress of the measure came by telegraph just after last week's RURAL went to press:

The conferees upon the interstate commerce measures, popularly known as the Reagan and Cullom bills, reached an agreement December 9th upon the differences between the Senate and House. The report of the conference committee will be presented as soon as it can be prepared and signed and its adoption will be asked at an early date. The bills passed by the Senate and House propose different plans for the regulation of the interstate traffic of the country. Both prohibit unjust discrimination between persons and places, the giving of special rates, preferences, etc., as well as certain other practices which are declared to be unlawful. Both bills require the railroads to publish their rates and to adhere to them when published. They did not differ materially in the penalty provided for a violation of their general provisions, but they differed widely in the methods proposed for securing their enforcement.

The House bill gives every shipper with a grievance the right of action in the State and United States courts on his motion, and in his own behalf to recover damages that he may have sustained, with a provision that a reasonable attorney fee should be allowed in every case of recovery.

The Senate bill did not preclude shippers from instituting suits in their own behalf, but it provided for the creation of a commission required to investigate all complaints made and to settle them by arbitration, if possible, and if not to prosecute the cases in the courts when they find that the shippers are entitled to redress.

By the compromise which has been agreed upon the conferees proposed to put both these plans of regulation into operation and to retain the remedial features of both bills. They will recommend that the House agree to the commission system as it stands in the Senate bill, and that the Senate agree to the provision allowing such shippers as may elect to do so to prosecute suits for recovery of damages in the United States courts in their own behalf, with the provision that they shall not have the right to pursue their remedy in the courts and through the commission in the same case. On the vexed and much-debated question of long and short hauls a compromise has been agreed upon.

The House bill absolutely prohibited a greater charge for a shorter than for a long distance, which includes the shorter upon any one railroad. The provision in the Senate bill prohibited a greater charge for the shorter than for the longer distance, under substantially similar circumstances and conditions, over the same line in the same direction and from the same original point of departure, or to same point of arrival. It also authorized the commission to make an exception to this general rule in special cases where it seemed proper.

The substitute section agreed to by the conferees makes it unlawful for any railroad to charge more for transportation of passengers and of a like kind of property under substantially similar circumstances and conditions for a shorter than for a longer distance, over the same line and in the same direction, the shorter being included within the longer, with a proviso that in special cases, upon application and after investigating, the commission may prescribe to the extent which such railroad shall be relieved from the operation of this section.

The House bill contained an absolute prohibition of pooling, while the Senate bill provided for an immediate investigation by the commission of the necessity of legislation upon the subject. Upon this point the Senate conferees have yielded and accepted the provision of the House bill. Following is the provision in full:

That it shall be unlawful for any common carrier subject to the provisions of this act to enter into any contract, agreement or combination with any other common carrier or carriers for the pooling of freights of different and competing railroads, so as to divide between them the aggregate or net proceeds of the earnings of such railroads, or any portion thereof; and in any case of agreement for pooling freight, as aforesaid, each day of its continuance shall be deemed a separate offense.

Upon the question of publicity of rates there was no difference of opinion. The House bill required each railroad to publish and to adhere to its rates between points upon its own line. The Senate bill made it the duty of the commission to also enforce the publication of such through rates as it might be found possible to publish. To this a substitute has been agreed upon by which each railroad is required to print and keep in every depot for inspection the public rates it may establish between points upon its own line. They are also required to file with the commission copies of all joint tariffs of through rates to which they may be a party, and the commission is required to se-

cure the publication of such through rates as far as may be found practicable.

Other modifications of minor importance have been made, but these are the principal ones on which a difference of opinion existed.

When the substitute bill has been printed, the committee will go over it carefully and may find it necessary to make some change, but they have substantially agreed upon their recommendations.

## AGRICULTURAL NOTES.

## CALIFORNIA.

## Alameda.

**LEMONS.**—*Irving Reporter*, Dec. 11: Our town will be represented at the Citrus Fair at Sacramento by a box of lemons sent in by our neighbor, Mr. H. Crowell. These lemons were picked by Mr. Crowell from a tree in his orchard surrounding his home, in our town. They are certainly very beautiful specimens of the citrus family, and we expect to see them receive a premium; and at the fair they will be an excellent advertisement of our semi-tropical climate.

## Fresno.

**SWEDISH SETTLERS.**—*Expositor*: A colony of some 50 or 60 families of Swedes from Michigan have been induced to locate near Kingsburg. Four or five families have already arrived, and the rest will follow as soon as they can dispose of their property in Michigan. Those who are here have purchased a tract of land for the colony and had it subdivided into 20-acre lots. The colonists will enter principally into the cultivation of fruit and raisins. They will bring with them in the neighborhood of \$5000 each, which will enable them to fully improve their places at once. They will be a valuable acquisition to Kingsburg, and their enterprise will do wonders toward developing the fruit-growing industry in this section.

## Inyo.

**AGRICULTURAL ASSOCIATION.**—*Independent*: At Bishop Creek an Agricultural Association has already been formed, in anticipation of the enactment by the Legislature of a law for the formation of a new agricultural district to include the counties of Alpine, Mono and Inyo.

## Lassen.

**ARTESIAN WATER.**—*Shasta Democrat*, Dec. 8: James Woodman, who has been sinking an artesian well in Big Valley, near Bieber, several days ago struck an underground stream at a depth of 400 feet, and the bottom of the well dropped into it. The current is said to be terrific. The well was sunk on a knoll and the water rose to within six feet of the top. He has water enough to flood the country, and will run a tunnel into the hill to tap the well.

## Los Angeles.

**SHIPPING ORANGES.**—*Telegram*, Dec. 9: The good effect of the Orange-growers' Protective Union is shown by the first two sales of the season. One car of Duarte seedling oranges will be shipped on Saturday from San Gabriel, which sold for \$2.50 per box on the cars. Another car of Los Angeles seedling oranges brought \$2 per box. These will be shipped on Monday and go East.

**UNDERDRAINING.**—*Florence Cor. Times*: The low, wet place on Mr. Bell's ranch, in time past considered of but little value, save for hogs to wallow in, has, by a system of drainage, been made valuable for producing alfalfa, etc. About 3000 feet of lumber has been used for deep underground fluming. Forty-three boiling springs were found on about one acre of the land, some of which were tintured strongly with sulphur. Owners of considerable low, marshy land southward, seeing the advantages derived from this system of drainage, contemplate the same kind of improvement.

**WALNUTS AND CORN.**—*Mr. J. H. Martin*, of Los Nietos, exhibited in the *Herald* office some specimens of corn, besides a large quantity of English walnuts. The corn consisted of three varieties—a few ears of White Sonora, 14 inches long, containing 782 grains to the ear; also White Flint, 13 inches long, with 700 grains to the ear; Large Yellow, 14 inches, with 800 grains to the ear. Mr. Martin showed walnuts from eight-year-old trees which measured eight inches around. They were all raised on Mr. Martin's place, a mile north of Fulton Wells, and show the good quality of the land in this, one of the garden spots of Southern California.

**ANAHEIM OSTRICH FARM.**—*Gazette*, Dec. 11: The owners of the ostriches having decided to abandon the present location of the farm, the work of removal is now energetically going on. The new location is in North Anaheim, immediately north of what is known as the Fithian tract. The birds will have a fine range on the hillside, and as the quality of the soil and the climate is very different from where they have been kept, it is believed that the birds will be greatly improved thereby. The new farm is susceptible of the highest cultivation, and will soon be an admirable feature of that charming region.

## Mendocino.

**ROUND VALLEY.**—*Cor. Ukiah Press*, Dec. 5: Stock of every description is doing well; in fact, feed was never better at this season of the year than it is now, and as we had good feed the past summer, stock came down from the summer ranges in good condition.

**SHEEP AND COYOTES.**—There are not as many sheep in Round Valley township by probably

30,000 as there were three years ago, notwithstanding the fact that we have never had in succession three more favorable years, so far as feed and the elements were concerned, since the first sheep were brought to this part of the county. We have great hopes that the Board of Supervisors at their January meeting will give us the scalp law again. We see no good reason why sheep should not be protected. They are of the most useful domestic animals we have, and are the prey of every carnivorous animal and bird in the country. Bears, panthers, coyotes, wildcats, dogs, eagles, etc., prey on them. Yet we are willing to protect ourselves against all except the coyote, and many sheep-owners are willing to add to the bounty for any that may be caught on their ranges. The Government deems it right, and justly, too, to protect wool from foreign competition by a tariff; and does it not look a little inconsistent that the local authorities do not protect as far as possible the life of the little animal which bears it?

## Placer.

**A CITRUS POSTER.**—*Record-Union*: One of the prettiest sights in Placer county at this time is the orange grove of P. Norbourg, about one-half mile north of Penryn. His trees, heavily loaded with the finest quality of budded fruit, attract general attention, and being directly alongside the railroad constitute a standard advertisement for Central and Northern California. Mr. Norbourg has had as high as 25 visitors at his place in one day. He is justly proud of his orchard. His trees are seven years old.

**SHELTERING ORANGE TREES.**—*Republican*: There is a considerable difference of opinion among parties planting citrus trees as to the protection needed. James Curry and Andrew Ryder have their young trees well wrapped in straw or cornstalks, but many think that this will freeze and so injure the trees. J. H. Hoffman and J. R. Johnson have driven four stakes forming a square around the tree, distant 12 to 18 inches, and drawn sacks over the stakes, and on cold nights they lay sacks on top. J. J. Morrison has a three-year-old tree in his yard that has never been protected, and on the strength of this he last spring set out 100 new trees and is not covering them at all. Out of the 100 set out, 99 lived and the other one was injured in transportation. W. G. Williams has two flourishing trees set out two years ago last spring and not protected. One has 49 oranges on it and the other one 20.

## Sacramento.

**THE EARLY BIRD.**—*Record-Union*, Dec. 9: Robins have already made their appearance in this vicinity, which is several weeks ahead of their usual advent. This may be a sign of an early spring.

## San Diego.

**A COUNTRY HOME.**—*National City Record*: On Sunday last we visited "The Glens," J. C. Pelton's country home, and what we saw could be expatiated on with both profit and interest, as showing the capabilities of our sunny clime. Here we saw broad acres and plenty of them, of deep and richest soil, mellow as an ash-heap and from two to six feet deep; green Egyptian corn, which has been growing all summer without one drop of artificial irrigation; watermelons ripe and unripe on green vines; orange trees, set out last March, in blossom, and bearing large, green oranges; vines, three to six feet long, from cuttings set seven months ago; green barley and wheat, the former in bloom, and buckwheat just springing from the ground, cherry, peach, fig, plum, apricot, and pear trees with green foliage (December 5); not least, a reservoir costing within \$200, to contain 2,000,000 gallons of water. We were royally entertained by Mr. Pelton and lady, and came home the better for having been there.

## San Joaquin.

**POTATOES.**—*Independent*: Arthur Thornton, of New Hope, is the lucky owner of about 50,000 sacks of excellent potatoes raised on 500 acres of land. Last year the price of spuds was so low that many people lost money on their crops, but this year the price is about 85 cents per sack. No man in this country deserves more spuds and better prices than Mr. Thornton.

## San Mateo.

**A HIDDEN PIT.**—*Times and Gazette*, Dec. 11: At Half Moon Bay, last week, Mr. John Meyer came near losing a pair of fine horses. He was plowing on the old Johnston place, when his horses sank through the ground. Upon investigation, an old well, 60 feet deep, was discovered, which many years ago had been in use and had simply been boarded over; the boards becoming rotten had given way. The spot had been plowed over for many years.

## Santa Barbara.

**JERUSALEM ARTICHOKE.**—*Lompoc Record*, Dec. 11: J. W. Shoults brought to our office yesterday a Jerusalem artichoke, weighing two and one-half pounds, grown on his ranch near town. He has about a quarter of an acre of them. They are excellent for hogs, and will yield tons to the acre.

## Santa Cruz.

**STRAWBERRIES.**—*Pajaronian*: Most of the Pajaro valley strawberry-growers will set out many plants this season. Many of the old plants have been taken out and are to be replaced, while a few growers intend increasing their acreage of berries. Thurber & Co. will set out 20 acres, R. W. Eaton will put out 5 acres, A. McNeely is to put in 8 acres, and J. W. Ostrander will plant 10 acres. Waters & Brewington have received a large lot of plants from

the East, and will set them out on their berry farm.

## Solano.

**DAMAGED BY DROUTH.**—*Denverton Cor. Republican*, Dec. 7: Summer-fallowed ground that was sown some time ago will, in all probability, have to be resowed, as the light showers caused a portion of the seed to sprout, only to be withered and its vitality destroyed by the dry weather that followed. An 80-acre field belonging to Zach Bethell, which was sowed with wheat more than six weeks ago, has been so damaged by the drouth that he intends to resow it with barley.

## Sonoma.

**PRUNES.**—*Democrat*, Dec. 11: H. W. Smith brought 600 pounds of prunes into town Thursday morning, which were grown in his orchard of one-half acre. On the half acre he raised 1140 pounds of prunes dried. Those which he brought in were all of a uniform size and averaged 40 to the pound, while the marketable average of the French prune is 80 to the pound. They were compared with a sample of the French imported prune, much to the depreciation of the latter. While the latter were much smaller and wrinkled and dry, the Sonoma county prunes were large, full, and devoid of that leathery appearance so often seen in dried fruits.

**MESQUIT GRASS.**—*Petaluma Courier*: A large number of the farmers along the coast, who formerly raised potatoes, are gradually drifting into the dairy business, and the question of the best grasses for stock-feed is one of great interest to them. Henry Lawrence and some others have for several years been stocking their farms with the Texas mesquit grass, and are so far pleased with the result. It is a hardy grass, keeps green all the year, and does well all along the coast. While not so sweet as some other grasses, stock soon become fond of it and thrive well upon it. It forms a heavy sod and yields in feed largely to the acre.

## Tulare.

**PLOWING AND SEEDING BRISKLY.**—*Times*, Dec. 9: G. S. Berry is putting in 4000 acres, John Tuohy is at work on his 3000 or 4000 acres, John A. Patterson has a large number of teams plowing 6000 acres, E. Jacob is putting in his lake lands, Dan Spangler is making the dust fly on Kings River, and so it goes in every section of the county. There will be more ground plowed and seeded to grain before the rains this year than at any previous time in the history of Tulare county.

**ORANGES.**—There is on exhibition at Nancawen's a short twig containing nine oranges, from the ranch of S. Z. Curtis, nine miles northeast of Visalia. Mr. Curtis has about 30 trees on his place, growing and fruiting out on the plains without any protection whatever. Only 15 or 16 bore this year, but what fruit he has is of large size, without any sign of rust, and of a sweeter flavor than those received here from the Los Angeles orchards. The frost has nipped some of his trees, but they start out again from the roots and do well, though no more care is bestowed on them than would be on a peach orchard. The grove is only plowed once a year.

## Ventura.

**BEANS AND CORNS.**—*Republican*: We are informed by many farmers of veracity that the corn and bean crops in the valley, just harvested, are among the heaviest ever raised in this county, corn yielding from 3000 to 4500 pounds, shelled, and beans, Limas and small whites, averaging about one ton to the acre. Some crops of beans have actually yielded over 2500 pounds to the acre, and they have all been secured without injury by the rains.

## NEVADA.

**BLACK WALNUTS.**—*Reno Gazette*: A black walnut tree at the Adams residence, Virginia City, has borne a fine crop of nuts this year. It is a thrifty tree, 12 years old and six or eight inches in diameter. It has borne quite a lot of nuts in past seasons, but not so plentiful and good as this season.

## WASHINGTON.

**SAGEBRUSH, MELONS AND PEANUTS.**—*Willamette Farmer*: Capt. Will Gray has made a home near Pasco, the place of transfer from the N. P. R. R. to the Cascade branch. The country through which this road passes is nearly all of this character—endless fields of sagebrush and shifting sand. This land, sterile as it looks, is nearly all taken up by actual settlers, but to show productive qualities we will tell of Capt. Gray's melon patch. He measured off 100 feet square of land and planted it in watermelon seed. It was not irrigated, though the land was kept stirred. Capt. Gray sold from that patch \$110 worth of melons—big ones, too. He gave away two wagon-loads, fed four loads to the hogs, and stored two loads in the earth cellar. Though the weather was cool, yet the melons we ate of were luscious. This big yield was on land that looks barren and desolate. The captain raised some peanuts also, and seems to think that they could be made a profitable crop in that section, from the success he had in his experiment. The loose, pliable earth is adapted to their cultivation. He explained that as the flowers opened and perfected on the lower branches, sand must be sifted gently over the blossoms; then, again, as the upper branches come into bloom, they also must be covered. The nut forms and ripens under the sandy covering.





### The Boat That Never Went to Sea.

It lies forsaken on the sand,  
Forgotten on the lonely beach,  
A thing of neither sea nor land,  
Beyond the waves' incessant reach.  
The tide may fall, the tide may rise,  
The wind may whistle joyfully,  
It has no fiber that replies—  
The boat that never went to sea.

Ah! happier were the derelict  
That tosses with the tireless waves,  
Where currents of the sea conflict  
Above the calm of deep sea caves:  
It had its part of storm and shine,  
It bore its colors valiantly,  
Its keel has cleft the bitter brine,  
Its sails were set, it went to sea.

And happier even were the wreck  
When masts are snapped and sails are torn,  
And waters meet upon the deck,  
Than this poor boat, untired, forlorn,  
That never, driven by the wind  
And blind with foam, ran desperately  
With rocks before and storms behind—  
This boat that never went to sea.

The wild convolvulus sows its seeds  
And blooms above the sun-warped planks  
That never met the water weeds  
And passed between their parted ranks;  
The rudder, that remembers not  
A hand to guide it steadily  
Through warning waves, must waste with rot—  
The boat will never go to sea.

—E. Cavazza in Portland (Me.), Transcript.

### A Snip of This, and a Pinch of That.

[Written for the RURAL PRESS by MRS. RANCHER.]

Quite awhile ago there appeared an inquiry in the RURAL PRESS for a good receipt for making cornbread, which elicited numerous replies. At the time I was prompted to send my own; not that it was better than many of the others, but that it seemed to me more explicit.

But the theme passed, and others were introduced to the attention of housekeepers, so that I forgot the subject, except as some receipt, more indefinite than usual, gave me a feeling of pity for the inexperienced cook who might strive to follow it. Lately a similar inquiry was sent by a little English girl to the post-office box of *Harper's Young People*; and the answers to this letter remind me once more of the necessity for exactness in such directions.

A good many years ago, when I began house-keeping, I was much in the habit of depending on my judgment in cooking. This may do in some cases, as, for instance, in making bread with potato yeast; a little yeast more or less making no particular difference.

Without doubt, too, some persons have greater natural tact in this, as in all other sciences. The minds, however, that can depend on native talent, without the aid of thorough study, are rare indeed.

Does the mechanic cast aside his rule and compass because his eye is quick to perceive variations? Or can the musician disregard the rules of time and harmony because of the correctness of his ear?

And what woman among us would hold that taste in arranging and draping is sufficient to take the place of thoroughness in sewing and fitting? So in the culinary art, exactness will render those whose natural abilities are quick more constant in their success, while to the lacking ones it is indispensable. Surely we do err if we consider this subject so humble as to be unworthy our strict attention.

With great regularity the many families of our land gather about the table three times daily. With the majority, it is the principal time for social intercourse.

Now, if the bread is light and nutritious, the butter fresh and firm, the meats tender and juicy, the vegetables well cooked but not watery, the dessert sweet and toothsome, mankind in general will smilingly tell stories, and laugh and joke in a manner most conducive to digestion; while the same dispositions sitting down to sour and heavy bread, to butter strong or oily, to meat tough and dry, to greasy, water-soaked vegetables, and sweetmeats that would give colic to an ostrich, will gloomily try this and that, will grumble or leave the table in disgust, and the whole family, if the fare is not bettered, will suffer from moroseness of spirits, or grow to be chronic grumblers. Any matter, therefore, which so affects our dispositions, cannot be of inferior importance.

The necessity for exactness was most forcibly brought home to me about six years ago by a young Italian girl, who came to do general housework in our family. She had told me at the outset that she did not understand American cooking, though, as we afterward found, she could prepare macaroni in a savory or delicate manner, according to your taste. I found

her unusually nice in washing, ironing and cleaning.

"You can learn to cook, Camilla," I said. "If you have patience to teach me, yes," she replied.

At the time my sleep was much broken into by a teething baby, and I was anxious she should learn to get breakfast by herself.

"I could do well enough," she said to me one day, "if I knew how to make those corn-breads and breakfast gems you like so well."

"They are very simple," I answered, "nothing but buttermilk and soda, salt, and white or graham flour for the gems. A couple of eggs and a little sugar added for the cornbread. This scoop holds just about flour enough for my family, and I stir them up thick enough to drop from a spoon."

All this with a growing conviction that my words were rather indefinite.

"Perhaps," she replied, but with a doubtful expression, "perhaps I could do this; but what about the soda? I know nothing about soda."

"Oh! about a heaping teaspoonful," I said, but growing more ashamed of my own ambiguity. "I depend upon my judgment very much. When there is soda enough the buttermilk has a certain sound as it is stirred."

"Very good for you," Camilla answered, "but I have no judgment. What then?"

So I set myself to measuring, and found that a breakfast cup of milk or buttermilk sour enough to thicken requires a level teaspoonful of soda. I use the Ohas. Bernard or A. Shilling & Co. brand, put up in four-pound cans, so they can be kept tight and perfectly dry, and find that they scarcely vary at all in strength.

Said an experienced cook to me one day: "I have no success in using buttermilk and soda." This was a matter of surprise to me, as I knew her to be a superior housekeeper.

"I think if you will try the rule I learned when teaching Camilla to cook, you will have no trouble," I answered. "An even coffee cup of thick milk and a level teaspoon of soda, made so with a knife, will be found to leave your bread neither heavy nor yellow."

To farmers' wives this is a matter of some importance. We all know the value of buttermilk for cooking, as it usually contains enough butter to render cornbreads and gems palatable without the aid of other shortening. But the dislike we all have to biscuit yellow with soda one morning, and heavy the next, has brought yeast powder into general use. Now yeast or baking powder is no slight expense. Some housekeepers assure me their bill for this article is almost as much as for flour. Several years ago our maid-of-all-work gave us some plain directions for making what the children call, in contradistinction to hot rolls, muffins, and gems, "regular biscuit." Lately I have left out all shortening, except what is contained in the milk, as the crumb of the biscuit is lighter and sweeter without it. And to prevent toughness in the crusts, a tablespoonful of melted butter should be used, half on the biscuit pan and half brushed over the tops of the biscuits. This amount for one ordinary sized bread pan, such as we usually bake four loaves of bread in.

There are many general rules in cookery, to which, if due heed be given, much variety can be attained. In the matter of rich cakes and puddings, eggs and flour will counteract the tendency to heaviness, produced by butter and sugar, as in the case of a plum pudding, which will bear up a goodly amount of suet and fruits, if it be made stiff with flour, and will roll out of the pudding bag light and comparatively wholesome. For nothing is a greater tax on the digestive powers than such articles when heavy and water-soaked.

If, however, a more delicate dish is desired, less butter and less flour should be used. Beating produces fineness and smoothness of grain, with lightness, while great holes are frequently caused by the use of too much baking powder, which is often made to take the place of thorough beating. If the tired housewife pleads she has neither time nor strength for this, would it not be better to leave this kind of cooking undone entirely, knowing that no table is poorly furnished that has good meat and vegetables, with bread, butter and our delicious California fruits, that are within the reach of all.

I count among my friends a lady, who, though born and walking in a lowly station in life, and without any claims whatever to society ways, can set before her guest, if her cupboard is somewhat akin to Mother Hubbard's, a plate of bread and good home-made butter, a dish of eggs and a dessert of fruit, with a finely-brewed cup of tea, nor add one word of apology for the lack of variety.

But I fear me, Mr. Editor, you will quite mistake the meaning of my heading, nor consider that it refers to the indefinite directions we so often find in our receipts for cooking, but will adjudge that I allude to the omnibus character of my load.

Still, I pray you take not a snip from the length nor a pinch from the breadth of this article, lest it be quite lost in the depths of your famous basket.

Onkdale.

SOME children take naturally to a practical view of things. A little girl was saying her prayers the other evening, closing up with, "God bless papa and mamma, little sister and everybody, and keep us from harm this night. Amen." The "little sister," a bright-eyed puss of five years, quietly remarked: "If you'd said 'everybody' to begin with, you needn't have made such a long prayer."

### The Book Agent.

[Written for the RURAL PRESS by an eye-witness.]

It happened to be a leisure day with Mr. Granger; there was nothing particularly requiring his attention, and why should he not light his pipe, take up a newspaper and proceed to enjoy a quiet afternoon?

As for his wife, idle days or idle moments seldom fell to her lot, and to-day she seemed to be especially busy. The ironing was not yet finished, a pile of little white aprons and skirts lay on the table; and Susie's dress was to be finished and Johnnie's jacket mended before her appointed task would be completed. Still she had hopes of getting through; for the baby was taking a good long nap, the irons were nice and hot, and everything seemed to be going smoothly and satisfactorily.

She stepped busily to and fro between the stove and the ironing-table, chatting over her work with a friend who was spending a few days with her, and now and then glancing out of the window at the pleasant prospect of hill and valley, field and orchard.

But presently she saw a sight which filled her with dismay. It was a young man sprucely attired who had tied his horse to the hitching-post, and was now coming up the path with an ominous-looking package in his hand.

"John, there is a visitor for you," she said to her husband, and quickly shut the door between the sitting-room and the kitchen.

Mr. Granger answered the sharp rap at the outer door.

"Ah, Mr. Simkins, how are you? Walk in." (The young man was a neighbor's son, and as such entitled to a kindly welcome.)

Mr. Simkins walked in, talked for a few moments about the crops and the weather, and then unfolded his package and his errand.

"I have a book here that I would like to show you, etc., etc."

Mr. Granger was nothing loth; he had nothing to do; he was quite willing to be entertained for an hour, though he had not the most remote intention of subscribing for Mr. Simkins' book. So he looked at the pictures, listened to the explanations, admired the binding, and then when the critical moment arrived, quietly opened the door and said to his wife: "Mary, my dear, Mr. Simkins has a very interesting book which he would like to show you."

If Mary had spoken out her mind then and there, she would have said: "Mr. Simkins need not trouble himself; I have neither time nor inclination to be bothered by him or his book." But he was a "neighbor's son," and Mrs. Granger was not given to brusque or curt remarks. So she tried to smile pleasantly as she said: "I am afraid you have come at a bad time, Mr. Simkins; I am feeling too poor to indulge in the luxury of buying books just now."

(Inwardly she was saying: "Oh, you coward, to leave me to say 'no' for you!")

Mr. Simkins was proof against such matter-of-course remarks. "Allow me to show you"—and he opened the pages. The frontispiece was a very good engraving. Mrs. Granger looked, expressed her admiration and was caught in the trap at once—no escape. The young man turned the leaves, glibly rattling off an impromptu lecture, and pretty soon Mrs. Granger's sense of amusement got the better of her vexation. For a woman of her age to be "listening like a three-years' child" to the explanations of her self-appointed instructor, was a little too funny. Why, years ago, while he was still a baby in arms, she had been more familiar with the subject of the work in hand than he was ever likely to be in all his life to come. She let him run on till he had shown her all the pretty pictures, then she said, still smiling: "Yes, it is quite an interesting book, but I cannot afford to subscribe for it. I have not five dollars to spare."

"Oh, it is not necessary to pay for it now. I shall not be bound to deliver the books for about six weeks. You can easily raise the money in that time."

"No," said Mrs. Granger, decidedly, "I cannot spare it now, and I am quite sure I shall not be able to spare it then."

"Madam," said the young man, earnestly, as though to warn her against the commission of a crime, "this is not a question of mere amusement. It is your duty to provide your children with a book like this—"

"And do you really think yourself competent to instruct me in regard to my duty toward my children?" Mrs. Granger's eyes sparkled and her cheeks glowed with indignation. "Young man, you have quite overstepped the mark. I do not want your book and I cannot afford to buy it, but if I wanted it ever so much and if I had no other earthly use for the money, I would not buy it from you after such an exhibition of impudence on your part."

"Did she really say that?" eagerly exclaims some woman who has suffered in the same way. Truth compels me to answer no. With the exception of Mrs. Granger's answer my story is literally and accurately true, but like many other people, she often thinks of the right thing to say when the opportunity has passed by; and in the present instance she allowed Mr. Simkins to depart disappointed, it is true, but unrebuked, while she went back to the kitchen to find the irons cold, the fire nearly out, the baby awake, and her afternoon entirely spoiled.

Now I ask in all serious earnestness, is not this kind of thing an outrage? Have busy

people no rights that "agents" should be required to respect? Some time ago a writer in the RURAL suggested that we should all bind ourselves not to buy anything from this class of people. For one I would willingly join such a "total abstinence society," and particularly as regards book agents. There is really no reason for their existence. The postoffice brings the publisher to every man's door. There is no village so remote that its inhabitants may not buy the best books at the lowest cost without the aid of any agent. The Harpers, John B. Alden and a score of others send out their lists of really valuable works at prices which are almost incredible. It is safe to say that from them one will receive five times as much for his money as from the book agent, whose wares are often worthless and his charges always exorbitant.

When I see an able-bodied young man driving about the country, in his stylish buggy, with a book to sell, forcing himself upon people who almost invariably regard him as a nuisance, wasting the time and trying the tempers of his victims, I feel an overpowering desire to have him set to "buck straw" with a thrasher, or to do any other equally disagreeable but useful work, which must be done for the good of the human race, the doing of which is therefore worthy of a man.

MRS. WRIGHT.

### The Man Who Did Housework.

There was once a man who was cross and peevish, because he thought his wife never did enough in the house.

He came home one evening from the hay field, cursing and scolding, till things seemed to fairly glow around him.

"Dear, don't be so angry," said the woman; "in the morning we will change work. I will go out with the hay workers and mow, while you do the work at home."

Yes, the man thought this a good idea, and was very willing to show her a thing or two.

So early in the morning the woman took the scythe and went out in the meadow with the rest to mow. The man was there to work in the house. First he made ready to churn; but after churning awhile, feeling very thirsty, he went down cellar to tap some beer. While doing this, he heard the pig in the kitchen. He ran upstairs, leaving the faucet open. At the sight of him the pig ran against the churn with disastrous consequences. When the man saw this mischief done, and the pig greedily smacking and sipping of the stream that ran over the floor, he was ready to fly with rage, and completely forgetting the beer-barrel, he punished the pig as best he could. He reached it again in the door, and gave it a mighty kick that killed it on the spot.

Now he remembered leaving the faucet open, but on going to the cellar all the beer had run out. He then went to the milk-room, and again found enough cream to fill the churn, for butter he must have for dinner. When he had churned awhile he remembered that the cow was yet in the stable and had received neither bite nor sup, though it was late in the day. Thinking it would take too long to go to the pasture, he concluded to put her on the sod roof, on which grew short green grass. As the hut lay by a steep side hill, he thought by laying a plank from that to the roof it would be an easy matter to get the cow up. But he dare not leave the churn, for the baby was crawling around on the floor and might upset it; so he took the churn on his back, thinking he would give the cow some water before putting her on the roof. Leaning down to dip water from the well, down came the contents of the churn, deluging his head and neck, then dripping into the well.

It was now near dinner time, and as there was no butter, he thought of cooking mush, and immediately hung a kettle of water over the fire. But now he bethought himself that the cow might fall off the roof and break her legs or neck, so he must go up to tie her. One end of the rope he bound around the cow's neck, and dropping the other through the chimney, he went down and tied it around his leg, for the water was boiling in the kettle and he must make mush. While doing this, the cow fell off the roof and dragged him up the chimney by the rope. There he hung, a prisoner, while the poor cow dangled between heaven and earth, able neither to go up nor down.

The wife had waited seven long and broad hours to be called home to dinner, but no summons came. At last she thought it was too long and finally went home. Upon seeing the cow hanging in such a remarkable manner, she quickly cut the rope with her scythe. At the same moment the man fell down the chimney, and his wife found him standing on his head in the mush kettle.

Thus ended the woeful experiences of a man who found fault with his wife.—*Ventura Republican*.

FEEL OVER A DAR.—One of our exchanges tells how a neighboring rancher, while going to his barn, fell over a large dar with such force as to render him insensible. A physician was called to care for the injured man, whose bruises were pronounced quite serious. We do not know what a "dar" is, precisely, but it appears to be something hazardous to meet by moonlight alone.



## John's Wife.

A young wife stood with her hand on her broom,  
 "And looked around the little room,  
 "Nothing but toil forever," she said,  
 "From early morn till the light has fled.  
 If you only were a merchant, now,  
 We need not live by the sweat of our brow."  
 Pegging away, spoke Shoemaker John:  
 "We ne'er see well what we're standing on."

A lady stood by her husband's chair,  
 And quietly passed her hand o'er his hair,  
 "You never have time for me now," she said,  
 And a teardrop fell on the low-bent head.  
 "If we were only rich, my dear,  
 With nothing to do from year to year  
 But amuse each other—oh, dear me!  
 What a happy woman I should be!"  
 Looking up from his ledger, spoke Merchant John:  
 "We ne'er see well what we're standing on."

A stately form, in velvet dressed,  
 A diamond gleaming on her breast,  
 "Nothing but toil for fashion," she said,  
 "Till I sometimes wish that I were dead;  
 If I might cast this wealth aside,  
 And be once more the poor man's bride!"  
 From his easy chair spoke Gentleman John:  
 "We ne'er see well what we're standing on."

—Sharon Advocate.

## The Eastern Farmer.

It is a frequent saying that the farmer has nothing to do but enjoy himself; that when the blizzards send in their cards he draws his chair up to the stove, puts his feet in the oven, and spends the day in reading the *Globe* and *Church Herald* and other moral works. According to tradition this occupation is only disturbed when he adjourns to the table and banquets off mince pie and divers meats. This is all a mistake. A close observer will see the industrious farmer crawl out of bed four hours before daylight, soften his boots with a hammer and commence his day's work with a lantern in one hand and a bucket of frozen slop in the other. He has from one to a thousand hogs, which shove their noses in his face, and tip the contents of his bucket on him, where it freezes until he looks like a skating rink. When he has escaped from the hog pen he hunts up six or seven buckets, and crawls through a wire fence to milk 27 cows. These animals wait until he has the bucket nearly filled, when they kick it over, aiming so that the contents will calcimine such parts of clothing as the hogs spared. Now and then they vary the monotony by kicking him instead of the bucket, which makes him feel tired and homesick. When the cows have been milked and he goes to feed the horses he finds the sorrel mare doubled up in the manger with colic. He then has to mix up a lot of aconite and water, which he attempts to pour down the animal's mouth, when it hits him on the teeth with its front foot and makes him wish he had never been born. He works around all morning with the old mare and then proceeds to curry the dun mules, which try to see which can kick the hardest, and by the time he is through he feels as though he had passed through a corn sheller. When he has fed the hens and watered the cattle, and hunted three hours for a 20-cent pig, and chopped half a cord of elm for the house, and carried 40 buckets of water for the horses and shelled three bushels of corn by hand, and shoveled a road through 10 feet of snow and milked the cows and curried the mules, and doctored the old mare again in the evening, he goes to bed, and gets up again in the morning four hours before daylight and commences the whole thing over again.—*Atchison Globe*.

## He was not Walking.

Jabe Mathis, of the Thirteenth Georgia, was a good soldier, but one day when the Confederates were retreating from the gory field of Gettysburg, Jabe threw his musket on the ground, seated himself by the roadside, and exclaimed with much vehemence:

"I'll be dashed if I walk another step! I'm broke down! I can't do it!" and Jabe was the picture of despair. "Git up, man," exclaimed his captain; don't you know the Yankees are following us? They'll git you, sure!"

"Can't help it," said Jabe; "I'm done for. I'll not walk another step."

The Confederates passed along over the crest of a hill, and lost sight of poor, dejected Jabe.

In a moment there was a fresh rattle of musketry and a renewed crash of shells. Suddenly Jabe appeared on the crest of the hill, moving like a hurricane, and followed by a cloud of dust. As he dashed past his captain, that officer yelled:

"Hello, Jabe; thought you wasn't going to walk any more."

"Thunder," replied Jabe, as he hit the dust with renewed vigor; "you don't call this walking, do you?"—*Savannah News*.

IS THE RACE TO BECOME TOOTHLESS?—Prof. Windle, says the *London Medical News*, has announced to the British Association, as conclusions from his researches on the subject, that man's original dentition included six incisors in either jaw; that two from each jaw have gradually disappeared; that the loss is due to the contraction of the anterior part of the palate; that this process of contraction will probably go on and result in the loss of two more incisors.

## YOUNG FOLKS' COLUMN.

## The Legend of Chocorua.

[Written for the RURAL PRESS by CLARA S. BROWN.]

In the beautiful village of North Conway, New Hampshire, where many tired city people each summer enjoy the grand scenery of the White mountains, the following legend was related by an aged farmer.

Chocorua is a mountain situated in the town of Albany, N. H., adjoining Conway, and south of the "Presidential range." Portsmouth is a quaint old town on the Atlantic coast just where the Piscataqua river, which forms the boundary between Maine and New Hampshire, flows into the ocean. This is the farmer's story:

Many years ago when all the country roundabout was covered with forests, and the Indians roamed from mountain to stream and even to the borders of the sea, hunting and fishing to their heart's content, there resided in Portsmouth a man who had a very beautiful wife. She was so beautiful and so good that her husband thought nothing on earth could add to his happiness, and when God sent to them a baby daughter, life seemed crowded full of blessings.

It was not long, however, before a dark cloud hung over the happy home, for the mother sickened, and when the Angel of Death descended and carried away the beautiful woman to the "life eternal beyond the skies," all was gloom and despair in the mourning husband's heart.

He brooded so long over his trouble, forgetting that God who gave had taken away for some good reason, that he became unsettled in mind. He no longer cared for the pleasant town he had once loved so well, nor would he seek consolation among his friends or occupy himself with work. The little motherless babe thrived, and for her the father lived, withstanding the temptation that came at times to end his earthly existence, that he might be united with the dear wife in the "world of spirits." When the child was two or three years old the half-crazed father took her out into the wilderness and built a wigwam on a mountain-side and began to trap wild animals and hunt.

The wild and lonely life suited him, and several years passed, during which the little girl grew strong and brown as a berry. She was happy among the flowers and birds, listening to the music of the waterfalls and watching for her father to come home from the hunt. But again trouble came. The mountain was inhabited by an Indian named Chocorua, and he had three sons of whom he was very proud. These sons were in the habit of stealing from the wigwam of the white man, and at last the hunter became so provoked by their depredations that he told Chocorua he should mix up some poison and leave in his wigwam, and if the sons broke in they might be killed. But the caution was not heeded. The sons climbed down the chimney and took the poison and died.

The old Indian grieved long and bitterly over his loss and swore vengeance upon the white man. He well knew that if he should injure the little girl it would cause her father the greatest suffering that could be produced; so one day, when she was alone, he crept up to the wigwam and murdered her. Not content with this, he mutilated her body until it was a fearful sight to see. When the father came home he tore his hair in anguish as he threw himself down by the remains of his loved daughter.

Scarcely knowing what he did, he rolled his child in a blanket, and took her on his back and carried her to Portsmouth, wading across swift streams, and making his way through almost trackless forests with his burden. After burying the child beside her mother, he persuaded several men to go back with him and hunt for Chocorua. The old Indian found out in some way that the men were coming, and, it being winter, put on his snowshoes, with the backs in front, to deceive his followers, and started away to find a hiding-place. This was a shrewd thing to do, but the hunters were keen, and they soon found where the toe of the foot dented the snow, and so discovered what he had done to throw them off the track.

They followed the trail until they saw Chocorua on the top of a high precipice. He stood there for a moment, looking up to heaven and invoking the blessing of God, and then he leaped over and was crushed to death far down among the rocks. Ever after the mountain was called by his name, and it stands to-day, as it will stand to the end of time, a monument to the tragic end of the old chieftain.

Los Angeles.

"SEE THE MOON!" said a lady to her nephew, a bright little boy of five, as they sat looking out the window together the other day. "The moon!" said the little man; "you can't see the moon in the daytime." "Yes, you can," continued his aunt; "there it is, over the trees." The little fellow had to admit that he saw it, but added: "Tain't lighted, any way."

A LITTLE six-year-old, finding an old comb in the garden with most of its teeth gone, hastened to her mother and exclaimed: "Oh, mamma, is this comb losing its first teeth?"

## GOOD HEALTH.

## Art and Science of Eating.

Rules for Invalids and Harmless for All.

EDITORS PRESS:—Allow me to contribute to your health column the following advice in regard to eating: Eat small mouthfuls; masticate thoroughly. Have every particle of food completely comminuted so that the various juices of the mouth and throat shall be completely and thoroughly mixed with every particle and iota of the food. Get every last virtue out of every atom of the nutriment. Then, and then only, is it fitted to be introduced into the stomach. Then the galvanism, the magnetism, the electricity, the life-principle, or some occult, or other unknown, or undiscovered, or unnamed something, is mixed and blended with the food, and the stomach is ready to act upon it without taxing and wearing overmuch its powers. Then the food, after being transformed to chyle, is in proper condition to build up and strengthen the system, with all its powers. Have the variety small at each meal, so as not to over-stimulate the appetite, thus causing excess in eating. Of condiments, relishes, sauces, gravies, butter, meat, spices, fats, eat only the smallest quantity compatible with rational—not excessive—gustatory enjoyment. The enjoyment is just as great in that mode of eating; even greater, as you will have the pleasurable feeling that you are doing your whole duty to yourself. A little self-denial adds to, rather than abstracts from, the pleasures of eating. As above remarked, get all the good out of all the food; and most especially so out of all the relishes, for it is these of which we are apt to partake too freely. Observe great regularity as to times of eating—whether you eat two, three, or even five times a day, eat at these times and at these times only. If, from accident, the time of eating goes by, wait until the next regular time, rather than be irregular in this matter. No matter how great the general variety, the greater the better; eat anything that does not positively disagree with you; only be careful to have each meal simple and of few articles.

Let the last meal of the day be light. If fruit or anything else must be eaten out of the regular meal time, let it be, if possible, near the meal time—just before or soon after, so as not unnecessarily to burden the stomach, which needs its stated rest as much as does the overburdened body. Never overload the stomach; err on the side of too little, rather than too much; then will "good digestion wait on appetite," and the nervous system be in good tone. It is a good rule to get up from the table a little hungry, although a better one is, eat to satisfaction, but never to satiety. Never eat while laboring under any excitement. The stomach needs all the powers of the mind as well as of the body for a time. When its labors are finished, that, too, can take a rest, while the body and mind may perform with health and vigor their allotted tasks.

Santa Barbara.

S. P. SNOW.

TO REMOVE A SPECK OR AN EYELASH FROM THE EYE.—This, we all know, requires the aid of a looking-glass, or the kindly hand of a friend, whether in or out of the house, but there are times when neither of these helps is near; so Nature has provided that, if we will use her appliances, she will assist us, and with a little practice it will be found the best and quickest in the end. The upper and lower eyelashes are given us as a protection to the eyes, but they also serve as little brushes when an accident happens. By taking the upper eyelashes between the thumb and finger, and drawing the lid completely over the under eyelashes, and gently moving it backward and forward, any specks in the eye fasten on to the lower fringe and remain there after having let go of the upper. This is a sure plan, and can be adopted anywhere, but it requires some perseverance to acquire it, and should not be given up if the first attempts are unsuccessful. Any disagreeable feeling about it is not half so painful or dangerous as is occasioned by the smallest speck.

THE DIET OF STRONG MEN.—The Roman soldiers, who built such wonderful roads and carried a weight of armor and luggage that would crush the average farm hand, lived on coarse brown bread and sour wine. They were temperate in diet and regular and constant in exercise. The Spanish peasant works every day and dances half the night, yet eats only his black bread, onion and watermelon. The Smyrna porter eats only a little fruit and some olives, yet he walks off with his load of 800 pounds. The coolie, fed on rice, is more active and can endure more than the negro fed on fat meat. The heavy work of the world is not done by men who eat the greatest quantity. Moderation in diet seems to be the prerequisite of endurance. It is not so much what people eat as what they digest that makes them strong. It is not what they gain but what they save that makes them rich. It is not what they read but what they remember that makes them learned. It is not what they profess but what they practice that makes them righteous.

## DOMESTIC ECONOMY.

## How to Cook Eggs.

EDITORS PRESS:—Put enough thin sweet cream in a frying pan to cover it an inch deep. Set it on the stove where it will boil but not scorch. Salt it to suit the taste. When it is about boiling, break in very carefully as many fresh eggs as you wish to cook. If the cream does not cover them, dip it over them with a spoon; when the white is well set take them up and add a spoonful of cornstarch dissolved in a little milk and you will have a nice gravy.

Fish Creek, Mendocino Co.

L. M. B.

LAYER CAKE.—One cupful sugar, one-half cupful butter, three eggs, one-half cupful sweet milk, two cupfuls flour, one-half teaspoonful good baking powder, or one teaspoonful soda and one-half teaspoonful cream of tartar. Beat the sugar and butter to a cream. Do not melt the butter, but warm slightly, if too hard. Stir the milk well into this, and then add flour into which the baking powder has been well sifted. Stir thoroughly; then add the eggs, one at a time, taking care to stir each one in well before adding the next. Bake at once. This will make four layers. The lightness of a cake depends far more upon the way it is put together than the mixture itself. If the above directions are carefully followed, it insures success.

TO BROIL OYSTERS.—Have fine, large oysters, and dry them perfectly in soft cloths. Take some beaten egg and cracker crumbs, seasoned, and, dipping the oysters, let them stand a few minutes. If you should make the cracker crumbs at home, be sure to sift them, so as to insure not having one crumb larger than the other, for if you do they will all come off and leave your oyster bare. Have a low, clear, brisk fire and a fine wire gridiron, heated. They should take but a few minutes to do. Have some butter rubbed on the dish on which they are served.

STEWED BEETS.—Wash, peel and slice them quickly, cutting into small dice. Cover with water sufficient to boil them tender, taking care not to let them scorch. Season with half a cup of vinegar, a cup of sour milk or cream, one large teaspoonful of butter, salt and pepper to taste, a tablespoonful of flour rubbed up with the butter, and in winter a dash of sugar. Let them boil in the sauce one minute and serve hot.

CHOW-CHOW.—One-half bushel green tomatoes, one dozen peppers, one dozen onions chopped fine, one pint of salt, let stand over night, drain off and cover with vinegar. Cook slowly half an hour, add two pounds of sugar, two tablespoonfuls cinnamon, two of allspice, one of cloves, one of pepper, half cup ground mustard, one pint of grated horse-radish, vinegar to mix; boil and mix with the ingredients.

FRIED SMELTS.—First clean them by making a slight opening at the gills, then draw them between thumb and finger, beginning at the tail. This will press out all the insides. Wash them and wipe them dry. Sprinkle salt over them, then dip in milk and dredge with flour, or dip in egg and roll in bread-crumbs, and fry in boiling oil or fat. The heads and tails should be left on.

RICE BREAD.—Rice bread makes a variety for the breakfast table. Take one pint of well-boiled rice, half a pint of flour, the yolks of four eggs, two spoonfuls of melted butter, one pint of milk, a little salt and a large spoonful of sugar. Beat all these ingredients till very smooth, and then add the beaten whites of the four eggs. Bake in shallow pans and serve hot.

NICE COFFEE WITHOUT EGGS.—Make small sack of cheese cloth, put in small tablespoonful for each cup of coffee, need not tie the sack, put in the pot, and pour a pint of cold water on it. Set this on in the morning and let it come to a boil, then fill up as you wish with hot water. Turn sack wrong side out after breakfast, rinse and dry for next time.

GRAHAM GEMS.—One pint of graham flour, one pint of wheat flour, one quart of milk, four fresh eggs, yolks only, one large teaspoonful of salt. Beat all together very smoothly, and lastly add the whites beaten to a stiff froth. Have the well-buttered gem pans very hot, and bake in a quick oven.

APPLE-LEMON PRESERVES.—Peel and cut in quarters sound sweet apples. Add to each quart of cut apples two sliced lemons and three teacupfuls of sugar, dissolved in hot water enough to melt it. Add apple and lemon to this syrup, and stew until tender, then place in small jars or cans.

RICE PUDDING.—One-half cup of rice, salt and one cup of raisins boiled until the raisins are tender and the rice dry. Add a custard and pour into a pudding dish set in a pan of water, and do not bake too long. The rule for the custard is four eggs to a quart of milk.

GRAPE PIE.—One egg, one teacupful of sugar, one heaping teacupful of grapes. Beat the egg and sugar together, then add the grapes, one tablespoonful of flour and a little butter. Bake with two crusts.





A. T. DEWEY.

W. B. EWER.

Published by DEWEY &amp; CO.

Office, 252 Market St., N. E. cor. Front St., S. F.  
Take the Elevator, No. 12 Front St.

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W. B. EWER.

G. H. STRONG

## SAN FRANCISCO:

Saturday, December 18, 1886.

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## The Week.

The rain did not reach as far as was anticipated in last week's *RURAL*, consequently there are some parts of the State not yet refreshed. The weight of downfall in other parts was lighter than seemed promised by the bluster of the elements, but the rain was sufficient to banish misgivings and set at work the plows over the greater part of the State. Since the storm the weather has been of the most delightful sort, and fit to fill the incoming winter-fleeing tourists with delight. There is, however, enough threaten in it to encourage the expectation that more generous rains are at hand.

All the State goes to Sacramento this week. A sketch in another column shows that the Citrus Fair is justifying the expectations of its extent and excellence. Our Southern California friends, although not exhibiting, are doing wisely in coming up to attend, that they may judge for themselves of the reports of good oranges in the upper part of the State. Some of the displays at Sacramento are evidently of exceptional character and will do the whole State good.

We are on the eve of the holidays. The date of our next issue will be the merry December 25th, and we shall endeavor to give our readers something acceptable and fitting the occasion.

## To Our Older Friends.

It is the season of the year when a newspaper is permitted to speak quite fully of itself. Last week we had a paragraph addressed especially to those who might, because of the distribution of sample copies see our paper for the first time. We would like now to have a few words with our older readers.

We hear now and then that the *RURAL* is regarded as a high-priced paper. We imagine that such a remark comes from some one who has not thought much about the price of a paper as compared with its contents or the conditions under which such contents are obtained and published. Perhaps the idea may, in some cases, be cherished by those who may sometimes see some of the cheap 50-cent chromo-advertising-monthly papers which furnish hodge-podge contents and sell their reading pages for puffs for which hundreds of dollars are paid.

It is easier to make a cheap paper than a good one. The clap-trap advertisements and pernicious announcements of questionable business are easy to get at high prices, and to exclude them is to sacrifice a large and easily-possessed source of income. It is easy, too, to fill up a paper with matter of a sensational kind, or to lug in columns of so-called information, which has no particular point, and consequently but little value. Such papers are cheap, if cheap means small cost; but, judged by their influence or practical value, they are dear at any figure.

We have had a few subscribers who have been misled by the cheap paper argument, but have returned to our lists and acknowledged their mistake. They know what cheap papers are really worth. They say that if one considers the moral cleanliness of the *RURAL*; the safety they feel in welcoming it to the household reading-table; the cheer and encouragement they feel in the support of a paper which honestly and effectively maintains their interests; the real value returned to them many times over during the year in practical helps in their work, and keeps them informed, not of what farmers are doing in other climates, but gives them the freshest details about how things are successfully done in this climate and soil—all these things, they tell us, make the *RURAL PRESS* worth to them many times its cost, and convince them that it is really cheaper far than the host of flash papers which sell for little money and are not worth even that.

If any of our readers should be thinking of going through 1887 with one of these cheap papers, we hope they will ponder well before deciding. We know a cheap paper will not suit them if they are at all careful about what they read and expect to obtain matter of practical use to them. We do not desire to publish a cheap paper—in all that the word cheap implies. We would rather lose the whole list of our readers than be responsible for floating upon the community the pernicious, rapid and useless literature which forms the stock in trade of the ordinary cheap flash newspapers.

We can assure any patron who thinks the *RURAL*, as now conducted, is a paying bonanza, that its publishers, for 17 years, with strict economy, have never become wealthy. Neither do they expect to become so by publishing an honest newspaper in the interest of their subscribers.

## Interstate Commerce.

The differences between the interstate commerce measures known as the Reagan and Culom bills have at last been adjusted by the Conference Committee, and in the present shape will undoubtedly become a law. These bills, as respectively passed by the Senate and House, were substantially alike in the general principles, but differed in some minor details. Both prohibited unjust discrimination between persons and places, the giving of special rates, preferences and the like. Both bills required the railroads to publish rates and strictly adhere to them. They did not materially differ in the penalty for violating these general provisions and the mode of redress. The main feature of the bill as now modified is that no more shall be charged for a short haul than for a long haul over the same road, and pooling is absolutely prohibited. A full abstract of the new measure may be found on another page of this issue.

Senator Stanford is represented as saying

that if the bill passes, as it certainly will, it will have a disastrous effect on California and all points of the country where two rival roads enter the State; for the reason that the rates on long hauls are made by competition. The short hauls constitute the principal business of all roads in the States, the business being local, and the result will be that the rate for that service will become the basis of computing the rates on long hauls. That is, the roads will not violate the law by making a less rate for the long than is charged for the short hauls, but will sacrifice the long haul schedule for the short ones, which will cause the rates of shipping from California to the East to go up higher than they are at present.

There may and there may not be something in Senator Stanford's point of objection, but it does not follow that in practice the measure will result as he says. If it does, it will simply make it necessary to secure further legislation regulating rates upon a just and fair basis. It is not just that the short haul should pay for a deficiency on a long haul, even if that were the fact, which is not admitted. We do not believe the roads have lost money by such measure of enterprise as they have shown in reducing overland freight rates, and we do not believe the competing roads are going to agree long on any united effort they may make to advance these rates. If they should form a conspiracy or combination to that end, there must simply be laws to prevent it. Senator Stanford's claims are just what might be expected from a railroad man who has always declared that the railroads are private property over which the Government has no control, and his announcement sounds much like an alarm cry for the purpose of driving support from the measure, which, fortunately, is now too strong to be injured in that way.

As for Mr. Stanford's objections, it may be further said that all legislation is experimental. This is a large subject to master in all its details, and we can hardly expect to have a piece of legislative mechanism that will run smoothly at first. It is only by trial that we shall learn where to tighten or relax. But one thing is certain, it is high time for tentative legislation in this direction. There are now about 115,000 miles of railroads in the United States engaged in carrying the commerce of the States, which now aggregates about \$40,000,000 a year and is steadily on the increase. This gigantic power is also steadily augmenting and is now practically in the hands of half a dozen railroad magnates. These men may meet in the room of a hotel and by a single stroke of the pen levy a tax on the products of fifty-five millions of people as arbitrarily as if they were the autocrats of the land. It may be their purpose to use this power prudently and for the best interests of the country, but it is too gigantic a power to be left unguarded. Eternal vigilance is the price of liberty.

That Congress has the power to interfere and regulate interstate commerce is unquestionable, for it is one of the enumerated powers in the Constitution. The power of the State is inadequate. It can only follow a commodity to the limits of its own territory, and there leave it to the mercy of the roads beyond. But Congress may regulate transportation from State to State, and follow a commodity till it touches the wharves of the seaboard. The doctrine has been established by the Supreme Court of the United States that "whenever a commodity has begun to move as an article of trade from one State to another, commerce in that commodity between the States has commenced."

## The Citrus Fair at Sacramento.

After lively and elaborate preparations, the Second Annual Citrus Fair for Central and Northern California opened happily Monday at Sacramento. The hall on J street, where the fair is held, is twice as large as that used last winter, being 60x160 feet in the clear, and there are 22 double-decked tables, each over 20 feet long, two tables 100 feet long, shelved, and one 60 feet long, with pyramids and large numbers of shelves; yet there is not space for all the exhibits that have come thronging and clamoring for accommodation.

The *Bee* describes the hall as "a mass of pleasing color. It is decorated with fan palms, freshly plucked for the purpose, with masses of red berries embowered in evergreen foliage. But the finest of all the decorations is the fruit

itself. The golden hues of the oranges and lemons give the predominating tones to the whole interior, and their fragrance is not less delightful to the nostrils than is their beauty of form and color to the eye."

The counties whose exhibits were in place Monday afternoon, and the order of their displays, beginning at the entrance, were as follows: Sacramento, Yuba, Butte, Tehama, Calaveras, Stanislaus, Yolo, El Dorado, Colusa, Napa, Sonoma, Shasta, Solano, Nevada and Placer. Exhibits from five others came in the day following, so that 20 were represented Tuesday evening, when M. M. Estee gave the opening address.

The displays made by Placer, Butte, Yuba and Sacramento counties are most remarkable for their extent, variety and general excellence. Placer has a decided advantage in position at the head of the room, and her output is arranged very attractively. She shows more oranges than any other county. They are arranged in great pyramids, trimmed with the brilliant green foliage and red holly berries, and interspersed with fine lemons and Japanese persimmons. Large quantities of the fruit are displayed in boxes prepared for shipment. Most of the oranges are budded, and of the Mediterranean Sweet, St. Michael and Navel varieties. The lemons are mainly Lisbon and Sicily. The display of olives from Penryn is noteworthy.

The Butte exhibit has above it the county's name, spelled out in oranges and lemons. It contains nine varieties of orange—including Navel, St. Michael and Mediterranean Sweet—five of lemons, limes, shaddocks, olives, olive oil, chestnuts, walnuts, three varieties of almonds, some fine apples and dried and prepared fruits. One of the interesting features is a box of oranges from the pioneer orange tree of Bidwell's Bar. This tree is 31 years old, and has been bearing for over 20 years.

Sacramento county is well represented. One of the tables devoted to her exhibit is decorated with lemon and olive boughs, heavily laden with fruit. The display includes freshly picked grapes, grown in the open air, and ripe blackberries, also raised outdoors without protection, matured during this month, large and of good flavor; fine raisins, and other dried fruit, with oranges and a blossom from a banana plant in a Sacramento city garden.

Yuba's display is highly commended as at once large, varied and singularly neat in its arrangement. It comprises 70 exhibits (in all over 300 boxes), mostly from the immediate vicinity of Marysville. The fruit is unusually free from discolorations and includes all the varieties of oranges that are most worthy of cultivation. There are Sicily lemons of remarkable size, and interesting specimens of licorice root; also, citrons, olives, pomegranates and persimmons.

Napa county has 50 feet of space on the west and 10 feet at right angles. Its exhibit is of oranges, Tahiti seedlings, Washington Navels, East India seedlings, lemons, limes, olives, prunes, Japanese persimmons, and 40 dozen samples of wines and brandies. Napa bases her strength upon her wines, but her fruit display is fine. She shows Napa soda and canned goods by the Napa Cannery Company.

Lake has no county display, but there is a fine exhibit of oranges from Buckingham Park, on the west shore of Clear lake. Other individuals show wines and some superb Bellflower and other apples.

Shasta exhibits fine oranges, non-irrigated, from four different growers, and makes, perhaps, the best display of apples in the pavilion: Winesap, Spitzenberg, Ben Davis, White Wax, Tulpehocken, Gloria Mundi, Smith's Cider, Northern Spy, Jeniton, etc., grown at altitudes of from 500 to 2500 feet. She shows also dried fruit—figs, raisins, apples, nectarines, peaches, pears, prunes, etc.—and a variety of grains, vegetables, walnuts and almonds.

Solano's exhibit includes wine and brandy, oranges, nuts, olives and olive oil, and several noble clusters of dates from J. R. Wolfkill, near Winters. Mr. Wolfkill has four African date trees, 27 years old, which began to bear seven years ago. They have since yielded annual crops of fruit, two-thirds of which ripen in the open air without protection of any sort.

We intended in this article to notice briefly the exhibits from all the counties north of San Francisco's parallel; but finding ourselves cramped for room, and looking as we do for ample original reports next week, we stop short of our earlier purpose, only adding that trainloads of Eastern visitors are amazed and rapturous, and that the floral exhibition, though an after-thought, is lavish and magnificent.



## Underdraining.

We are glad to note that our correspondents are reporting an increased disposition toward underdrainage among the fruit-growers of their neighborhoods. A few weeks ago our Vacaville correspondent spoke of it and said many tiles were being put in; last week we had an item of Mr. Markley's drainage work in Sonoma county, and on another page of this issue our Napa valley correspondent mentions the same disposition among the intelligent growers of that region. There is no question about it; the artificial drainage of orchards and vineyards (or parts of them) which are standing upon subterranean water tanks must be artificially rid of this standing water if the health, growth and longevity of the tree or vine are to be secured.

We have often alluded to the pressing need of such provision where the soil has become loaded almost to the muzzle by seepage water from irrigation ditches, and we are glad to see that such regions are waking up to the need of coupling drainage outlets with their irrigation inlets. Another matter closely allied to this is the action of alkali on soils thus artificially water-soaked. This was mentioned some time ago by Prof. Hilgard in one of his University Bulletins, and we understand he will have a much fuller exposition of the matter in a forthcoming report of the College of Agriculture. But these are the great issues in the drainage problems which are arising in this State.

What we were minded to allude to, especially at this time, is the advantage which many of our readers would no doubt derive from doing just what the Vacaville and Napa growers are doing, and that is preparing for the proper drainage of their own lands, and especially that set with trees or vines. The great loss of trees last summer should be a warning to many to study this matter. On shallow soils with impervious subsoils there are apt to be here and there underground basins even on land the surface of which seems to be naturally tilted enough to let off the water. In these depressions the water will stand until evaporated by the sun of the coming summer—the land will be a mush in winter and a brick in midsummer, and it is ridiculous to expect any satisfactory growth of a deep-rooting plant in such a situation.

If an underdrain is put in properly, the surplus water will be carried off, the team can safely go on the ground when it is the proper season for plowing, and in the summer-time the soil will be friable and moist—just such soil as any one would like to be planted in if he were a vegetable. Nor does this exhortation pertain to the fruit-grower alone, although at present his conscience seems most quickened on the subject. There are many vales and dips on pasture lands which are mire traps for cows, and grow only coarse amphibious vegetation, so to speak, which can be made the most productive areas on the pasture by underdrainage followed by sowing of good grasses. We had an account a few years ago of a work of this kind by Mr. R. G. Sneath, of Jersey Farm. He had a hilltop meadow which seemed destined by nature for a storage reservoir for the city water works, so thoroughly water-soaked it was. Underdrainage turned it into a fine meadow, moist enough to grow the finest grass. The marsh was subdued and made very productive. We might multiply instances, but these will suffice. Our agriculturists are cherishing sounder ideas upon these matters of improvement of farming lands than prevailed a few years ago. Those who were so loud in claiming that California lands needed no drainage, no manure nor anything else which enters into high farming in other parts of the world, are changing their minds, and there is abundant reason for it. California will do well under most all conditions, but much better when helped by measures which secure fair and favorable conditions.

Most of our readers no doubt remember enough of their own or their fathers' efforts at underdrainage at the East to make it unnecessary for us to recount the ways in which underdrains can be made of tile, or flat stones, or poles, or brush, or other materials. Where there is no surplus money at command to buy tile, but time enough to collect other materials, a temporary purpose can be served by the use of perishable stuff like poles or brush; but now that tile is to be

had at a reasonable figure in this State, and as a tile-drain once well laid in firm soil will last a long lifetime, it is poor economy to use anything else if this can be had.

We can say of drainage as of most other improvements: If you are in doubt about the advantage of it, try it. Try it on a small scale. Take any spot which is miry in winter, and where the trees or vines are not doing as well as elsewhere, or where you are getting no growth but water grasses, put a drain in which has a proper outlet, and if a year or two of observation do not set you to draining on a larger scale then the experience of a world will not fit your case.

## A Peep into the Winter.

"Take care for the beautiful," said the poet-philosopher, "for the useful will take care of itself." The spirit of this saying may be carried into our plans of spending the long winter evenings. It is true that winter in this climate is rather a poor excuse; it does not come with snow and sleet, jingle of sleigh-bells, big wood piles or coal bins, but it is winter all the same, such as it is, and should have a place in our calculations. It is not well to let our crops, business, new styles of hats or bonnets monopolize all our thought. Is not the life more than meat, and the body than raiment? May it not be well to ask what place we can give to culture, to beauty, to comfort, to happiness and contentment? How have we planned to spend a long, rainy day or bleak, raw, chilly evening?

How about our reading? No plan for this segment of the year can be regarded as complete that does not make provision for making the best use of time in an intelligent use of books. No economy is so bad as that which limits the supply of good literature. If there must be retrenchment, let it commence below the brain, at the mouth, for instance. It is a wretched mistake to stuff the stomach and starve the mind; to bedeck the body at the expense of the soul. There is no excuse for it. In these days of plenty, variety and cheapness in literature all can, to some extent, have an intellectual feast. It should be made a sort of family arrangement. Reading aloud is good exercise and always in order. It helps to pass the time pleasantly and profitably, and is practice in an art that is too much neglected. Pass the book around and let all read a spell. It leads to pleasant conversation, and then how beautiful it is for all to share in our literary good things. Read loud enough so that dear old grandfather or grandmother, who are a little dull of hearing, may enjoy the feast.

But after all, our plans for home comforts depend a good deal on what sort of a place home is like. Warmth, light, comfort and beauty are born of loving hearts, cheerful, patient, gentle dispositions. Some homes dazzle and glisten like icebergs in the sunlight, but they are awful cold. A low, heavy, dripping fog hangs all day about others, making every one, even the dog, feel out of sorts. You can almost tell a pleasant home as far as you can see it; there is such a sweet, genial magnetism surrounding everything. The house, the gate, the shrubbery, all have a sociable look and seem to say: "Come in; you are welcome." It must be a very ugly nature that will leave a bright, cheery home for the club or to play poker in the vile atmosphere of the rum shop. Surely such a soul is possessed of the devil.

We cannot conclude these random hints to the home-makers without reminding them not to forget the children in their plans for the winter. Give the children a chance. The fact is, the secret of home happiness is the art of keeping the children pleasantly occupied. There ought to be an hour or more every day or evening, when, circumstances permitting, father and mother give themselves up to the entertainment of the children with reading, games or music. An occasional romp will wonderfully help things. Lay in a good supply of fruits, sweets, all kinds of nuts, and be sure you have lots of pop-corn, as supplies for the evening. Do not spend all your home sociabilities on the holidays, but keep on hand a good fund for use all the year round. Make your home one long benediction; you can if you try, and not to try is the unpardonable sin. There is such a thing as organizing home happiness. Reader, it is worth a thought, especially these winter evenings.

## Whence Comes the Rain?

As the weather is a fashionable subject at this season of the year, it may be worth while to allude for a moment to the popular belief that because a heavy rain in California is usually attended by southerly winds, the rain comes from that direction. It seems so simple that nine people out of ten, perhaps, who have not taken pains to secure accurate data on the subject, would settle the matter by their own observation that before it rains the south wind must blow, and by the negative proof that north winds are not water-bearing. This would pass well enough were it not for the weather experts and the signal service observers, who say the rain really does come down from the north, because the observers at the northern stations report it first and they can trace its progress southward, station by station. More than this, too, the barometers at the various stations show a depression wave moving southward, even though the surface wind be moving in the other direction. The fact is, our great rainstorms beat their way southward in opposition to the wind.

It is interesting to note that in Australia they have a similar variance between the common opinion and the scientific demonstration as to the direction whence come the rains. The last received copy of the Adelaide (South Australia) Observer has a report of a lecture on "Climate and Drouth," delivered last October by Mr. J. Varley, S. M., from which we quote the following:

Every winter you may hear people say: "We get our best rains from the northwest." They do not. It is all land in that direction. The rain comes from the southwest, and the wind, circling round the center of depression, blows at times from the northwest as the area of low pressure makes its way eastward. He had already said the winds that prevail for the most part, both in summer and winter, that is, the southeast and northwest winds, are not rain-bearing. When a large body of moist air is hanging over any part of the country, the cold, dry air, if coming from a different direction, settles down as it approaches the moist air, and enters like a wedge, gradually forcing its way underneath until the process is sufficiently advanced to condense the moisture into rain. There is a very important lesson to be learned from this, and is applicable to the whole of Southern Australia.

This statement shows that in South Australia they have the depression of the barometer advancing in the opposite direction to that the wind is blowing, and that while one wind seems to bring the rain, it is really coming from the other direction—the storm advancing in the face of the wind. Why is this so? It must be that the advancing body of moist air draws toward it the wind from the opposite direction, or, as the lecturer puts it, the wind circles around the center of depression, and thus the wind blows one way and the rain drifts along from the opposite direction. Whatever may be the reason, the fact of the rain progress and the south wind facing each other is well established.

**PREMIUM FOR CITRUS FRUIT-GROWERS.**—The Southern Pacific Railroad Company has addressed a letter to Newton Booth, President of the Northern California Citrus Fair Association, offering a premium at each annual exhibition of \$250 for the grower producing the best exhibit of advancement in this line of industry for the year previous. The terms upon which the offer is made will exclude exhibitors who have grown citrus fruits merely for ornamental purposes, confining it to those who have entered upon the industry of citrus fruit culture with reference to its establishment as a permanent horticultural industry. The award will be further restricted to those only who are able to illustrate, by the exhibit they make, their progress in the direction indicated, and will therefore comprehend the extent of cultivation by the exhibitor, and the variety and quality of the fruit exhibited. The award will be made by the President and Board of Directors of the Association, after due examination of the exhibits and of the written statements accompanying them, upon the last day of each annual exhibition.

**AGRICULTURAL DIRECTORS.**—Gov. Stoneman has appointed J. C. Newton, San Gabriel, and J. W. Robinson, Los Angeles, Agricultural Directors for District No. 6.

**SAN DIEGO** complains of tramps and thieves, burglaries and various outrages. Eighteen suspicious characters were arrested there one day last week.

## The Holidays.

There is no need of consulting the almanac to learn that the holidays are near. The subtle influence is in the air. The toy shops and store windows where all sorts of nice things, finery and knick-knackery are displayed in the most artistic and attractive manner; the gay, bustling crowd of purchasers and sight-seers who throng the streets in spite of wind, fog, and bad colds, all reveal the fact that the gift-making, merry days are at hand. The head of the family realizes it as the children keep him in mind of it. Even the epigastral nerves of the epicure thrill with anticipative delight as he gazes at the fat turkeys and luscious quarters of beef hung temptingly in sight.

We need not dig very far below the surface to discover that we all need these holidays to chase away the vapors of gloom and distrust which hang as a sort of damp fog about the mind; to drive out the demons of fret, worry and anxiety and break up the dull, dreary routine and drudgery of care and business. It was one of the great errors of the past that it had more days for fasting and prayer than for thanksgiving, song and joy. Eyes were kept full of tears which should have been full of beaming delight. The world moves by inspiration, not depression. The lamentations of Jeremiah were followed by the ruin of Judea. The benediction of Jesus waked it from the grave and started the pulsation of a new life and hope through the world. Man may need a *Miserere* in his last hour, but certainly a *Gloria in Excelsis* in his youth and manhood.

Those are the most useful and powerful souls who see the most beauty in the world, the most brightness in life, the most light streaming out of the present and future. The State and the Church have often been saved by the hopeful hearts that were never discouraged, and would not cherish any other sentiment than the hope of triumph. Melancthon looked back and lost; Luther looked forward and won. Christmas came to man in the song of the angels, "Glory to God in the highest, and on earth peace and goodwill toward men." Whoever will enter into the full meaning and spirit of that song during the passing holidays will, shake off all doubt, fear and apathy, and see that life, with all its cares, worries and pinching poverty, is after all a blessed thing. He will see that there is more good in the world than ill; that we are made to be happy, and in the most desolate place may gather the sweet flowers; that the purer the heart the more fragrant its joy; that this is God's world, and not the devil's, and that our hope of a hereafter is not a beautiful mirage which hangs over the resting-place of our dead, but a prophecy of better things, a glimpse of the white porches of our Father's House. In this spirit we wish all our friends, patrons and enemies, if we have any, may all enjoy to the full the holidays.

**LICORICE.**—We notice that a Colusa county man writes to the *Evening Bulletin* that he put out licorice roots in his orchard and they "have done so well that they are crowding the trees." We should think as much. Licorice will crowd anything in soil which it is pleased to grow in—it will be a tight squeeze for the fence-posts, even. The fact of the matter is, that licorice will probably enroll itself beside morning-glory on the farmer's scroll of fame. It will be a fearful plant to get rid of when it once gets a footing in the soil. There is a wild native licorice here closely related to the plant producing the licorice of commerce. It is a terrible pest and its area is extending. As for the imported species, it offers, as we have said, quite a profitable crop, in all probability because of the vast consumption of the root by tobacco-makers and brewers as well as by druggists and other pill producers; but one does not want to plant it too carelessly, or it may do so well that the planter will be forced to grow it whether he will or no. We only intend this as a timely caution, and not as an intimation that the plant may not become of great value to the State.



## ENTOMOLOGICAL.

## The Codlin Moth.

## Full Discussion of Recent Methods of Repression.

At the Fruit-growers' Convention in Sacramento an essay on the codlin moth was read by W. G. Klee, State Inspector of Fruit Pests, and discussion followed. A full report will be given in the coming publication by the State Board of Horticulture. We give the leading portions, as follows:

## Mr. Klee's Essay.

In the estimation of many fruit-growers, this pernicious trouble is the worst pest ever introduced into the State. To my knowledge it exists in nearly all the northern counties, and, with the exception of Ventura, in all from Sacramento to the last southern county. In several sections of these counties it has, however, not yet been found; for instance, at Carpinteria, in Santa Barbara, where I made diligent search for the least sign of it, but failed to see anything of the kind. Some years ago, in the same locality, I understand that Mr. Cooke also failed to find any. It is rather remarkable that it should not have reached here yet, as the people do not appear to be over-careful as regards the danger of spreading the insect pest. At Carpinteria, I found a theory advanced which was to account for the absence of the codlin moth. They claim that the coal oil odor, quite penetrating at times, kills the moth. This theory might be applied to Ventura county. But it is advisable that no one put any faith or reliance in this theory. In my opinion, the absence is due simply to the fact that no boxes containing the moth have yet been brought there, and the people, appreciating their present good fortune in that respect, should take all precaution in future against the importation of this obnoxious merchandise.

The work of the codlin moth is too conspicuous and too well known to need any description, and so we may pass directly to the discussion of the remedies, of which there are many offered, but none so far tried have proved quite satisfactory, although it must be admitted that several are quite promising—so promising that I believe we may say we are on the road to success.

The different modes by which people have tried to repress the codlin moth may be divided in the following manner:

1. Those aiming at killing the young larvæ while in the fruit.
2. Those aiming at destroying the mature larvæ.
3. Those aiming at destroying the moth.
4. Those aiming at destroying the hibernating cocoons.

## Measures to Kill Young Larvæ While in the Fruit.

**Sprays.**—This mode of protection is evidently the most promising of any, and in the East, where it has been tried for a number of years, it has given quite satisfactory results. Of these solutions, the arsenic compounds have been the preferable. The experiments of Prof. S. A. Forbes, of Champaign, were condensed and published in the *Country Gentleman* some time ago. His experiments were with Paris green, London purple, and lime. Of these, only the Paris green can be said to have accomplished anything remarkable. Lime dissolved in water proved worthless; London purple saved 10 per cent of those that otherwise would have been wormy. Trees sprayed with Paris green produced apples of which 75 per cent were sound, while those not sprayed had but 21 per cent sound. These trees were sprayed eight times with the mixture, much more often than Professor Forbes considers necessary. The last spraying was made early in September, two months later than the common practice. After this, a two-days' rainstorm occurred. Immediately afterward a large number of apples were gathered and subjected to careful chemical analysis, when some arsenic was found adhering to them, and to such an amount that 75 apples would convey a poisonous dose. Professor Cook, of the Michigan Agricultural College, has reached more definite results, and seems positive as regards absence of danger in using Paris green, and also as regards the efficiency of London purple. We quote from him here:

Spraying with the arsenites.—By far the best remedy for this codlin moth is to use either London purple or Paris green. The remedy is not only very efficient, but is also easy of application, and not expensive. I have now tried this thoroughly for six years, and in each and every case have been more than pleased with its excellence. Enterprising fruit-growers of New York, Michigan and other States have also tried it, and are as loud in its praise as I am. Indeed, I know of no one who has tried it in vain.

I have found London purple just as effective as Paris green, and as it is cheaper, and rather easier to mix with water, is to be preferred. I mix the powder one pound to 50 gallons of water. It is better to wet the powder thoroughly, and make a paste, before putting it into the vessel of water, that it may all mix and not form lumps. One common pail of the liquid will suffice for the largest tree. A teaspoonful of the poison is enough for a painful of water. The spray may be caused by a fine perforated nozzle or a cyclone nozzle. The finer it is, the less liquid will be required. The important thing is to scatter the spray on all the fruit, and get just as little on as possible. The larvæ is killed by eating

the poison, and we find that the faintest trace suffices for the purpose. Again, the poison should be applied early—by the time the fruit is the size of a small pea. I have found one such application to work wonders. There is no doubt but that the first application, followed by one or two others at intervals of two or three weeks, would be more thorough; yet I have found one application, made early, so effective that I have wondered whether it is best or necessary to make more than one application. I do think, however, that it must be early. In May and June, the calyx of the apple is up, and so the poison is retained sufficiently long to kill most of the insects.

The danger from this practice I have proved to be nothing at all. The microscopes and chemical analysis have both shown that all the poison has been removed long before we wish to eat the fruit. The wind, no less than the rain, helps to effect this removal, as I have shown, by putting the poison on trees sheltered from all rains.

These experiences of persons in the East, cited here, are most valuable; but we must not forget that our climate differs in many respects, particularly as regards rain in summer, and very much in their favor is the shorter season, east of the Rocky mountains, as there at the most are but two broods in the season. If our spraying is to accomplish good results, we must use at least two or three, and when surrounded by infested orchards, judging from trials made here, this number of sprayings is absolutely necessary.

## Californian Experiments.

Arsenious acid or white arsenic dissolved in potash.—This remedy is now used less in the Eastern States than Paris green or London purple; but if we can manage to apply it to the trees without doing them injury, it is undoubtedly the safest remedy, as regards the danger of poisoning those who may eat the fruit sprayed with it. Investigation has proved conclusively that it is perfectly safe. This safety is due partially to its being less poisonous, compared with Paris green, and partially to its being extremely soluble in water; this latter quality causing moisture however slight to carry it off. It is chiefly on account of this latter property that it is objected to in the East, where rains prevail all summer.

One objection yet remains, and that is, unless used under certain conditions so as not to allow too rapid evaporation, it is liable to seriously damage fruit and foliage. The remedy was tried by various people in Santa Clara valley, where I have investigated its effects. Mr. C. T. Settle has an orchard of young apple trees, just in their prime, situated in the district near San Jose, familiarly known as "The Willows." Part of his trees were sprayed with white arsenic, dissolved in potash at the rate of one pound of arsenic to 200 gallons of water, and also at the rate of one pound to 300 gallons. Little difference can be seen between the effects of these two. The trees were drenched with the compound. The work was done at evening, before clear days, at the end of May, about the time the fruit had just been formed. The effect on the foliage was most disastrous, causing it to fall, and with it most of the fruit. Some varieties suffered more than others—Yellow Bell-flowers apparently the most, White Winter Pearmain the least. In June, when I saw the trees, they were rapidly recovering their foliage. During the subsequent visit in August I found the fruit that had remained on the sprayed trees, as compared with that of the unsprayed trees, but little affected by the codlin moth. At my request Mr. Settle forwarded a box of apples to Professor Hilgard for chemical analysis. Out of 18 apples treated to a thorough washing of potash solution, no trace of arsenic could be found.

Mr. G. W. Ousley, a neighbor of Mr. Settle, sprayed with the same solution, first in the spring at the same time as Mr. Settle did, and then five weeks later. His results were far more satisfactory; although the foliage was damaged to some extent, all the fruit was saved. The reason of his success was due to his not using as much of the compound as Mr. Settle did; also due to his aiming chiefly at the fruit. The damage to the leaves consisted chiefly in the burning of the edges; but few of the leaves themselves fell. On my request, Mr. Ousley forwarded to me some of the apples that had been twice sprayed. A similar analysis, made also by Prof. Hilgard, failed to reveal any trace of arsenic.

As regards the success as a preventive against the moth, Mr. Ousley writes me that, of the trees sprayed, 50 per cent of sound fruit was harvested, while of those not sprayed nearly all the fruit was wormy.

Thus far we have seen that the arsenic was partially hurtful to the foliage. An interesting experiment, when this was not the case, was brought to my notice by Mr. Ousley on a neighbor's place. Here, several trees have been sprayed with exactly the same solution as that used by Mr. Settle and Mr. Ousley, but it was applied in the morning of a cloudy day; but the others were made in the evening, the day following being bright, this first-named experiment doing no damage to the foliage. It will be seen, therefore, that in these sprayings we may find a remedy which, applied often enough and at the right time, will prove an effective remedy.

In the report of the Department of Agriculture at Washington, Prof. Riley gives the proportions, in which arsenic has been used for the purpose of killing various insects:

Fifty grains of arseniate of soda and 200 grains of dextrine, dissolved in one gallon of water; this diluted at the rate of about an ounce to 10 gallons.

One pound of arsenic and one pound of sal-soda,

boiled in one gallon of water until the arsenic is dissolved at the rate of one quart to 40 gallons of water.

## Paris Green.

Paris green is a compound of arsenic and copper. It is a far more powerful poison than arsenic alone, and is not soluble in water, hence will remain much longer on the trees. As stated before, in the Eastern States it is used in preference to arsenic, as it is not so liable to be washed off by rain; and another advantage is that it will not hurt the foliage.

We regret that we have not been able to reach any definite proof of its efficacy in this State—nothing except the statements of the Kennedy Brothers, of Los Gatos, who claim to have used it on Bartlett pears to great advantage last season. The proportion they used, as given to me, was 8½ tablespoonfuls of Paris green to 1½ pounds bar soap, dissolved in 40 gallons of water.

At the October meeting of the State Horticultural Society, Judge Blackwood, of Haywards, made the statement that he had used it the previous season with great success.

Mr. Webster Treat, of the Oakshade orchards, also used Paris green and London purple; but having used whale-oil soap and sulphur washes, it is difficult to say how much of the success can be attributed to this compound. However, in a letter to me, he writes very encouragingly about the arsenic compound, and yet admits that it has not been thoroughly satisfactory, but thinks many frequent doses will do the work. We regret being unable to secure for analysis any of his much-sprayed fruit. Before we wrote to him it had all been disposed of.

## London Purple.

London purple is another arsenical compound. It is the residue from the manufacture of aniline dyes, and contains lime, arsenious acid and carbonaceous matter. It is more soluble, more adhesive, less poisonous and less expensive than Paris green. It costs 5 cents where Paris green costs 12. With the exception of Mr. Treat, I am not aware of any one who has used it this year.

## Whale-Oil Soap and Sulphide of Soda.

In this compound, recommended by myself as a summer wash, I have considerable faith. The wash is very simple, and comparatively easily prepared. Dissolve 30 pounds of whale-oil soap (80 per cent soap, at the most costing 5 cents per pound) in 60 gallons of water, by heating the two together thoroughly. Boil 3 pounds of lye (American concentrated lye is what we have used) with 6 pounds of sulphur and a couple of gallons of water. When thoroughly dissolved it is a dark-brown liquid (chemically sulphide of soda). Mix the two, the soap and the sulphide of soda, well, and allow them to boil for about half an hour; then add about 90 gallons of water to the mixture, and it is ready for use. Apply it warm, at about 130° Fahrenheit, by means of a spray pump. Used warm, its effect is better, and less material is required than when cold.

It was used last spring at the University grounds as a summer wash, and the first brood of codlin moths was very small. It was not used more than once, and its effects could not be expected to last more than five weeks. The later fruit was considerably infested.

## Sulphur.

In a report of a horticultural institution in Germany—Geisenheim-on-the-Rhine (R. Goethe, director)—we find record of partial success, obtained by scattering sulphur a number of times on the fruit.

## Measures to Catch the Larvæ.

**Banding system.**—This mode of protection, which has been practiced in the Eastern States, has been tried in this State more than any other. Its usefulness is based on the observed habit of the larvæ when leaving the apple to seek shelter under the bark. The band about the tree provides artificial shelter for the worm, and the majority of the larvæ no doubt find their way to this; but a sufficient number for giving future trouble find other hiding-places on fences, buildings, etc., and perhaps more than anywhere else under clods at the foot of the tree, and it is here in an old orchard that I have almost invariably found cocoons. To make the banding system more effective, the ground right around the tree, as well as the whole orchard, should be thoroughly pulverized. The greatest obstacle to the success of the banding system is the neglect of one orchard-owner, while his neighbor conscientiously and thoroughly performs the work. The neglect or half-done work of one person among his trees is sufficient to counterbalance the attentive and thorough work of many others around him. The difficulty, in so many cases, of doing anything really satisfactory, I think is due to this want of co-operation. In my own orchard in the Santa Cruz mountains, comparatively isolated, very fair results have been obtained. It is evident that in a thickly-settled community, unless all concerned do their duty, the work will be largely in vain.

## Picking off Infested Fruit.

The practice of picking off infested fruit, of course, comes under the same head as the band system. In that it aims at a reduction or extermination of the next brood, it should go hand in hand with the band system. It is also open to the objection that unless the neighbors do their duty, little good is accomplished.

## Thissell's Trap.

The so-called moth trap, invented by Mr. Thissell, of Winters, is founded on the same idea as the band, but is arranged so that when the

moth hatches it remains in the trap. This trap consists of a collar of tin, to which a piece of wire cloth is attached. The collar is in the middle, so as to hold the wire away from the tree. A piece of sack is placed around the tree. The wire cloth is gathered above and below the collar and fastened closely to the tree with tacks. The meshes are just large enough for the larvæ to enter. To make allowance for the larvæ above the average size, the tin collar at the middle is perforated with holes slightly larger than the wire meshes. The moth when hatched cannot possibly escape, but remains to die in the trap. The trial I have seen was very satisfactory—all the larvæ placed on the trunk finding their way directly into the trap. It will be seen that this trap saves all the work of searching the bands, which in itself amounts to a great deal. The absolute necessity of looking at the bands at short intervals makes the system extremely annoying, as all other work of the time must be laid aside for this. On the other hand, Thissell's trap is rather expensive, being from 15 to 30 cents, according to the size of the tree. It has also the objection that it does not allow for the expansion of the tree, a fault quite serious when young trees are to be protected.

## Measures Aiming at Destruction of the Moth.

**Light to attract the moth.**—This means aiming at the destruction of the moth have been least successful of all. From the testimony of the best observers, both here and in the East, we may conclude that the number of codlin moths caught and killed by light is very small, as compared with the number of other night-flying insects, many of which are useful. At Mr. Treat's orchard, the device—a lamp above a can of oily mixture—in my judgment has been no more successful than others on the same principle.

Cans filled with vinegar and molasses or other similar compounds.—This device, it seems to me, has been least successful of all, attracting all kinds of insects but the ones most of all desired. It must be regarded as a failure.

## Remedies Aiming at the Destruction of the Hibernating Larvæ.

To prevent any larvæ from hibernating on trees, all old loose bark should be scraped off and the ground treated to a depth of six inches below the surface. If the trees are covered with lichens, which is very often the case, the spraying of the trees with an alkaline wash will be of excellent service, killing any that might be there, and also invigorating the tree. If potash be used, 1-7 pound of concentrated lye and ½ pound of potash to 1 gallon water is a good mixture.

Finally, summing up the subject of the means aiming at the extermination of the codlin moth, the band system, coupled with washes of the nature indicated in the preceding, seems to be the best to be relied upon the coming season. It will be my object to determine definitely what can be accomplished in this direction. I think we are now in the right way, and by the end of the next season we shall know quite definitely which of the above washes is the safest and most effective.

## Discussion.

Mr. Shinn: Is it at all certain that the London purple will reach all the apple blossoms? I suppose that is essential to the success of the remedy.

Mr. Klee: The results have been in the saving of from 75 to 80 per cent of the fruit; that is as near as they have got. They may get nearer to it by keeping it up, but that is as much as we know that it will do. Now as to Mr. Gray's question as to whether the red scale will live in the hot valleys—I think that can be answered affirmatively. I think there is more than one present here in the room who can testify that it will in almost every locality; in fact, I think it will live in any locality on the coast—it will live in the driest climate. Now, there were several important points brought up by Mr. Ranyon. In the first place, the trees can be hurt or destroyed by the potash and soda lye—I have known of their being hurt myself—but those trees had already buds partly swelled, and every one who uses this wash must ascertain beforehand in what state the trees are. They must be as dormant as you can get them in this country, and then I have never seen it do any harm to the young fruit buds. It may sometimes be difficult, and especially in a large orchard, to find trees perfectly dormant, and there comes in great vigilance, and that vigilance cannot be insisted upon too much. While I claim that we have the remedy, it is only by eternal vigilance and by co-operation that we can accomplish the result.

## The Monkey Test for Arsenic.

Mr. Block: It has been stated here that the effects of the poison have not been sufficiently demonstrated. Mr. Settle had been washing his trees with one pound of arsenic to 200 gallons of water; a neighbor of his had a monkey that had the run of the place. The second day after he washed he and his neighbor saw the monkey go into the apple trees and take off an apple. They concluded they would let the monkey analyze the effects of the arsenic, and they watched the proceedings. The monkey took the apple and then he got through with it, whether it tasted better on account of the arsenic than otherwise or not—but he went back and got another one. They thought they would let the monkey have as many apples as he wanted to, to see what the effect would be. The monkey ate the second apple and it had no ef-



fect upon him; the result was that Mr. Settle was perfectly satisfied and was willing to eat the rest of the apples. This thing encouraged me. I have always been opposed to the use of poisons against these insect pests. I took two or three trees and washed with London purple, using one pound to 60 gallons of water. The first tree I washed during the heat of the day, which I think is always injurious, even to wash with cold water without anything else. I find that in spraying it the skin of the apple contains oil; the oil repels it; it does not take the water and cover the entire surface; that wash has affected the leaves and a good many of the leaves fell off; it scorched them, but it started off with another growth and saved a good crop of apples. To overcome that, so as to have the poison spread over the entire apple, I dissolved the poison in soap water, beat up the soap to make suds. I put that in the water and it covered the entire apple, and I would recommend wherever it is used to use some soap with it for the purpose of covering the entire apple. I do not believe that you can dissolve poison so that the fruit will be covered without the soap. I have seen very little difference between the two; the trees have matured a good crop. I have sprayed only once, rather late in the season. There has been some fruit that had the codlin moth, but the tree matured a good crop of perfect fruit; at the same time, on account of the loss of foliage, the apple was not as large as it otherwise would have been under ordinary circumstances. That is my experience. I do not think there is any danger connected with it.

Mr. Klee: One word in answer to Mr. Block. You will remember that Mr. Settle sprayed with white arsenic, which is a very different thing from Paris green; and it is the Paris green sprayed apple that I want to get analyzed—that is the compound which seems to have done the most good, and it is a very different compound, for it contained both copper and arsenic, and has a virulent poison—the arsenious acid. There is not any more than one apple that a person can stand as a medicinal dose. I figured that out one day and found that each apple would receive much more than a medicinal dose. As I stated before, after four months there was not a trace of arsenic left.

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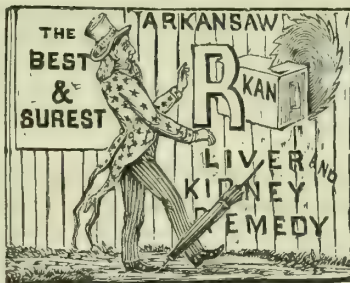
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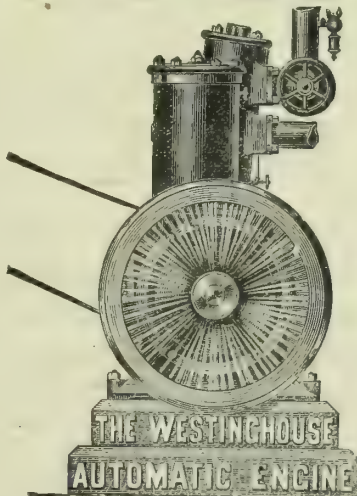
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### BRIGGS' SELMA TRACT.

This most desirable tract, comprising 1280 acres of first-class gray ash and sandy loam land (situated one and one-half miles from the fast-growing town of Selma, the second in the county, and two miles from Fowler, both being S. P. R. R. towns), has been subdivided and will be sold in 20, 40, 60 or 80-acre farms. The distributing ditches are now being constructed, and convenient roads are laid off. The main canal is 60 feet in the bottom.

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Consist of stock in the canals and entitle the owner to one-eighth of 2 feet 6 inches of water, being  $2\frac{1}{2}$  times the usual amount supplied to colonies. The owner of the water stock has a pro rata vote in the management of the canal, and the expense per year is about \$3.50 on a 20-acre lot.

A school-house is to be erected on the land this year, and it has two within two miles of it at present. Fresno, Selma, Fowler and Kingsburg are good local markets for produce. Opportunities to labor with or without terms are abundant, and land can be rented for wheat-growing in the neighborhood. The health of this region is perfection, and, in common with the plains generally, is an excellent sanitarium for persons affected with pulmonary and rheumatic complaints.

The best raisins in the world, wines unsurpassed, the finest grapes, the best peaches, apricots, plums, prunes, nectarines, figs and olives, and in fact all the choicest fruits and vegetables of the world are grown in this favored region. Raisin vines three to six years old yield per acre from four to seven tons, and increase to eleven. Wine grapes three to six years old yield from four to eleven tons per acre. Alfalfa is cut from four to six times a year, and yields from one to two tons per acre at each cutting.

Two good cows and 100 hens furnish more than half the living for a family, and can be kept, with a team, on three acres of alfalfa, the growth of which is incredible in this favorable combination of soil and climate.

A comfortable house for a small family can be built for \$150.

The low price, taking into consideration water and transport facilities, should especially recommend this to seekers of homesteads.

Price, \$25 to \$37.50 per acre, on very easy terms to actual settlers.

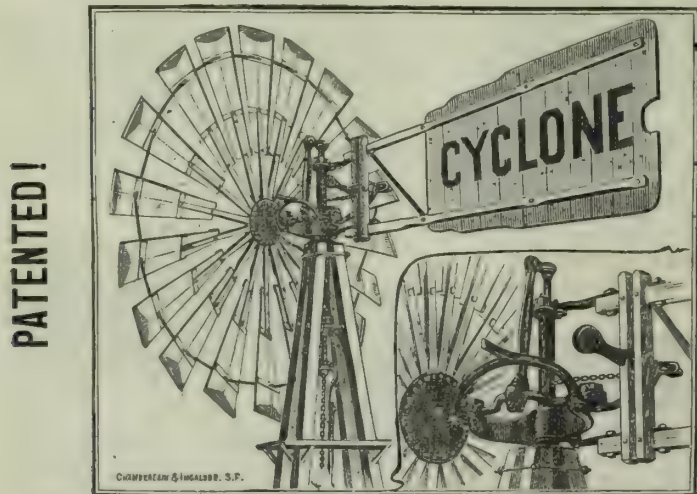
For further particulars call on or address

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These Mills are the Best, Cheapest, Strongest and Lightest, and are Self-Regulators.

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12-ft. Mills, - - -	\$65 00	16-ft. "B" Mills, - - -	\$110 00
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## WEST COAST LAND CO.

SAN LUIS OBISPO, CAL.

Incorporated March 27, 1886.

CAPITAL,

\$500,000.

#### DIRECTORS.

GEO. C. PERKINS,  
JOHN L. HOWARD,  
ISAAC GOLDTREE,  
R. E. JACK,  
C. H. PHILLIPS.

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JOHN L. HOWARD, President.  
ISAAC GOLDTREE, Vice-Pres't.  
R. E. JACK, Treasurer.  
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Secretary and Manager.

### THE PASO ROBLES, SANTA YSABEL, and EUREKA RANCHES,

Recently purchased by the West Coast Land Company, are now offered for sale in subdivisions.

This immense body of land, including 12,000 acres unsold of the Huer Huero ranch, belonging to C. H. Phillips, comprises 64,000 acres of rich, virgin soil. It lies in a compact body, in the center of San Luis Obispo county, and is within from 9 to 20 miles of the sea coast. It is covered with white and live oak timber, is one of the most picturesque bodies of land in the State, and requires

#### NO IRRIGATION.

It has an abundance of living water, and where not sufficient for domestic use, good water can be had at a depth of from 16 to 40 feet. It has an average annual rainfall of 21 inches, exceeding by six inches that of Santa Clara county, one of the most prosperous counties in the State.

The extension of the Southern Pacific Railway from Soledad southward traverses these lands for 15 miles throughout their entire length, placing the property within eight hours of San Francisco.

These lands are offered at from \$10 to \$30 an acre, and are all susceptible of the highest cultivation. In salubrity of climate, productiveness of soil and location as to market, they are equal to lands in Los Angeles and other counties, which readily bring from \$100 to \$200 and upward; and as to price and terms, offer the best inducements to those seeking homes on any part of the Pacific Coast. The survey of the

#### PASO ROBLES RANCH

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This ranch, containing 20,400 acres, has been subdivided into 230 lots. It is 12 miles from the sea coast, and is 20 miles north and west from San Luis Obispo city.

This ranch was one of the earliest granted by the Mexican Government and having been held by the same party for over 30 years, has never before been offered for sale. It consists exclusively of land of the choicest character, and is second to none in the State for the production of wheat, wine, fruits, raisins and olives.

TITLE, U. S. PATENT.

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One-third cash; balance in 4 equal payments at 2, 3, 4 and 5 years; interest, 6 per cent per annum. The mortgage tax paid by the mortgagee makes the interest about 4 per cent net to the purchaser. A deposit of \$25 will be required in all cases to cover expenses of sale.

C. H. PHILLIPS, Manager,

West Coast Land Co., San Luis Obispo, Cal.

Send for Catalogue and Map.

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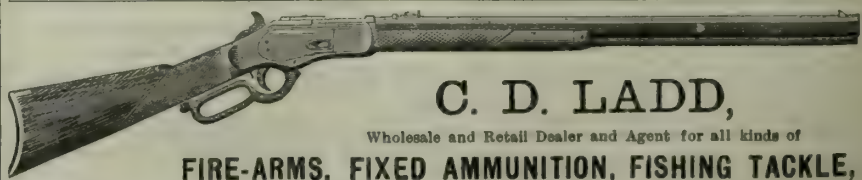
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ACTIVE steps are being taken at Woodland toward organizing a Yolo County Agricultural Fair. Another meeting is to be held at the Byrns hotel on the 18th inst., when a report from the committee is expected.



## Breeders' Directory.

Six lines or less in this Directory at 50c per line per month.

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D. D. BRIGGS, Los Gatos, Cal. Fancy Poultry breeder.

O. J. ALBEE, Santa Clara. Thoroughbred poultry.

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LAKE-SIDE STOCK FARM HAS

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Also a fine stud of Clydesdale Stallions, Mares and fillies of all ages.  
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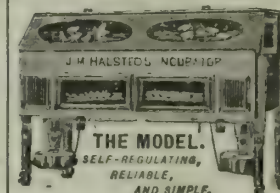
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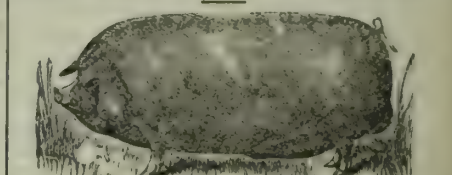
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39 Clay Street and 28 Commercial Street,  
SAN FRANCISCO, CAL.

SHIPPING ORDERS A SPECIALTY.

THOMAS POWELL,

General Commission and  
PURCHASING AGENT.

Office with Hawley Bros. Hardware Co.,  
301 Market St., San Francisco.

Will fill orders for Farm Machinery and Extras, and choice varieties of Seed Wheat and Barley. Wheat and Barley sold on sample.

O. L. BENTON & CO.,  
Commission Merchants,

Wholesale and Retail Dealers in  
Poultry and Wild Game, 65, 66, 67 California  
Market, S. F. All orders attended to at the  
shortest notice. Goods delivered Free of Charge to  
any part of the city.

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WOLF, BROWN & CO.,  
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And dealers in California and Oregon Produce,  
321 Davis Street, San Francisco, Cal.

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Green and Dried Fruit, Produce, Eggs, Etc.  
Consignments Solicited. 524 & 526 Sansome St., S. F.

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BRICK STORES:  
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All Kinds of Green and Dried Fruits.  
CONSIGNMENTS SOLICITED. 324 Davis St., S. F.

PORTER BROS. & CO.,  
Commission Merchants,  
404 and 406 Davis St., S. F.  
Special attention paid to shipping.

EVELETH & NASH,  
Commission Merchants,  
422 Front St., and 221, 223, 225 and 227 Washington St.  
Consignors receive the benefit of our large shipping trade.

COMMERCIAL HOTEL.

A. & J. HAHN, Prop'rs,

Nos. 273, 275, 277 and 2 Main Street, STOCKTON, CAL.  
Rates, \$1.25 to \$2 Per Day.

Stage offices for Collegeville and Oakdale, Roberts and Union Islands, and L. & E. Mineral Springs stages. The most desirable location in the city. Refurnished and refitted in the best style for the accommodation of the public.

## CLEAR YOUR LAND WITH JUDSON POWDER.

RAILROAD MEN, FARMERS AND VITICULTURISTS HAVE,  
by practical experience, found that the JUDSON POWDER especially, is the best adapted to REMOVE  
STUMPS and TREES.

FROM 5 TO 20 POUNDS OF THIS POWDER will always bring any sized stump or tree with  
roots clear out of the ground. The EXPENSE IS LESS THAN ONE-HALF the cost of Grubbing.  
In most instances, Giant Powder, or any other "High Explosive," is too quick, and ordinary Blasting Powder  
is strong enough.

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Full Cargoes of Wheat furnished Shippers at short notice.

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Feed the Land and it will Feed You!

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SPECIAL FERTILIZERS FOR ALL CROPS.

Our Fertilizers lessen cost of irrigation, increase the yield, improve the quality of crop, and  
are cheaper than barn-yard manure.

Circulars containing prices and full information mailed free to any address.

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Office, 116 California Street, - - San Francisco, Cal., U. S. A.

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Free Coach to and from the House.

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PACIFIC FRUIT COMPANY,

(Successors to HOWE & HALL.) JUSTI, ROOT & CO., Managers,

WHOLESALE AND COMMISSION DEALERS IN

CALIFORNIA GREEN

Raisins,

NUTS, HONEY,



AND DRIED FRUITS,

Oranges,

BEANS, PRODUCE, Etc.

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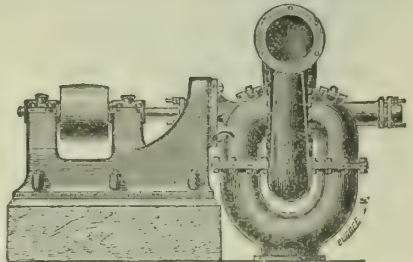
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IRRIGATING  
PUMPS.

WE ALSO CARRY IN STOCK THE LARGEST LINE OF

MACHINERY

In the UNITED STATES,

Consisting of Wood and Iron Working  
Machinery. Pumps of every  
description.

ENGINES AND BOILERS

A SPECIALTY.

GRANGERS' BANK

OF CALIFORNIA.

SAN FRANCISCO, CAL.

Authorized Capital, - - \$1,000,000

In 10,000 Shares of \$100 each.

Capital Paid up in Gold Coin, \$645,360.

Reserved Fund and Paid up Stock, \$21,178.

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I. C. STEELE, Vice-President  
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usual way, bank books balanced up, and statements of  
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COLLECTIONS throughout the Country are made,  
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CERTIFICATES of DEPOSIT issued payable on demand.  
BILLS OF EXCHANGE of the Atlantic States bought  
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Cashier and Manager.

San Francisco, Jan. 15, 1882.

THE GERMAN  
Savings and Loan Society,

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Capital and Deposits, July 1, '86  
\$13,826,466.

LOANS MADE ON REAL ESTATE IN  
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\$100 Reward to any one  
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It is the Cheapest,

By more than one-half, of any other  
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## S. H. MARKET REPORT

NOTE.—Our quotations are for Wednesday, not Saturday, this date the paper bears.

## Weekly Market Review.

## DOMESTIC PRODUCE, ETC.

SAN FRANCISCO, Dec. 15, 1886.

The past week has been of a quiet, inactive character, owing to the rains, and the uncertainty regarding more at an early day. Until the character of the winter is more fully determined very few changes of an important character are liable to occur.

The European wheat market has been gradually advancing, with a strong closing to-day. The following is the latest:

LONDON, Dec. 15.—Cargoes off coast, firm but not active. Mark Lane, English turn dearer; Foreign, strong. Cal. wheat off coast, 37s 3d; Cal. wheat just shipped, 37s 9d. Cal. wheat nearly due, 37s 6d. English country market generally dearer. Liverpool wheat, spot, upward tendency. Liverpool wheat, Cal. 7s 3½d to 7s 6½d. Weather in England, wet.

## Foreign Review.

LONDON, Dec. 13.—The *Mark Lane Express*, in its review of the British grain trade during the past week, says: Deliveries of native wheat have been very small. Values in provincial markets have advanced. The trade in London is slower, although there has been a rise of 6d. Sales of English wheat during the week were 63,345 quarters at 33s 11d, against 5864 quarters at 30s 5d during the corresponding period of last year. Flour is firm and 6d dearer. Foreign wheat has maintained a rise of 6d. A slight increase in the American supply, combined with reduced shipments from India, keep quotations steady. Corn and oats are each 6d higher. To-day there was a fair demand for wheat, and prices were 6d@1s dearer. There was a further rise of 6d for flour. Corn was scarce at an advance of 6d. Barleys were quiet, but steady. Beans and peas were scarce and 6d@1s dearer.

## London Wool Market.

LONDON, Dec. 13.—At the wool sales to-day, there was a smaller attendance and less animation. The details of the day's business are as follows: Victoria—1700 bales, scoured, 8½d@1s ¾d; do locks and pieces, 10d@1s 2d. New South Wales—1400 bales, scoured, 10d@1s 8d; do locks and pieces, 9½d@1s 1d; greasy, 3d@1s 1d; do locks and pieces, 4d@1s 1d. South Australia—900 bales, scoured, 10½d@1s 9½d; do locks and pieces, 4d@1s 1d. New Zealand—200 bales, scoured, 8d@1s 7d; do locks and pieces, 9d@1s 4d; greasy, 5d@1s; do locks and pieces, 3½d@1s. Cape of Good Hope and Natal—400 bales, scoured, 1s 10d@1s 4½d; greasy, 5d@1s 7d.

## Eastern Wool Markets.

BOSTON, Dec. 11.—The increased interest shown by buyers, last week, has been continued. The sales of the week are larger than for some time, amounting to 4,877,000 pounds of all kinds. The tone of the market is firm for the choicest grades of wool, but Territory, fall Texas and Oregon wools, which are in comparatively large stock, are being offered at lower prices compared with those asked some weeks ago, though very little lower than those quoted last week. At the same time, there is rather more inquiry for these grades, but manufacturers have not been willing for some time to pay the high prices asked, and dealers have been obliged, in order to move their stocks, to accept lower prices. The tone of the general market is still firm, and the most desirable wools are in strong hands. The market is quiet for California wool. Sales of only 100,000 pounds spring have been made, including 50,000 pounds at 20c to 24c; and 50,000 pounds on private terms. Nothing is doing in fall wool. Oregon wool is in fair demand, with sales of 190,000 pounds.

NEW YORK, Dec. 12.—Supplies of attractive standard wools continue to be offered with more or less indifference, and owners think so well of some lots as to adhere to a line valuation fuller than they can in any way realize at the moment. A fair number of manufacturers were looking around last week, but fought hard over cost, and small differences prevented several sales. Among sales were 20,000 pounds Eastern Oregon at 24½c; 200 bales choice Montana at 31c, and 200 bales Territory at 22½c. The Philadelphia market shows very little improvement. Manufacturers are pursuing a conservative policy, and sales, as a rule, are confined to small lots for immediate requirements. Among sales were 45,000 pounds California at 18 cents, 10,000 pounds Nevada fine at 22c; 10,000 pounds Territory fine at 23c. The Boston market is still quiet and in buyers' favor, but dealers are firm in prices, though there is considerable pressure to sell Territory wools. Among sales were 305,000 pounds Territory at 21½c.

## New York Wheat Market.

NEW YORK, Dec. 12.—Wheat still seems to be safely within the limits at which the price does not restrict the foreign inquiry. The close was steady, with December options up ¾ cents at 90 cents, and others ¼ better at 90½ cents for January, 92½ cents for February, 94 cents for March, and 95½ cents for April.

## New York Hop Market.

NEW YORK, Dec. 12.—Business is moderate; Pacifics and States are held down by low prices for foreign, so that the market remains in a flat and unsatisfactory condition; coast crop, 1886, prime to choice, 26@27 cents; same, fair to good, 23@25c; crop of 1885, good to choice, 12@15 cents.

## California Products at the East.

NEW YORK, Dec. 12.—California Muscatel raisins, 91.85@2; London layer, 92@2.25. California walnuts, 9@13c.

Canned Goods.—The market is strengthening for many descriptions. Apples are in demand, and advancing. Lima beans are doing better. String beans are active, with sales estimated at 7000 to 10,000 cases. Succotash is scarce and firm. Salmon is firmer, with \$1.57½@1.60 asked for Columbia river brands.

Seeds are quiet, but firm. California yellow mustard, 3½@4½c.

Beans.—The market is firm, but quiet. California Lima, \$1.80@1.85.

NEW YORK, Dec. 15.—New California lima beans

are beginning to arrive. The demand is fairly active and no stock is permitted to accumulate. The quality of this season's crop is fine and the price, \$1.80@ \$1.90, is obtained without difficulty. Turkish prunes in boxes are offering in the market. They are put up in attractive packages of 55 pounds, sixties, seventies and nineties, and command 6½c and 5½c respectively. The offering of Malaga raisins Friday next at public sale promises to be large. A still lower depth of depression is looked for. California goods are a trifle weaker in tone, but the best brands for forward delivery are not offered, the principal agents being desirous of assisting their customers by maintaining the present values for quantities, until such time as the stocks now held can be distributed.

## California Fruit at the East.

CHICAGO, Dec. 11.—California grapes are quiet. Muscats in 20-lb boxes sell at about \$1@1.25, and are in moderate demand. California dried fruits sell fairly and rule firm. The scarcity of domestic dried fruit this year is a decided advantage to the market for California fruits. Prunes, French, 9½ lb, 9c; Plums, pitted, 12c; Peaches, quarters, 12c; halves, pared, 25c; Nectarines, 9c; Pears, 8@12½c; Raisins, London layers, 22-lb boxes, per box, \$1.85@1.90; Raisins, loose Muscatel, per box, \$1.70@1.80.

## Local Markets.

BARLEY.—The market has fluctuated considerably the past week, being controlled by the weather. This afternoon it is weaker, owing to the threatening weather. On Call, transactions have been free. To-day's sales are as follows: Morning Session—Buyer season—200 tons, \$1.10; 600, \$1.09½; 300, \$1.09½; 100, \$1.09½; seller season—200 tons, \$1.00½; 600, \$1.00½; 300, \$1.00½; 100, \$1.00½. Afternoon Session—Buyer season—100 tons, \$1.08½; 500, \$1.08½; 600, \$1.08; 300, \$1.08½; 100, \$1.08½.

BEANS.—Whites are stronger and in demand. Colored are firm.

BUTTER.—No change for the better is reported, but, on the contrary, a weaker feeling is noted, owing to a strong selling pressure.

CHEESE.—The market is barely steady, with some concessions reported, owing to heavy supplies.

EGGS.—The market continues depressed under free receipts of both eastern and Californian, and a light demand.

FLOUR.—The market is stiff, with a good export and home demand ruling. Another advance in prices is expected at an early date. Quite a number of small outside mills are reported to have shut down for the season, but the standard mills are running on full time.

WHEAT.—Sales the past week aggregate about 8000 tons of shipping at from \$1.48½ to \$1.51½. A sale was made to-day of 500 tons at Stockton, at \$1.53½, for which the best bid that could be got here was \$1.51½. An exporter was the buyer. Transactions on Call the past week were large, with a heavy operator, who was supposed to have been short, buying over 50,000 tons. The call was as follows to-day: Morning Session: Buyer season—5200 tons, \$1.55½; 700, \$1.55½; 1400, \$1.55½. Buyer 1886—1600 tons, \$1.49½; 100, \$1.49½. Afternoon Session: Buyer season—2100 tons, \$1.55½; 1500, \$1.55½; 2700, \$1.55½. Buyer 1886—200 tons, \$1.49; 800, \$1.49½ per cwt.

[COMMUNICATED.]

## Market Information.

## Cereals.

Barley has fluctuated considerably the past week, going according to the weather, with clouds easier, rains lower, and higher or strong when clear. Considerable has changed hands for seed at fairly good prices. The consumption is lighter, while exporters are unable to operate, owing to the high prices demanded by holders.

Corn has a stronger tone, with a slight advance obtainable for the better grades. Offerings of Eastern or Western corn are not so large, while holders of Californian are more reserved.

Oats are steady, with a firm tone for the better grades. Black oats continue scarce and strong, notwithstanding the demand for seed is falling off.

Both rye and buckwheat are without essential change.

The latest official statistics of the British and American (the latter east of the Rocky mountains) visible supply of wheat, flour reduced to wheat, was on October 1, as follows, in bushels:

United Kingdom.....15,000,000 24,000,000

Afloat.....15,069,000 11,825,000

United States.....58,500,000 56,000,000

Totals U. S. and U. K.....88,569,000 91,825,000

As compared with January 1, 1886, the stocks in sight on October 1, 1886, showed a decline of over 32,000,000 bushels, while for the like time last year only 625,000 bushels. The very large reduction this year is in the face of the United States crop, being 512,000,000 bushels in 1884, 357,000,000 in 1885, 557,000,000 in 1886. From July 1 to October 1 this year, farmers' deliveries in the United States were largely in excess of the like time in 1885, yet the visible supply in this country was, on the latter date, only 2,500,000 bushels greater than at that date in 1885. A correspondent writing to *Bradstreet's* under date at London, Eng., of Nov. 20, says: "Probably the proportion of the wheat area sown is about two-thirds. The weather had been so very wet up to the beginning of this week that many people would suppose the proportion less; but it happens that the eastern, south-eastern, and home counties, where the wheat area is largest, had fairly dry weather till recently, and that the farmers in those counties were able to get most of their sowing done early. All this is up and looking well. But in the late districts very little wheat has been planted, and the land is now in such a boggy state that frost will be needed to make a great deal of it work well, especially where it was plowed up before the wet weather. Sowing ought to be finished by this time, and as we may get a long frost at any time now, or continual rain or snow, the completion of the work may be unseasonably deferred, or the area sown may be smaller than intended. In any case it is reported from some districts that less wheat than ever is to be planted this autumn, and spring wheat counts for next to nothing in this country." From the above it is quite evident that the wheat acreage of the United Kingdom this winter and next spring will be below that of last

winter and spring, which was 204,802 acres less than the preceding winter and spring. The falling off in the acreage this winter will make itself felt on the markets of the world before six months roll around.

In the local wheat market, exporters took advantage of the rains of last week by bidding down, and also crossing orders on Call so as to break the market, but without success so far as strong holders were concerned. A few timid holders sold, but the total sales were considerably short of exporters' wants. Under pressing necessities combined with higher markets abroad, advances of which, it is claimed, were purposely kept back, caused higher prices to be paid on last Saturday and Monday. Some sales of barely No. 1 were made at \$1.50, while parcels fully up to the standard fetched over \$1.50. Rains of last week caused ships to be held higher, but clearer skies and colder weather cause them to weaken off.

## Feedstuffs.

Hay is dull and lower, although at the close holders are offering more sparingly, which causes a better tone to prevail. Choice to extra wheat hay has been placed in carlots at \$13 per ton, with other grades proportionately less.

Brans and middlings and other ground feed are dull and heavy, with concessions demanded. Better pasture is reported to have cut off a large demand.

Feed carrots are slower, but prices are reported to be without change.

## Fruits.

Lighter receipts of grapes create a stronger market, notwithstanding a lessened demand.

Oranges are more in favor, with a larger home and shipping demand reported by dealers. The varieties are increasing, with the more choice wanted.

Lemons and limes are dull, with prices favoring buyers.

Oregon continues to send us heavy supplies of apples, which keep the market from advancing as high as it otherwise would. The holiday demand is reported good, which takes liberally of the more common for cooking purposes. Eastern apples continue to be received in heavy supplies; as the quality is good, they move off readily. Lady apples are steady and firm.

Pears are firm for choice.

## Live-stock.

Beef cattle are firm, as are hogs and mutton sheep, but no advance is established, although sellers are asking more money. In horses and milch cows there are no changes to report. Following are slaughterers' prices to dealers, for whole carcasses for dressed meats:

BEEF.—Extra, 7@7½c; first grade, grass fed, 6½c; 7c per lb; second grade, 5½@6c; third grade, 5@6c.

MUTTON.—Ewes, 5½@6c; wethers, 6@6½c.

LAMB.—Spring, 6@7c. Yearlings, 6c.

VEAL.—Large, 7@8c; small, 9½ to 10c.

PORK.—Live hogs, 2½ to 3c for heavy and medium; hard dressed, 4 to 6c per lb; light, 2½ to 3c; dressed, 3½ to 4½c; soft hogs, live, 1½ to 2½c.

On foot, one-third less for grain or stall fed, and one-half less for stock running out.

## Vegetables.

Favorable outdoor weather, it is said, will cause early receipts of spring vegetables from the warmer countries.

In cabbages and root vegetables no changes of consequence are reported.

The advance in potatoes, reported last week, has been lost under very heavy receipts this week. One day's receipts was over 14,000 sacks. The heavy receipts demoralized buyers, and caused them to hold off for lower prices, which they succeeded in getting. The market closed heavy at lower prices.

Choice hard, good-keeping onions are still strong, although cut and other wise defective onions are weak and hard to place, except to the city and near-by trade.

Sweet potatoes are in lighter receipts, which creates a strong market. The demand is only fair.

## Miscellaneous.

The tonnage movement compares with last year at this date as follows:

On the way.....210,183 163,013

In port, disengaged.....132,517 132,517

In port, engaged.....59,964 24,285

Totals.....328,126 319,815

The above gives a carrying capacity as follows: 1886, 525,000 short tons; 1885, 501,704 short tons; increase over last year, 23,296.

Hens, roosters, and ducks are strong, but turkeys are easy.

Alfalfa seed is offered by the carload lots, at 9 to 9½ cts.

Hops are very dull, but not quotable lower.

Raisins are in good demand, for both home and Eastern trade; only the more choice command full prices.

Comb honey is higher, and wanted at the advance, owing to a better demand and light supplies.

Nuts are easier, but no lower quotations are reported.

Dried fruits are very strong, with an advance obtainable over quotations for the more choice cured. Dried peas are slow at lower quotations.

Broomcorn is very strong, with holders asking more money.

San Francisco, Dec. 15, 1886.

## The Persimmon.

EDITORS PRESS.—Will some of the many polymologists kindly give me some information regarding the culture and propagation of that delicious fruit, the Japanese persimmon? There are six trees on the ranch, all of different varieties, and one of these suckers freely. 1. If I layer the suckers, will they make good bearing trees? 2. I have planted all the seeds, so far, in hopes of thus raising more trees. 3. Will cuttings grow readily and produce vigorous trees? The six trees were sent direct from Japan, and were unnamed. 4. How should I prune the trees, and what general treatment is best for them? Have never yet seen anything in the pages of the PRESS on this subject.—C. MILLIKAN, Sutter Creek, Cal.

Will some persimmon-grower give his experience on these points?

## Domestic Produce.

Extra choice in good packages fetch an advance on top quotations, while very poor grades sell less than the lower quotations.

WEDNESDAY, Dec. 15, 1886.

PEAS AND FEAS.

Bayo, etc.....1 40 @ 1 55 Filberts.....10 @ 11

Butter.....1 25 @ 1 55 POTATOES.

Barb.....1 50 @ 1 65 Burbank.....1 10 @ 1 30

Red.....1 25 @ 1 40 Early Rose.....60 @ 1 11

Pink.....1 25 @ 1 40 Cuffey Ove.....1 10 @ 1 25

Large White.....1 60 @ 1 80 Jersey Blue.....1 10 @ 1 30

Small White.....1 60 @ 1 65 Petaluma.....1 10 @ 1 30

Lima.....2 00 @ 2 45 Tomatoes.....1 00 @ 1 25

Old Peas, blk eye.....1 80 @ 1 80 River reds.....70 @ 1 00

do green.....1 00 @ 1 12 Humboldt.....1 10 @ 1 30

do Nites.....1 25 @ 1 25 do Kidney.....1 10 @ 1 30

BROOM CORN.

Southern porton.....50 @ 75 do Oregon.....1 15 @ 1 30

Northern porton.....50 @ 75 Pearl.....1 10 @ 1 40

CHICORY.

California.....4 @ 4 Sweet.....2 00 @ 2 50

German.....6 @ 6 POULTRY AND GAME.

Roosters.....5 00 @ 7 00

Cal fresh roll, etc.....20 @ 27 Broilers.....3 00 @ 4 00

do Fancy birds.....30 @ 40 Ducks, tame.....4 00 @ 6 00

Pickle roll.....17 @ 20 do Mallard.....2 00 @ 3 50

Firkin, new.....15 @ 18 do Sprig.....1 00 @ 1 50

Eastern.....15 @ 18 Geese, pair.....1 00 @ 2 00

Cheese, Cal, etc.....12 @ 15 do Goodling.....3 00 @ 4 00

Eastern style.....15 @ 16 Turkey, B.....13 @ 14

eggs.

Cal, ranch, doz.....30 @ 40 do Dressed.....14 @ 16

do store.....25 @ 30 Turkey Feathers.....10 @ 20

Ducks.....10 @ 15 do Snipe, Eng, wing.....10 @ 20

Oregon.....20 @ 25 do Common.....75 @ 85

Utah.....25 @ 30 do Doves.....50 @ 100

FEED.

Brans, ton.....15 50 @ 16 50 Hare.....1 00 @ 1 25

Corn meal.....20 @ 22 Venison.....8 @ 10

Gr'd Barley ton.....24 @ 25

Hay.....20 @ 24 PROVISIONS.

Middling.....15 50 @ 22

Oil Cake Meal.....25 50 @ 28 50

Straw, bale.....35 @ 40

FLOUR.

Extra, City Mills 4.....37½ @ 4 75

do Col. Mills 4.....42½ @ 5 25

Superfine.....25 @ 3 75

GRAIN, ETC.

Barley, feed, etc.....1 00 @ 1 10

do Brewing.....1 10 @ 1 30

Chevalier.....1 45 @ 1 60

do Coast.....90 @ 1 45

Buckwheat.....1 00 @ 1 20

Corn, White.....1 00 @ 1 20

Yellow.....1 05 @ 1 15

Small Round.....1 10 @ 1 20

Nebraska.....97½ @ 1 05

Oats, new.....1 00 @ 1 10

Choice feed.....1 35 @ 1 50

do good.....1 27½ @ 1 32½

do fair.....1 25 @ 1 30

do black.....1 40 @ 1 55

do Oregon.....1 25 @ 1 40

Rye.....1 10 @ 1 25

Wheat milling.

Gilt edged.....1 55 @ 1 60

do good.....1 52 @ 1 57

do fair to good.....1 50 @ 1 55

Shipping choice.....1 52½ @ 1 57

do good.....1 48½ @ 1 50

do fair.....1 45 @ 1 47½

HIDES.

Dry.....8 @ 18

Wet salted.....8 @ 18

HONEY, ETC.

Beeswax, lb.....20 @ 22

Honey in comb.....9 @ 12

Honey in comb.....12 @ 13

Extracted, light.....4 @ 45

do dark.....3½ @ 45



## List of U. S. Patents for Pacific Coast Inventors.

Reported by Dewey &amp; Co., Pioneer Patent Solicitors for Pacific States.

From the official report of U. S. Patents in Dewey &amp; Co.'s Patent Office Library, 252 Market St., S. F.

FOR WEEK ENDING NOVEMBER 30, 1886.

- 353,345.—CAR STARTER—S. Baker, San Jose, Cal.  
 353,347.—REVERSIBLE PLOW—Benson & Hollis, Boulder creek, Cal.  
 353,286.—CAR TRUCK—Thomas Carter, S. F.  
 353,295.—MOTOR—T. Duff, S. F.  
 353,489.—ANGLE HANGER FOR TELEPHONES—Michael Gerst, S. F.  
 353,565.—CAR COUPLING—W. H. Keen, Woodbridge, Cal.  
 353,310.—DYNAMO ELECTRIC MACHINE—N. S. Keith, S. F.  
 353,500.—CONCRETE MOLD FOR SUBWAYS, ETC.—E. L. Ransome, S. F.  
 353,518.—CAR COUPLING—A. N. Towne, S. F.  
 353,519.—CAR COUPLING—A. N. Towne, S. F.  
 FOR WEEK ENDING DECEMBER 7, 1886.

- 353,657.—ANIMAL TRAP—John Bean, Los Gatos, Cal.  
 354,037.—STREET RAILWAY CAR—J. C. Brown, S. F.  
 353,785.—CAR SIGNAL—Sands Forman, Gold Hill, Nev.  
 353,851.—TAPE MEASURE—J. Fountain, La Grande, Ogn.  
 353,854.—FERMENTING BUNG—T. S. Glaister, Sonoma, Cal.  
 353,857.—ALMOND HULLER—Jos. Hobart, Nordhoff, Cal.  
 353,872.—SHUTTLE—McGee & McMahon, Oregon City, Oregon.  
 353,020.—VALVE FOR HYDRAULIC ELEVATORS—P. F. Morey, Portland, Ogn.  
 353,877.—HUB-BORING MACHINE—A. L. Navone, Calistoga, Cal.  
 353,866.—SAWMILL SET WORKS—A. E. Roe, S. F.  
 353,897.—PUMP—L. Teague, Arcata, Cal.  
 354,029.—ARTERY LIGATOR—Jas. Trullinger, Silverton, Ogn.  
 353,718.—LEAK-STOPPING MATTRESS—J. H. L. Tuck, S. F.  
 353,727.—ORE-FEEDER—G. E. Woodbury, S. F.  
 13,847.—TRADEMARK—Cal. Wire Works, S. F.

NOTE.—Copies of U. S. and Foreign Patents furnished by DEWEY &amp; CO., in the shortest time possible (by mail or telegraphic order). American and Foreign patents obtained, and general patent business for Pacific Coast inventors transacted with perfect security, at reasonable rates and in the shortest possible time.

## A Guilty Sacrifice

Should never be made, but ambition and enterprise deserve reward. Wherever you are located you should write to Hallett & Co., Portland, Maine, and learn about work that you can do and live at home, earning thereby from \$5 to \$25 and upwards daily. Some have earned over \$50 in a day. All particulars free. Both sexes. All ages. Capital not needed; you are started free. All is new. Those who start at once cannot help rapidly making snug little fortunes.

## Consumption Cured.

An old physician, retired from practice, having had placed in his hands by an East India missionary the formula of a simple vegetable remedy for the speedy and permanent cure of Consumption, Bronchitis, Catarrh, Asthma, and all Throat and Lung Affections, also a positive and radical cure for Nervous Debility and all Nervous Complaints, after having tested its wonderful curative powers in thousands of cases, has felt it his duty to make it known to his suffering fellows. Actuated by this motive and a desire to relieve human suffering, I will send free of charge, to all who desire it, this recipe, in German, French, or English, with full directions for preparing and using. Sent by mail by addressing with stamp, naming this paper, W. A. NOYES, 149 Powers' Block, Rochester, N. Y.

## Farmers and Travelers

Sojourning in Marysville will find the Western Hotel the best in the city, being clean, quiet, comfortable and reasonable in prices. Geo. Wappel, proprietor.

## FRENCH COACH HORSES.



SUPERBE

Winner First Prize, World's Fair, Antwerp, 1885. A breed, combining size, beauty, action and endurance established and reared under the patronage and direction of the French Government.

## THIRTY JUST IMPORTED

All approved by the Inspector General of the National Studs of France, and the get of Stallions owned by the French Government. 120-page Catalogue of **Oakland Stud** free. Address **M. W. DUNHAM,** Wayne, DuPage Co., Illinois.

## MONEY TO LOAN

## COUNTRY REAL ESTATE

AT REDUCED RATES BY THE

## SAVINGS AND LOAN SOCIETY,

619 Clay St., San Francisco.

Blank Forms of Application.

## Rural Seed Offering—1886.

## Great Inducements for New Subscriptions.

To encourage gardening and further extend the circulation of the PACIFIC RURAL PRESS, we will offer, while this notice remains in our columns, to furnish to all old or new subscribers the following seeds on the favorable terms named below:

## VEGETABLE SEEDS.

## 83 Varieties.

In Papers, postpaid. Cts.

- 1 Early Blood Turnip... 10  
 2 Early Extra Bassano... 10  
 3 White Sugar... 10  
 4 Yellow Sugar... 10  
 5 Early Long Dark Blo'd... 10  
 CABBAGE.  
 6 Early York... 5  
 7 Early Dutch... 10  
 8 Early Wakefield... 10  
 9 Extra Fine Large Dutch... 10  
 10 Early French Oxheart... 10  
 11 Large Late Drumhead... 10  
 12 Red Dutch (pickling)... 10  
 CELERY.  
 13 White Solid... 10  
 CAULIFLOWER.  
 14 Early Paris... 10  
 CUCUMBER.  
 15 Extra Early Forcing... 10  
 16 Long Orange... 10  
 17 Early Horn... 5  
 18 White Belgian... 5  
 19 White Spine... 5  
 20 Early Cluster... 5  
 21 Early Frame... 5  
 22 Long Green... 5  
 23 Eng. Gherkin, Pickles... 5  
 LETTUCE.  
 24 Early Curled Silesia... 5  
 25 Ice Drumhead... 5  
 26 Simpson's Early Cur'd... 5  
 27 Priz Head... 5  
 28 White Paris Gas... 5  
 29 Hanson... 5  
 30 Boston Market... 5  
 MELONS.  
 31 Large Yel. Canteloupe... 10  
 32 Extra Fine Nutmeg... 10  
 33 Casaba (new)... 10  
 34 Cuban... 10  
 35 Mt. Sweet Watermelon... 10  
 36 Iron Clad Watermelon... 10  
 37 Scaly Bark do... 10  
 38 Black Spanish do... 10  
 39 White Imp. or Lodi do... 10  
 ONION.  
 40 Early Red... 10  
 41 Red Wetherfield... 10  
 42 Yell Danvers... 10  
 43 W. Forgal or Sil. Skin... 10  
 PARSNIP.  
 44 White Dutch... 10  
 45 New Early Round... 10  
 RADISH.  
 46 Mammoth California... 10  
 47 Olive Shaped Radish... 10  
 48 Early Scarlet Turnip... 10  
 49 Blk Spanish or Wint'... 10  
 SQUASH.  
 50 Early Scalloped Bush... 10  
 51 Early Sum. Crk Neck... 10  
 52 California Field... 10  
 53 Marblehead... 10  
 54 Boston Marrow... 10  
 55 New Hubbard Winter... 10  
 TOMATO.  
 56 Large Yellow... 10  
 57 The Conqueror... 10  
 58 Early Red Smooth... 10  
 59 Trophy... 10  
 60 Canada Victor (earliest)... 10  
 61 Acme... 10  
 62 Cow Horn... 10  
 63 Yel. Rutab'a or Sw'd'h... 10  
 64 Early White Flat Dutch... 10  
 65 Long White French... 10  
 66 Imp. Late Rutabaga... 10  
 SPINACH.  
 67 Round Leaf... 10  
 68 Large Flatheads... 10  
 PEAS.  
 69 Extra Early... 10  
 70 Champion of England... 10  
 71 Yorkshire Hero... 10  
 72 Queen of Dwarfs... 10  
 BEANS.  
 73 Black German Wax... 10  
 74 Refugee... 10  
 75 Red Valentine... 10  
 MISCELLANEOUS.  
 76 Kohlraabi... 10  
 77 Scotch Kale... 10  
 78 Curled Parsley... 10  
 79 Sage... 10  
 80 Thyme... 10  
 81 Tobacco... 10  
 82 Blue Gum... 10  
 83 Monterey Cypress... 10

## FLOWER SEEDS.

## 107 Varieties.

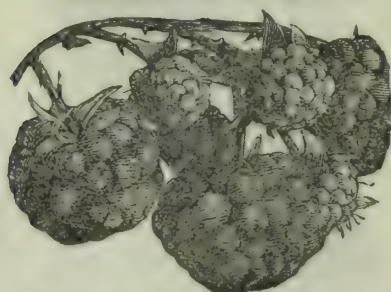
- 84 Calceola Coccinea (Tassel flower)... 5  
 85 Campanula Speculum (Venus L'king Glass)... 5  
 86 Candytuft, white fragt... 5  
 87 Centaurea Cynus (Bachelors Button)... 5  
 88 Clarkia fine mixed... 5  
 89 Convolvulus (Morning Glory) mixed... 5  
 90 Foxglove, mixed... 5  
 91 Gilia, mixed... 5  
 92 Globe Amaranthus... 5  
 93 Gypsophila Elegans... 5  
 94 Ice Plant... 5  
 95 Larkspur, finest mixed... 5  
 96 Linum Grandifolium (Flax)... 5  
 97 Love-in-a-mist... 5  
 98 Marigold, db French... 5  
 99 Marigold, African, dbl... 5  
 100 Mignonette, Sweet... 5  
 101 Nasturtium... 5  
 102 Nigella... 5  
 103 Portulaca, mixed... 5  
 104 Poppy, Double, mixed... 5  
 105 Rocket, Sweet... 5  
 106 Scabiosa, Dw't, mixed... 5  
 107 Sensitive Plant... 5  
 108 Sweet Pea, White... 5  
 109 Sweet Pea, Crimson... 5  
 110 Sweet Pea, mixed... 5  
 111 Sweet Pea, mixed... 5  
 112 Sweet William, mixed... 5  
 113 Sunflower, Cal. Dbl's... 5  
 114 Adlumia Cirrhosa (Mountain Fringe)... 10  
 115 Althea (Hollyhock) fine mixed... 10  
 116 Aster, China, mixed... 10  
 117 Australian Vine... 10  
 118 Balsam (Lady Slipper) fine mixed... 10  
 119 Balsam, Fine Paris, dbl... 10  
 120 Balsam, Splendid, dbl... 10  
 121 Balsam, Dwarf, double... 10  
 122 Balsam, Woe Fl'd, dbl... 10  
 123 Balloon Vine... 10  
 124 Browallia Grandiflora... 10  
 125 Canna (Indian Shot)... 10  
 126 Canna, fine mixed var... 10  
 127 Celosia Cristata Varie'a... 10  
 128 Celosia Cristata Purpurea... 10  
 129 Chrysanthemum Album... 10  
 130 Dahlia Superflua, mxd... 10  
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 508 Celosia Cristata, fine mixed (Coxcomb)... 10  
 509 Chrysanthemum Album... 10  
 510 Dahlia Superflua, mxd... 10  
 511 Dianthus Chinensis (Indian Pink)... 10  
 512 Dianthus Chinensis Double White... 10  
 513 Celosia Cristata, fine mixed



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**BEST MARKET BERRY KNOWN!** Large, Firm and Luscious, stands travel finely, bears immensely, and has two crops a year; 75 cents per dozen; \$3 per 100. Also Strawberries, Blackberries, Gooseberries, Currants, etc., of finest imported varieties. Prices on application.

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Receive through season, by every steamer from Japan, best varieties of

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Rarest Ornamental Shrubs & Plants.

Camellias, 1 to 12 feet high, Azaleas, Rhododendrons, Bamboos, Magnolias, newest Chrysanthemums, Tree Paeonias, Roses. Send for our new Catalogue. P. O. Box 1501.

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All fresh, hardy, stocky trees. Monterey Cypress, 8 to 12 inches high, transplanted in boxes of 70 trees each, at \$2 per box or \$25 per 1000; 12 to 15 inches, of 50 trees per box, at \$4 per 100 or \$35 per 1000. Seedlings, 3 to 4 inches, at \$5 per 1000. Blue Gums, 8 to 12 inches, of 100 per box, at \$1.50 per 100 or \$14 per 1000; 12 to 18, of 70 per box, at \$1.50, or \$20 per 1000; 18 to 24 inches, 50 per box, at \$1.75, or \$30 per 1000. Large, straight sarked or bulked Gums or Pines shipped only after the roots have sprouted through sacking. Blue, 4 to 6 feet, at \$15 per 100; 6 to 8 feet at \$20 per 100; 8 to 10 at \$25 per 100. Red or Round Leaved Gums, 4 to 6 feet, at \$20 per 100; 6 to 8 feet at \$25 per 100. Pines, 2 to 3 feet, at \$20 per 100. Acacias, 2 to 3 feet, of 30 trees per box, or 3 to 4 feet of 20 trees per box, at \$2 per box. Also fresh-gathered, strong-growing seeds of the Monterey or Italian Cypress, Blue, Red or Iron Bark Gum or Acacia in variety at lowest rates. Postage Stamps taken for orders not exceeding \$2. No other than the best of stock will be sent from this nursery, as we desire to make a friend of every cash customer.

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## Bordeaux Varieties.

I OFFER FOR SALE, AT \$10 PER M. 200,000 CUTTINGS of the following renowned varieties, fully packed, F. O. B. at depot: Cabernet Sauvignon, Cabernet-Franc, Merlot, Verdot, Malbec, Tinturier, Portat-Ploussard, Mondens, Petite Sirrah and Grosse Blue. Also from \$2.50 to \$5.00 per M. all other well-known wine and table grape varieties, too numerous to mention. The above Grape Cuttings are from our vineyard, and we guarantee them true to name, healthy, in good condition, and offered at lowest market price. Ten (10%) per cent invariably in advance on small orders. Information furnished, if desired. Will not guarantee cuttings procured for accommodation from other vineyards, but will always select them from responsible parties and in healthy locations. The Burgundy and Bordeaux varieties are very scarce, and parties desiring to plant this winter would do well to secure their cuttings at once, and save money and disappointment.

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At \$3 per M.

Muscadel, Muscat, Sultana, Flame Tokay and Emperor; also Rooted Vines at \$10 per M.

OAK SHADE FRUIT CO., Davisville, Yolo Co., Cal.

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If You Want to Save Money and avoid a life of trouble, buy Trees Free from Scale.

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FOR THE SEASON OF 1886-7.

Apples, Pears, Peaches, Apricots, Nectarines, French and Hungarian Prunes, Plums, Figs and Cherries. Cypress, Gums, Acacias, Ornamental Shrubs, Greenhouse Plants. 8,000 WHITE ADRIATIC FIGS—The fig of commerce, home grown, for sale the coming season. Sixty varieties of Grapes, rooted and cuttings, including all the best Wine and Raisin varieties. Catalogue free.

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## 33d YEAR. STOCKTON NURSERY. 33d YEAR. WHITE ADRIATIC, SAN PEDRO, SMYRNA, and ENDRICH FIGS.

Preparturiens, Macrocarpa, Mayette, and Chaberte Walnuts, Chestnuts, Persimmons, Mulberries, Olives, Oranges, Lemons, Pears, Apples, Peaches, Apricots, Cherries, etc. Plums and Prunes on Myrobolan Stock, Grapevines, Ornamental Trees, Shrubs, Palms, Magnolias, Clematis, New Roses and Hothouse Plants.

## TRY THE PERSIAN MULBERRY.

NO SCALE.—I wish particularly to call the attention of Fruit-growers to this fact. I have repeatedly had my nursery examined by experts, and upon no occasion have they found any scale or any indication of scale. The nursery is isolated from orchards, both old and new, and as I take every precaution in importing new varieties to get only clean stock, I feel perfectly warranted in guaranteeing every tree sold by me free from scale and other pests that are proving so disastrous to the fruit interests of the State. SEND FOR CATALOGUE.

E. C. CLOWES, Proprietor, Successor to W. B. WEST.

Stockton, Cal., October 27, 1886.

This is to certify that we the undersigned have this day thoroughly inspected the Stockton Nursery; that we found no Scale or indication of Scale, and that to the best of our knowledge and belief the Stockton Nursery is free of this dreaded pest.

WM. H. ROBINSON, Quarantine Guardian San Joaquin Fruit District. JOS. HALE, County Commissioner of Horticulture.

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We have now for sale at Lowest Market Rates the Largest, Best Selected and Healthiest Stock of

## Fruit Trees, Grape Vines, Olives, Small Fruits, Etc.

Ever offered on the Pacific coast, including all the new varieties, all grown on new land at the above Nursery and free from scale and other pests. Samples of the trees always on hand.

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WE HAVE ALSO CONSTANTLY ON HAND A LARGE AND FRESH STOCK OF

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And Ornamental Trees and Plants, Bulbs, Roses, Magnolias, Palms, etc., at LOWEST RATES. Price List mailed on application.

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BY THE DOZEN, 100, 1000, or 100,000.

Our Stock this Season Cannot be Excelled on the Coast,

Neither in quantity, quality, varieties, size of trees, nor for health and vigor of same. We offer \$1 each for every scale bug found on our nursery trees.

OUR PRICES ARE VERY LOW THIS YEAR.

Send for our new and beautiful lithograph-cover Tree and Seed Catalogue. See in it description of

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The very earliest, good shipping Plum. There are fortunes in it. Also our new and fancy

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All of this year's growth, for sale at the GEO. F. SYLVESTER SEED WAREHOUSE, Nos. 315 and 317 WASHINGTON STREET, SAN FRANCISCO. SAMUEL BRECK, Proprietor.

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FINE ASSORTMENT OF THE LEADING VARIETIES OF FRUIT AND ORNAMENTAL TREES.

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LARGEST PEACHES IN CALIFORNIA. Splendid flavor; good shippers; excellent for canning. Cypress, Gum and Pepper Trees in boxes. Flowers and Shrubs.

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Apricot, Plum, Prune and Peach on Myrobolan Plum stocks. Bartlett, Winter Nellis, B. Clairgeau, B. Hardy and other varieties, 1 and 2 years. A full stock of 1 and 2-year-old Apple Trees, Peach on Peach, Nectarine, Quince, Fig, Grape, Currants, Gooseberries, Almonds, Walnuts, Chestnuts, etc. Prices reasonably low. No scale bug. Also Myrobolan Plum and Pear Seedlings, home grown. Address W. H. PEPPER, Petaluma, Cal.

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In carload or smaller lots. Fresh, clean, and free of foul seed. Also all varieties of Grass, Clover, Garden, Flower, and Field Seeds. Send for Catalogue and special quotations on large orders. W. R. STRONG & CO., Sacramento, Cal.

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OFFER FOR THE SEASON AN EXCEPTIONALLY FINE STOCK OF

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All the Standard Sorts are grown in large quantities, also many New and Rare Sorts never offered before.

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PLUMS, PRUNES, and APRICOTS  
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PEACH ON ST. JULIEN PLUM,  
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Our Apple, Pear, Plum, Prune, Apricot, and Cherry are grown on imported stock, on new land, isolated from any old orchards and are free from all insects and defects. An inspection is solicited by all those intending planting the coming season.

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PEACHES, NECTARINES, APRICOTS, PRUNES, ALMONDS, FIGS, OLIVES, POMEGRANATES, MULBERRIES,

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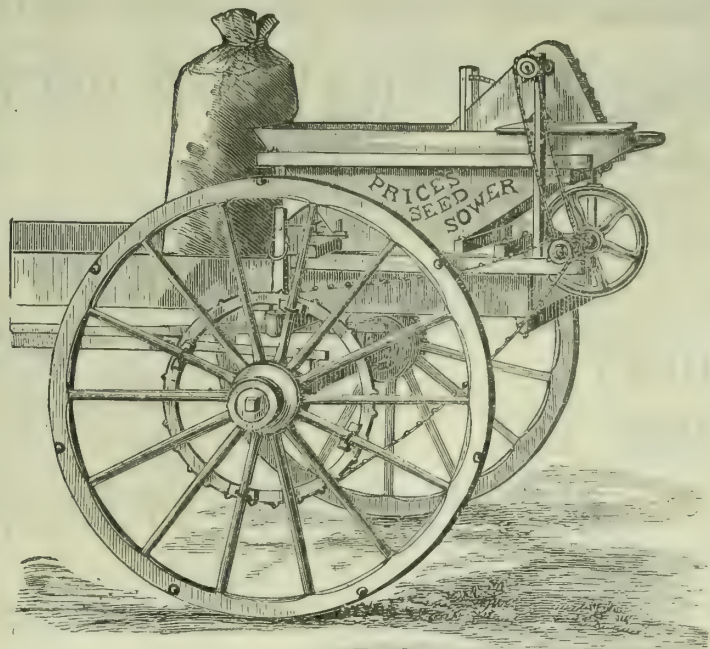
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Sows a strip 100 feet wide at each passage (working width in wheat, 80 feet). Sows as evenly as a Force-feed Drill.

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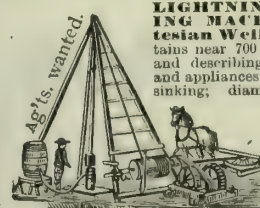
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Are the Very Best Plows in the Market.

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## NEW BRADLEY VINEYARD PLOW?

It is one of the latest things out, and is attracting much attention. There has been a large number placed in California Vineyards during the past year, and all gave the best of satisfaction.

Price, with Extra Share and Iron Whiffletree, \$15.00.

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Garden City Tule Sulky Plows,  
Wrought Frame Sulky Plows,  
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10-inch Two-Gang, with Steel Bottoms.....  
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10-inch Two-Gang, with Chilled Iron Bottoms.....  
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(Including extra Shares and Land Gauge.)  
16-inch Castor Rolling Coulters for above—Extra—Each.....  
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WRITE FOR PRICES.

The work done by this Gang exceeds any plowing that can possibly be done with a hand plow. It will do good work where the ground is so hard that a hand plow cannot work. It works splendidly in trashy ground without clogging.

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It has a break attachment for lifting the plows out of the ground, which we prefer on Gangs, they being heavier than Sulkies. With this device they are handled with the greatest ease. We have lately added a Lever, by which the Pole is moved to the right or left, for the purpose of giving the plow more or less width of furrow, as may be desired. It can be operated by the driver while the plow is in motion. For plowing around circular corners or curved furrows of irregularly shaped lands, it works to perfection. We also make a jointed pole, which allows a free up and down play of same, and does away with any pressure upon the horses' necks, that might otherwise occur in plowing over uneven surfaces. They are guaranteed to do a good work as can possibly be done by any gang plow in existence.

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LIGHT,  
SIMPLE,  
DURABLE, and  
FLEXIBLE

THOUSANDS IN USE,  
GIVING ENTIRE SATISFACTION.

Points of Superiority in which it excels:

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It is MUCH easier for the team.  
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It has a LEVER to change the angle.  
It is not heavy on the horses' necks.  
It has no side draft.  
It leaves no ridge at the center.  
It has self-feeding oil cups.  
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It conforms to uneven surfaces perfectly.  
It can be made rigid if desired.  
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Send for prices and descriptive circular of same.

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## SUPERIOR GRAIN DRILL

Beats anything of its kind yet invented,  
it being the only Drill in the world  
that will not crack the wheat.

MILBURN HOLLOW IRON AXLE WAGON. FINEST BUGGIES IN THE WORLD. LARGEST CARRIAGE REPOSITORY on the Coast. ALL KINDS OF AGRICULTURAL IMPLEMENTS. GARDEN CITY CLIPPER PLOWS. SUPERIOR GRAIN DRILLS.

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STEEL BEAMS!  
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STEEL FRAMES!  
And Best of Hardened Plow Steel Bottoms.

This new departure in the construction of Sulky Plows is fast winning immense popularity everywhere. The J. I. C. Gang, with two 12 or 14-inch bottoms, weighs only 500 lbs.

It Cannot be Strained or Broken.

It is the easiest managed Gang Plow, because it has a power lift, and the lowering and raising of the Plows is done by the horses.

## THE JAY-EYE-SEE SULKY PLOW!

Is constructed on the same principle as the Gang, and is made of steel throughout. Weight only 400 pounds. Made with 14 and 16-inch bottoms. The above Plows are, without doubt, the SIMPLEST IN CONSTRUCTION, and therefore the strongest and easiest managed. Order one on trial and be convinced.

### FOR THE NEXT 60 DAYS

I will make Special Prices on the J. I. C. Steel Sulkys and Gangs much lower than these plows have been sold for.

I do this in order to get them introduced, as I feel sure these plows, when put in operation, will sell themselves.

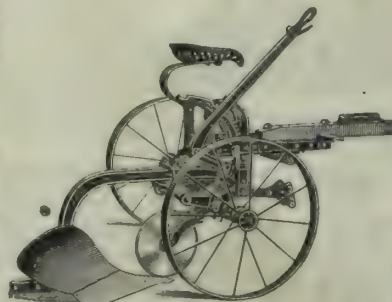
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# PACIFIC RURAL PRESS

CHRISTMAS EDITION - TWENTY-FOUR PAGES.

Vol. XXXII.—No. 26.]

SAN FRANCISCO, SATURDAY, DECEMBER 25, 1886.

{ \$3 a Year, in Advance  
SINGLE COPIES, 10 Cts.

## Santa Claus.

The great charm of Christmas is the pleasure it brings to the children. But it has been intimated by some folk of the Gradgrind sort who have no more poetry in their souls than a tombstone blinking in the frosty starlight, that the children's ancient friend Santa Claus, St. Nicholas, Knecht Clobes, or whatever alias he may travel under, is a myth, a phantom, a regular old fraud, and that he should be exposed and not be allowed to beguile the imagination of childhood into a love of the marvelous. Still we can hardly blame these matter-of-fact, hard-headed people. It is the spirit of our realistic age that is inclined to reject everything it cannot measure with a foot-rule or weigh on scales. It is an age that hangs out many beautiful beliefs to dry in the north wind, and scoffs at all such stories as the Wandering Jew, the Dancers of Kolbeck, Joseph of Arimathea with his Holy Grail, the Wild Huntsman who to all eternity chases the red deer, the Captain of the Phantom Ship, the Exploits of St. Patrick, Sinbad the Sailor, Jack the Giant-Killer and Bobadil as only some of Mother Goose's wild yarns. But, be all this as it may, the dear old saint who gladdened the world in the days of Queen Bess and the Merry Monarch, who stood beside the stockings of Shakespeare and Goethe and whispered pretty sentiments into the ears of Charles Dickens and Hans Christian Andersen, and has for



POSTING HIS LETTER TO SANTA CLAUS.

Our bricked-up chimneys and cast-iron skepticism in the shape of stoves and furnaces may cause him to say some angry words in mediaeval Dutch that would not sound well in English, but he manages to come all the same, so the children say, and finds the empty shoes and stockings and leaves every little heart palpitating with joy.

With what pleasurable anticipations the little ones prepare their letters to their Christmas saint. The elder babies who have mastered the art of printing letters make their supplications in their own way and pass hours in the struggle of composition. The little toddlers must have their letters written for them, and they pour their longings into the ears of elder brothers and sisters, who will be sure to intercede in their behalf. The engraving shows a couple of children who do not propose to send the letters flying up the chimney in the usual method, but prefer to demand the aid of the Government in securing safe and quick delivery of their letters to Santa Claus. It is all they can do by combined effort to reach the high mail-box, but they will accomplish it, and all will hope that Santa Claus will pay due attention to requests presented to him in such a proper manner.

Joy be with the little ones in these Christmas times. Let no reasonable effort be spared to fill their hearts with pleasure. Fortunately it does not take great things to please them if their training has been proper, and

50 generations or more made the hearts of the children flutter with delight, has lived too long and done too much good to be laughed out of existence by the myth fiends. It is true, the dear old saint has received some very rude shocks from our dreary agnosticism. His reindeer team may be considerably frightened by the snort of the iron horse and dazed by electric lights. And then he may have to drive around the corners more swiftly than in the days of yore in order to escape those modern nuisances, the reporters of the daily press. there is none so poor that he cannot contribute, in some acceptable way, to their enjoyment. The stories in this week's RURAL show that not alone our own children should be remembered,



## CORRESPONDENCE.

Correspondents are alone responsible for their opinions.

## The Fruit Interest in the Great Sacramento Basin.

[Written for the RURAL PRESS by L. F. MOULTON.]

Our northern valley counties are destined to excel in orchards and vineyards to the same extent that they have already excelled in the production of cereals and live-stock.

For years the central county of this great basin has been the banner wheat county of the State, as well as of the United States. For years it has produced one-sixth of all the wheat grown in the State of California. For years it has ranked the first in the State of California, and the 15th in the United States in the value of her agricultural products. To-day she stands in the front and confidently challenges all competitors in the race for supremacy; to-day she recognizes that wheat, so long her king, must give way to the fruit tree and the vine, and that her princely land holdings must yield up to the subdivisions of the progressive new-comer. To-day she goes forth in the pride of her young strength to take her true station in that higher civilization and power that is begotten of a higher intelligence and industry than that simply which casts abroad the seed for thousands and thousands of acres of grain, and, idly waiting for harvest, then gathers in, machine-like, the fruit of earth's fertility and the season's beneficence. To-day, in fact and in truth, she takes hold of fruit trees and vines with the vim she has always shown and which will give her the same rank in these greater, higher industries that she has held in other industries in the past.

Her rich and fertile soil, her mild climate, her majestic river, her luxuriant vegetation, have through centuries of the past ministered to the wants, necessities and comforts of man and beast alike.

Long before its occupation by our people, long before the great continental divide had been pierced by the extreme advance of our boldest explorers, was Colusa, one of these northern counties, the very center of savage life in our great valley. Here in the town of Colusa, where now the iron horse comes daily snorting in, and stamps impatient for its mighty burdens to be removed, is the very site of the red man's great temple of worship, legislation and justice. This very spot where now the shrill whistle daily proclaims a new civilization, was to the savage mind most sacred ground. Most undeniable is the proof of the inherent value of her soil, the beneficence of her climate, and the purity and healthfulness of her crystal river, when it is known that in savage days, in barbarous times, when all tribes of men relied on earth's spontaneous productions, there were in this tribe of Indians that occupied the site of the present town of Colusa, more than 1500 members, while other tribes numbered one-tenth to one-fiftieth as many only, and that all acknowledged the Colusa tribe as the law-givers, and their village as the capital of the whole country.

But few of this once powerful tribe now remain to tell the sad tale of modern whisky and white man's civilization; yet the well-established fact still remains and will ever remain that this county then was, as it now is, the very center of our great valley's manifest fertility.

But, to come to our subject—

## From Wheat to What?

This is the anxious and oft-repeated query of the pale-faced tribe of to-day. Turn where they may, revolve the question as they will, all reach the same conclusion, that the fruit tree and the vine must be everywhere accepted. This conclusion reached, comes then the more earnest individual question—what varieties?

Foremost in the list, most desirable for these northern counties, may be named raisin and shipping grapes; the Muscatelle flourishes wonderfully in our best soils, and produces raisins that can hardly be excelled anywhere. The apricot is a leading fruit for our higher and drier soils, of which we have thousands of acres perfectly adapted to its growth. While in many parts of the State the apricot is being dug up on account of imperfect fruit and blighted crops, here, in these counties, the yield is abundant and certain, and the fruit is entirely free of spots and knots; it is of a rich golden hue and delicious flavor. This fruit will probably be more extensively dried, canned and shipped to the marts of the world than any other fruit grown in this locality.

The French prune and other varieties of prunes will be very extensively and successfully raised here, for the few bearing trees we have are producing, in different kinds of soil, most admirable fruit, all of the choicest flavor. Many of the leading varieties of plums attain to the greatest perfection and excellence, as in the case of the prune or drying plum. The curculio has not as yet been presented to us by our Eastern neighbors to destroy our prunes and plums; and we may therefore, by keeping free of this pest, most successfully compete with the Eastern States, and even with Europe, in the production of these fruits.

The Bartlett pear is a most vigorous grower in our soil and climate, and will flourish between our mile-apart levees.

The fig is as much at home in this valley's

rich soil as an elder bush or a wild grape vine in an old Indian rancho. There are now growing in Colusa trees bearing a white fig of the very best flavor, a successful drier, and making a perfect and exceedingly rich dried product.

According to the best of authority, the date palm will be entirely at home in our soil and under our almost tropical sun. So of the olive. I have myself raised, in four years from the cutting, with but very little care, the finest of olives. The tree is as tenacious of life as the morning-glory or the cat-with-nine-lives—so tenacious, in fact, that some even claim that it thrives best in poor soil and on rocky, barren ground; but this I do not believe. I have one large tree that has been destroyed three times, and each time it has pushed out a new growth, and to-day it is full of choice fruit, and possesses a perfect trunk and limbs and a beautiful foliage.

I have in my grounds pomegranates, Japanese persimmons, palms, limes, lemons, citrons and oranges, all growing in the open air. The oranges are now of a bright, golden color, and possess a delicious flavor. They are two months earlier than the far-famed southern oranges—in fact, our oranges are all past ripe before the southern or Los Angeles or famous Riverside oranges are fit to eat.

## Climate.

The temperature here does not fall below that reached in the southern part of the State, and our trees do not need any more protection than in the south, where they too find it desirable to "blanket" their young trees occasionally for the first few years. Orange trees raised from orange seed and grown in this climate do well without any protection; but they should have good, rich soil and plenty of water all the year round, to keep up the greatest degree of vitality, thus enabling them to resist frost and insect pests.

One special advantage we seem apparently to have over the lower altitudes and damper atmosphere is, that the hot sun seems to kill all scales; or, at any rate, the scale does not seem to thrive or survive in our drier atmosphere.

I had last year on exhibition, at the Sacramento Citrus Fair, some oranges; and a Los Angeles paper, in noticing the fact, humorously said that I had procured 6000 orange trees from Los Angeles, and that only one had escaped "freezing to death," and that one I had "blanketed" since a yearling, thus enabling me to have one tree left to gather fruit from. Now the fact is, I got only a few trees from the south, and this tree from which I gathered the oranges that I had on exhibition was not one of them and was never "blanketed" at all, but was raised from orange seed procured in Sacramento city, was budded and bore fruit up to 1872, then froze to the ground the same as did the orange trees of Los Angeles during that severe winter, and, like the frozen Florida orange trees, took just seven years to again commence bearing; since which time (1879) it has been producing good crops of the finest oranges every year in the open air.

Just as wheat in the past has held full sway, so in the future will grapes, apricots, prunes, plums, pears, peaches, nectarines, cherries, apples, walnuts, figs, olives, lemons and oranges from these northern valley counties take the lead in tempting both the palate and the eye of Eastern buyers, and first shall reap the greatest reward and first shall be introduced to the markets of the North and the West, the East and the South, and especially of the Northwest, those of our people who, first realizing the true situation, shall change from wheat to fruit.

## Poor Nursery Stock.

In addition to the question of varieties of trees and vines, there should be especially considered by beginners the stock and seeds from which the plants offered for sale have been grown. Instead of offering stock produced from seeds procured from the Southern States or elsewhere from trees that are seedlings for many generations back, the country has been flooded with trash that has been produced from trashy seeds procured promiscuously from canneries or produced from "budded-to-death trees," or from suckers or little pieces of roots cut up and grafted into and called a tree, or else, worst of all, the common practice of using cuttings from the French Myrobalan seedlings or cutting into small pieces this desirable imported stock to save cost of the genuine natural tree. These unnatural methods should be discouraged alike by both nurserymen and fruit-growers everywhere. No wise fruit-grower will ever trust such worthless trash as results from these pernicious practices.

## Irrigation.

Another important subject connected with fruit-growing is irrigation. Through the protection afforded by what has been derisively known as "Moulton's mile-apart levee theory," we are now enabled to carry the water safely through our counties between widely separated or mile-apart levees, subject, of course, to occasional breaks in such levees, as are set up on edge and occupied by gophers, squirrels and sleepy-headed settlers; yet even in these neglected sections, indolence, contrary to established rules, has a rich reward in a fertilizing coating of rich river sediment. And here is to be seen convincing proof of the value of my long ago and oft-expressed theories of winter flooding; for, with the surface of the river raised by and between mile-apart levees, the water now in moderate floods rises above the

highest river-bank land, making possible to deposit on all these orchards and vineyards its rich sedimentary washings. And further, from these highest land-surfaces, it is with the utmost ease that the water is let out into the highest pens or checks, and from these into the next, and so on, until all the water is consumed or allowed, if desired, to run down into the lower ponds or channels on either side of the river, and thence on down to the bay.

And I now recommend, in addition to my old winter-flooding pen or check theories, that there should be left in the levees on both sides of the river, say three miles apart, and nearest to high bank sloughs, overfalls 200 feet long, with aprons to lower this richest of plant food and drink down into these natural canals, to be in turn there held between levees on the banks, and let out into highest pens or checks, and so on successively as far as may be desired, the same as though the pens or checks adjoining the river itself. This overfall would make it impossible for extreme floods to burst well-made levees in the low places suffered to exist by lazy, sleepy-headed orchardists and river-bank dwellers, as then the excess of water would flow out over the land and effectually settle the great question of irrigation. I have always held through the many years that I have been called crazy on the question of winter-flooding, leveeing, controlling of river waters, and the suppression of the slickens fiend, that there was one simple principle of right that should be recognized by our legislative and judicial powers, and that is, that the settler occupying banks of "dry sloughs," formed by the action of water, should be declared a "riparian proprietor," with a right to demand that, during floodtimes of flowing streams, water sufficient for his individual purposes be allowed to flow through floodgates, substantially erected under direction of the Board of Supervisors, at the point where such slough puts out from the flowing stream, but not, however, to the injury of any other proprietor below him, who might not require any water. This would completely settle my winter-flooding hobby, as it would, except for gardens and Chili clover, afford abundance of water for all purposes to all land-owners, as one good flooding in winter is all that is needed under any circumstances, for orchards or vineyards, if followed up by thorough cultivation.

With canals that appear on the northern county maps perfected, and the above ideas and theories carried out to the utilization of all the surplus waters of our river and our many mountain streams, nearly every part of our immense valley would be made to flourish, prosper and abound in almost every kind of plant, tree and vine now known to the most favored portions of the whole world.

Then, with the transportation problem to Eastern markets more effectually and satisfactorily settled, no country hat greets the sun in his daily course could show a more happy, contented or prosperous people than would these northern counties.

The great question of reaching the markets of our own metropolis, and the line of transportation to more distant markets, was solved for us long ages ago. There flows by our door, through our border, a great river that constitutes the only railroad commission that the transportation lords of to-day admit they have as yet failed to buy. Holding thus the balance of power, our narrow and our broad-gauge railroads are brought nearer to the service of the people, and there is insured to us for all time unusual facilities for the transportation of our varied products.

If now still lower rates can be secured to Eastern markets on daily cars that shall be required to receive any quantity of fruit, however small the lot, there will be but little else needed to stimulate our people to the greatest activity in the planting of trees and vines.

These northern counties stretch out their broad and fertile area in sight of the snow-capped Sierras on the east and cold Mt. Shasta's eternal snows on the north; they are within a few hours' romantic and picturesque ride on our narrow-gauge railroad to the health-giving mineral springs on the west, to the streams and lakes abounding in fish, and forests overrun with game, where the tourist or the husbandman may drink in a day of pleasure in these richest of nature's grandest gifts to man, and return home at eve to enter with renewed vigor on the morrow's duties and labor.

Here in this modern Italy, choicer than Italian vines and trees, rarest of tropical fruits, shrubs and flowers, the cool, refreshing breath of old ocean from the west and of white Lassen peak on the east, the majestic crystal river, fed by melting snows and mountain springs, flowing past our doors, carrying on its bosom boats freighted with the product of our fields of golden grain and fruit and vine out through Golden Gate to broad old ocean, to return with the golden luxuries of other climes to cheer and beautify prosperous and happy homes, all contribute their golden wealth and conspire to make these counties truly the golden counties of the Golden State.

## Colusa, Cal.

A "BLACK SNOW," which fell in 1875 over an area of about 15 by 20 miles in the vicinity of Holland, Mich., was found to contain a considerable proportion of dark, earthy matter. This was subjected to elaborate scientific examination, and pronounced volcanic dust from some far-distant crater. A dissenter from this view has sought a simpler explanation, and has since proven that the dust came from the prairie soil a hundred miles to the southward.

## Sonoma County Notes.

EDITORS PRESS:—After a short rest, the scribe who ought to write oftener is once more on duty. The winter is upon us, but no heavy rains nor wintry weather have been experienced. So far not more than 2.25 inches of rain have fallen. Farmers have therefore done but little plowing, although many acres have already been harrowed and cultivated for a coming hay crop.

Sonoma used to be one of the leading grain-producing counties of the State, but now hardly enough wheat is grown in the county for home use. This is not because the soil is exhausted, but because our people have found that fruit and grape-culture are both more pleasant and profitable. There is no county in California where a greater diversity of crop is raised. To be brief, let me name a few of our many staple productions, viz., wheat, oats, barley, rye, corn, buckwheat, alfalfa, tree fruits of all kinds (oranges, pomegranates and Japanese persimmons are now ripe on trees owned by the writer), potatoes, vegetables of almost every variety—you know Sonoma produces pumpkins which have given us a national reputation—melons, etc. And when we tell you there is no part of the globe that can excel Sonoma in grapes, we but modestly speak the truth. For quantity and quality the Sonoma county grape crop is unsurpassed. Our wine yield is large and excellent, but I must not say too much at once, even if the truth be not all told.

There is much interest manifested at Santa Rosa, and also at Healdsburg, concerning railroad extensions. It is pretty certain that a standard-gauge road will be built during the summer of 1887, connecting Benicia, on the Straits of Carquinez, with Santa Rosa. This done, a new prosperity will dawn upon Sonoma, especially that portion traversed by the line of the proposed road. The Healdsburg people hope to have the California Pacific road extended from Calistoga, its present terminus, to Healdsburg. Should the road be built, it will open up the fertile Knight's and Alexander valleys to closer communication with the outer world.

With the outgoing year there will be several outgoing State and county officers. Several of them have proved faithful public servants, while not a few have drawn their salaries and done little more. With the incoming year the Legislature will assemble. We notice a goodly number of farmers in the lists of the elected. It is to be hoped that they will prove honest, competent public servants.

The roads are in splendid condition, and the tax-gatherer is finding everybody.

Farmers have done fairly well this year. Live-stock is in good order and has not yet required any extra feed. OCCASIONAL.  
Santa Rosa, Dec. 13, 1886.

## Stockton Notes.

EDITORS PRESS:—December fogs are moistening the ground already wet enough by the rain of the 8th to plow fairly on all soils, and everybody hopes for two weeks without rain, to push the seeding now well begun. Several farmers are using from 30 to 40 animals. On black lands many have waited for weeds to start; now the burned fields are quite green with them. Summer-fallow is not killed by drouth, as was feared, and the outlook, with wheat at \$1.50 and \$1.51½, is encouraging, for we rarely have heavy rains till the holidays. Roads are not usually bad till Christmas gifts are distributed.

Already the city is gay with paraded marvels of beauty and color, to open alike the purses of rich and poor, and mysterious packages are tucked away, to delight on sweet Christmas eve, though too often "the old, old story" is neglected.

The Ladies' Relief Society gives a benefit for the poor soon, and Mrs. Dohrmann, the noble teacher of the kindergarten, has again undertaken to have each poor child receive a gift from the trees prepared by her scholars and patrons.

The pavement work on Main street will soon be done to Sutter street. The chain-gang has been worked on it, and the sand for the street-bed taken out of Mormon channel.

To go to town on Saturday is a time-honored usage, and on that busy day the plaza, or Hunter-street square, rings with auctioneers of everything, from laces to horses, patent-medicine vendors, knife-grinders, men bawling peanuts, popcorn and oranges. Squint-eyed women drive hard bargains for dishes and carpets; dudes puff cigars and bleared old men squirt tobacco and foretell the weather.

On one side of this busy square will stand the \$250,000 courthouse, 176 feet high to the top of the Goddess of Liberty on the dome, with fine fronts on Main street and Weber avenue. The last visit of Col. Myers, of Detroit, settled all plans, even to finding hardpan for the concrete and brick foundation, at a depth of five feet. The supervisors are now ready to issue bids for this elegant structure, which it will take many a year of taxes to pay for, but will greatly beautify the city and is needed for the credit of the county. MRS. W. D. ASHLEY.  
Stockton, Dec. 13, 1886.



## HORTICULTURE.

## California Dried Fruits.

There were many excellent addresses delivered at Sacramento Citrus Fair. Many of them related especially to the resources and adaptability of the central and northern districts of the State and will serve a good purpose in making these regions better known. We shall present extracts from them as our space permits. As an address of especial interest to those already domiciled in the State and engaged in its productive industries, we select the following by George W. Meade, of San Francisco, to whose firm the highest award was made for its display of raisins at the fair:

The subject of the dried fruit and raisin industry of California is a most pleasing one to now contemplate. It is, comparatively speaking, but a few years since California raisins and California dried fruits cut but a small figure among the products of our great State, and out of our coast markets they were practically unknown. To-day, however, note the great change. From small beginnings the productions of these two lines have kept pace with the growth of the State, year by year, until now the output of California raisins and dried fruits is as eagerly watched in New York, Chicago and other great Eastern markets as it is in our home market of San Francisco. Year by year the markets for our dried fruits are widening, and while a few years ago our most distant market was Colorado, these goods are now being eagerly sought for and distributed in all the great markets of the United States. Large as this business has already become, it is still in its infancy, and has a future before it that, in our opinion, will be excelled by few, if any, of the other great industries of the State.

## With a Population of 80,000,000

Of people in the United States, it is perhaps quite safe to say that not over 3,000,000 have as yet tasted or seen California dried fruit or raisins. The possibility, therefore, of not overdoing the market, as will easily be seen, is something that is not likely to occur for a century to come, if, indeed, it ever occurs. The Eastern demand for our dried fruits for the year 1886 has never before been so eager or active, and at prices which must give to the grower or producer a good return on his capital invested.

There will, of course, as in all lines of business, be poor years and good years; but, taking it one year with another, there is no industry in California, present or prospective, which promises better or speedier returns to the grower than the drying, in whole or in part, of the products of his orchard. To further stimulate and increase, however, the already great and growing demand for our dried fruits,

## Greater Care in their Grading, Selection and Packing

For market must be exercised. The Eastern trade is very exacting—they pronounce our fruits, when properly graded, the finest in the world, but have found, and justly so, much fault with many shipments on account of irregular grading, lack of attention to proper selection and indifferent and faulty packing. All of this can be, and we know will be, in time remedied, and when that time comes, 10 cars of California dried fruits can be sold on their merits alone where one is now. Take the article of California dried peaches—a large grower has, perhaps, 20,000 pounds of the dried product; of this quantity, perhaps, 1000 pounds were over-ripe peaches, which, when dried, turned black. If these were picked out, and either thrown away or sold by themselves for what they would bring, the balance of the fruit would from its uniformity bring enhanced prices more than sufficient to cover this loss. Many growers, however, to save this poor fruit, mix it in with the good, with the invariable result that when the shipment reaches market it not only gives general dissatisfaction, but when sold the price is scaled on the whole 20,000 pounds to a figure that will net him less than if he threw all of this black stock away or fed it to the pigs. The same remarks will apply to apricots, apples, plums, and, in fact, dried fruits of all kinds.

When the product is ready for market, have it regular and uniformly graded. Do not mix in poor fruit. Put up only choice, selected fruit to be sold as your first grades. Pack up your second grade by itself and let it sell on its merits; in fact, let the great consuming public of the East know that when they call for first-class California dried fruit they are going to get it. This fact once established, it will no longer be a question what shall we do with our yearly increasing products of dried fruits? but no shall we be able to meet the demand?

## Sun-Dried and Evaporated Fruits.

We urgently advise the discontinuance of the further sun-drying of apples, unless they be bleached with sulphur before being placed on the trays. The evaporated, bleached apple, here as throughout the entire East, is rapidly taking the place of the ordinary sun-dried apple, the sale of which is rapidly growing less year by year. Evaporated, bleached apples, in 50-pound boxes, are worth to-day 12 cents in the San Francisco and Sacramento markets, and in active demand, with prospects of even higher prices; while the ordinary sun-dried, unbleached

apple is a drug and unsalable at three cents per pound.

In the southern portion of the State nearly all the sun-dried apricots are

## Bleached with Sulphur

And then carefully graded. As high as 22½ cents per pound have been paid in Riverside for these apricots this year, which gives the producer a magnificent profit and shows what a little care and attention will do. To some extent our northern producers also bleach their apricots, but not very generally as yet, and when it has been done, either from insufficient knowledge of the process or lack of proper attention to details, it is only true to say that we have seen very few as yet of the northern apricots that even approximate in color, grading and style the product of our Riverside friends.

There is almost an unlimited field East for these sulphured apricots. We have got the fruit in our northern counties—the process is simple, and there is no reason, with the same attention, why we should not equal, if not excel, the product of Southern California.

With sun-dried peaches we also recommend a universal sulphur bleaching. It will brighten the color, add to the appearance, and in that shape the fruit will always bring enough more to cover the cost of such bleaching many times over. Pears, either sun-dried or evaporated, should also be bleached, and the sale for the ordinary sun-dried, unbleached pear, like the sun-dried apple, is getting to be a thing of the past.

While some growers have endeavored to bleach or lighten the color of prunes or plums, it is an unnecessary expense and a waste of time and labor. A few bleached prunes might sell for a trifle more in a small way now and then, but never to that extent that it would pay any one to bleach them.

## Styles of Packing.

Regarding styles of packing, sun-dried apricots, pitted plums, prunes and pears should always be put up in either clean white cotton sacks or in neat uniform, nicely papered and faced 25 pound boxes. Peaches and sun-dried apples can be put up in burlap sacks, but even for these we recommend a white cotton sack, as it adds somewhat to the appearance of the fruit, and is more pleasing to the buyers.

Choice evaporated fruits, if not sold to some regular packer in bulk, should always be packed in boxes, and, with the exception of apples, for which a 50-pound box should always be used, for all the balance we recommend a 25-pound box as being what is mostly called for by the trade in general. The fruit should run uniform through the boxes, and nicely faced and papered on top so as to present an attractive appearance when opened.

## Dried Figs and Prunes.

The California black fig is increasing in favor East, and we believe will eventually be found a very profitable crop to raise.

As is very well known, the output of many kinds of our dried fruits the past season was seriously curtailed for two reasons—first, a short crop; and, second, the large shipments East in a fresh state. While it is a little early for us as yet to give accurate figures as to the output of all kinds, we place as an approximation the product of French and German prunes for 1886 at 2,000,000 pounds; of peaches, 750,000 pounds; of pitted plums, 500,000 pounds; of apricots, all kinds, 600,000 pounds; of evaporated apples, 450,000 pounds; and of figs, say 150,000 pounds. With a good season it is altogether likely that next year this quantity will be trebled or quadrupled, and no grower need have the slightest fear but what a ready market will be found for every pound of it and at full price.

## California Raisins.

In approaching the subject of California raisins it is with more than ordinary pleasure we note the great increase in the product, the splendid improvements in the style and method of packing, and, what is perhaps better than all, the vastly increased demand, which has amounted to almost a furor from Eastern markets for the choice raisins that California has turned out in the year 1886. Commencing in 1870 with a few hundreds of boxes of experimental California raisins, this industry slowly but steadily, despite the constant warfare and prejudice of the New York importers of Spanish raisins, despite the cheap labor of Spain, has constantly forged its way ahead until this year we approximate the total pack of California raisins at the splendid total of 700,000 boxes, of 20 pounds each, which is equal to 14,000,000 pounds of raisins, or about 50,000,000 pounds of Muscat grapes in a fresh state. The experimental stage has now passed. All choice brands of California raisins are now being taken in the great Eastern markets on almost a par, and in many instances equally so, or even at

## Higher Figures Than the Malaga Fruit.

We anticipate the pack next season at 1,000,000 boxes, and if proper attention is given to grading, assorting and packing, and making our raisins in the box what they are called on the lid, we hazard nothing when we say that every single box of this pack can be placed at remunerative figures in a half-dozen of the largest Eastern trade centers.

To accomplish all this, however, and to still further maintain and to extend the splendid reputation that California raisins have made this year in the East, every possible energy must be exerted to still improve the quality of our pack. Nothing must be left undone, no efforts should

be spared to make our raisins not only equal, but superior, to the very best goods imported from Spain.

## Raisin-Packing Houses.

It should be with us no half-way, but one continuous, unceasing, unrelenting war of improvement and aggression until the last box of Spanish raisins has been driven from America forever. That this much-desired result be more speedily brought about, we offer as a suggestion to growers of raisins generally, that they encourage the establishment of raisin-packing houses in their vicinity, conducted by men of experience and of means, to whom they can, year by year, sell their raisins in the sweat-boxes at fair market rates for cash. In this way a market will be provided each year for the product of their vineyards, and these raisins in the hands of one competent packer will be all uniformly graded and packed under one brand, and thus distributed East. As it has been in the past, and in a great measure is now, these scores of small, indiscriminate packings of raisins all over the State, with no standard whatever as to grade, is one of the reasons that has kept California raisins in the background so long. We had the fruit to make good raisins, but no two packs run alike, and when a car was shipped East one mark would turn out very good and another mark inferior. The result was, the whole car was rejected, and the jobber turned again for his supplies to the Malaga fruit.

## Better Results this Year.

This year, however, owing to the efforts of some large packers in sending East only strictly choice raisins, the tide has turned. We have already secured a splendid anchorage, and now all that remains to be done is for California raisin-producers to be producers, and for raisin-packers to be packers; for the producer to assist and encourage the packer, and for the packer to assist and encourage the grower.

Then with a strong pull, and a long pull, and a pull all together, we firmly believe that within 10 years no more Spanish raisins will be seen in American markets, and we also firmly believe that within that time, with our Californian ingenuity, which is now devising, and will continue to devise, new and quicker methods of packing by machinery, we shall even enter the Spanish stronghold, and that California raisins will be as common in the great markets of England as they are in the large markets of our own country to-day.

## THE STOCK YARD.

## The Government and Cattle Diseases.

The following dispatches from Washington show that a vigorous effort is being made to move Congress in an important direction:

Dewitt Smith, of Illinois, President of the National Cattle-Growers' Association, has arrived in this city for the purpose of securing the passage of a bill to more effectually prevent the spread of pleuro-pneumonia or other contagious diseases. The bill proposed by the association, which will shortly be introduced in the Senate by Cullom, of Illinois, is substantially the same as that urged upon Congress three years ago. It gives the Commissioner of Agriculture the authority to go into the infected States and condemn, pay for and kill diseased cattle and cattle exposed to contagious diseases.

This, however, is to be done in co-operation with the State authorities. In case the State refuses to co-operate with the Federal Government, it is proposed that the President shall have power to "schedule" such State and prohibit transportation beyond its boundaries.

Mr. Smith says a misunderstanding seems to exist as to the reason why compensation is granted to the owners of diseased cattle. He says it is not done for the purpose of reimbursing the cattlemen for the loss sustained, but because it is thought good policy to grant some compensation in order that they will not attempt to conceal the existence of the disease. The cattlemen believe, says Mr. Smith, that if the legislation proposed by them be enacted into law, pleuro-pneumonia and contagious diseases can be eradicated in three or four years.

## Another Measure.

A delegation of the National Cattle-Growers' Association has a bill in preparation for introduction in the Senate, which has for its object the suppression of pleuro-pneumonia. The bill is being carefully drawn by Judge Shellabarger, and will probably be introduced in the Senate by Senator Miller, of New York.

## Still Another.

The committee of the Consolidated Cattle-Growers' Association of the United States appointed to prepare and present to Congress a bill for the extirpation of contagious pleuro-pneumonia and like diseases among cattle has been in conference here this week with members of Congress and Government officials, and are perfecting a bill, the leading features of which propose the appointment by the President of a commission of three, to be men of executive ability, whose functions and pay are to be suspended by the President whenever public safety will permit, and restored whenever he deems it necessary. The commission is to have ample powers to quarantine, appraise, slaughter, and pay for diseased and exposed cattle, and establish rules and regulations therefor. The bill calls for an appropriation of \$1,000,000.

## METEOROLOGICAL.

## The Thermal Belt at Los Gatos.

EDITORS PRESS:—I see some reference in this week's RURAL to orange-growing in Los Gatos. Hoping to contribute a letter perhaps to the subject, and also to set our locality in a more favorable light, which I think it deserves, I send you the following:

Two orange groves in Los Gatos were evidently referred to in the Fruit-Growers' Convention in Sacramento without distinction. The older, Dr. McMurtry's, upward of 20 years old, is situated on the east side and about 50 feet above the creek bottom, and not directly in the draft of the canyon. The west side has the stronger draft and is apparently colder, but there is probably not much difference in amount of frost. Orange trees are growing on both sides all over the town. Once only in the last five years have the trees been injured, and that only the young growth. The mercury that morning at seven o'clock in Dr. McMurtry's grove stood at 25°. On the benches higher above town no harm was done.

The other orchard referred to, set by Mr. Harvey Wilcox and now partly bearing, is 200 to 300 feet higher, a little further out of and probably above the cold draft and backed by high hills; no serious frost there.

Mr. Locco has a place a mile eastward in a small canyon with oranges, lemons and limes bearing. The limes, some of them near the creek, have at some time been frozen down, but came up again; nothing else injured.

Kennedy brothers, in the same locality, in open level land, have an orange tree over 20 years old standing in moist bottom land near the creek. Also a thriving young orange nursery in the same bottom, where one would naturally look for frost.

Toward Sratoga there are three or four groves of 50 to 100 trees or oranges and lemons 10 or more years old, some irrigated, some little or none. Almost every house yard has a few trees, and even out in the valley for five miles are here and there a few trees. One party in the valley has about 100 young trees, which have passed a winter or two.

Seven or eight years ago a good many orange trees were planted about San Jose; these nearly or all died in one or two winters thereafter. There are some trees in the town probably seedlings. Mr. Gish, a neighbor of mine, has two seedling lemon trees growing in a chest-nut orchard; the nut trees are 20 feet apart, the lemons standing in the center of the squares. All are 15 years old and their tops interlace so as to completely shut out the sun. They have never been irrigated. Last year, a dry year for us, the largest tree bore 450 lemons of good size and quality, and did not appear to suffer for want of water any more, if as much, as the nut trees. (Query—Will a lemon root stand drought better than an orange root?)

Judge Rankin in Los Gatos has a lemon tree in his yard which has an estimated crop this year of 100 dozen. And an old fruit dealer in San Jose told me last week that the lemons from Los Gatos, then for sale at his store, were equal to the imported. He also claims that our oranges and limes are equal to the best, excepting, of course, those oranges grown on China lemon roots.

On my own place 29° has been the lowest temperature in five winters. I have had seedling oranges and lemons in seed bed and nursery for two winters, unprotected and without injury so far. Last winter some fall buds started out in early winter and were not hurt.

Up to the present time this year tomato vines are green, and I have pineapple and banana plants growing without protection.

The pinch, however, comes later, when the summer heat has all left the ground, and after a cold rain which has left snow upon the mountain tops; then there is likely to be frost most everywhere, and ice, too, very near to if not at the most favored spots. Ice in the gulches is frequent, but rare on the ridges.

I have seen ice in little brooks and on the banks; 4 feet distant a bean and potato vine pass the night unhurt. I have seen ice in a shallow vessel one-quarter, and I think nearer three-eighths, inch thick, and on the same level near not a leaf was hurt on orange or lemon trees; but this degree of cold happens only once in a winter, or in several winters, and only one or two nights together. A month of such weather might produce very unpleasant results.

My own place is about 800 feet above tide-water and 500 above the town. Anywhere at 200 or more feet above the adjoining level land, or hollows, or gulches, the temperature at night is usually about 10° warmer than below.

One morning in October, upon actual test, I found the temperature at my place 15° warmer than at San Jose at 6 A. M. At the latter place it reached 50° at nine o'clock—the point where mine was at six. It was a clear morning. I believe the same conditions extend to an elevation on the valley side of the mountains to 1500 feet or more, where not too shady, and that all along our foothills and mountains, on both sides the valley, citrus fruits will ultimately be cultivated largely for both pleasure and profit.

N. E. BECKWITH.

Los Gatos, Santa Clara Co.

THE Japanese persimmon trees in Oroville are hanging full of fruit.



## PATRONS OF HUSBANDRY.

Correspondence on Grange principles and work and reports of transactions of subordinate Granges are respectfully solicited for this department.

## Grange Song.

No north, no south, no east, no west,  
The whole broad land is ours;  
We'll hide those dreadful battlefields  
And plant them o'er with flowers.

We'll sow the seed, in faith and hope,  
Our work shall never cease,  
'Till every hill and mountain slope,  
Shall send us words of peace.

We'll start the cheer at the Eastern sea  
And send it to the West,  
'Till the glad shout comes back to us,  
From mountain crest to crest.

Then gather all your hosts again,  
Wide out your banners fling,  
And rouse ye, Nature's noblemen,  
To crown the farmer, king.

—"Connecticut" in Our Grange Homes.

## Temescal Grange.

Several weeks ago Bro. Past Master Bagge and family moved into their new and comfortable cottage. When visited, his fellow-Patrons found him in a beautifully furnished home, but suffering from inflammatory rheumatism, brought on, probably, by extra exertion. At the meeting of Temescal Grange last Saturday, all were glad to heartily greet Bro. Bagge again in the Grange.

The subject of the discussion for the day was the legislative needs of California. Bro. Frink thought that some more efficient laws were needed to prevent the disgraceful scenes lately enacted during the labor strikes in San Francisco. Bro. Renwick thought that in comparison with the wages of farm hands and the profits of the average farm owner, \$2.50 per day was good pay. Farmers certainly work more hours a day than car conductors and gripmen, and generally have to be satisfied with making not more than a dollar a day. Sister Bagge was sure that \$2.50 a day was not too much for a man who had to support a family. As to farmers' wives, how many of them get even two bits a day and their board? It seems to be city hoodlums that are most lawless. Sister Kinney suggested arbitration as the best and perhaps the only remedy. We all have to suffer when such lawless acts are committed. There must be a wrong somewhere, or there would not be such a continuous struggle between labor and capital. Bro. Bagge disapproved of the employment of lawyers litigating all our difficulties, but was in favor of arbitration. He believed that our laws should require arbitration first, and adopt litigation only as a remedy when arbitration has failed. Observations during his younger days in Denmark had led him to this belief. The legal rights of married women and widows were discussed by Bro. Renwick and Bro. and Sister Paine, who spoke earnestly in favor of placing a husband and wife on an equal legal business footing in the rights and disposal of property.

Sister Babcock called attention to the rapid increase of the thistle nuisance in fields and along the highways in Alameda county, and thought further legislation necessary in reference to noxious weeds.

Legislation in favor of postal telegraphy, National Savings Banks, and the distribution of water for irrigation, was also discussed. Brothers Renwick, Paine and Dewey and Sister Kelsey were appointed a committee to present resolutions at another meeting, embodying the opinions of the Grange on the subject of legislation.

An invitation from Eden Grange inviting Temescal Grange to join in installing the officers of both Granges, at Haywards, at 10 A. M. on Saturday, Jan. 8th, was accepted with thanks. The verses, "Forty Years Ago, Tom," were beautifully recited by Sister Jessie Weed.

## National Grange.

The Journal of Proceedings of the 20th session of the National Grange, P. of H., with compliments of Secretary Trimble, is already at hand. This is getting out a report in wonderfully good season. Few State Granges are so prompt; and we know of other Orders taking half a year to do the like, even where less labor is involved than in this volume of 190 pages.

W. M., Darden, to whom the question of representation of Pomona Granges in the State Grange had been referred, felt obliged to reverse the ruling of the Master of the State Grange of California as based upon an unconstitutional resolution of the N. G. at its 12th session; but the following was afterward adopted without a dissenting voice:

Resolved, That Art. I of the Constitution be amended by adding: "SEC. 4.—County or Pomona Granges may be represented in State Granges under such regulations as the State Grange may provide."

After the early conflicting reports it is good to find an authoritative statement, that the 21st session will be held at Lansing, Mich., beginning Nov. 9, 1887.

Among the resolutions adopted was one looking to the election of U. S. Senators by direct

popular vote; and others in behalf of adequate laws against bribery in caucus, election, or legislative halls, and in favor of a National telegraph system.

We hope to refer to the proceedings again hereafter.

## Grange Work and Progress.

[Prepared Weekly by M. WHITEHEAD, National Lecturer.]

The object of the Grange is not to antagonize any other class, not to wage a warfare against any other interest; for it recognizes the right and importance of every legitimate enterprise and vocation, and is quite willing to concede to them every right upon the principles of justice to which they may have claims. Farmers in the Grange will cheerfully aid in the advancement of every useful interest, and shall strive to secure them protection, justice and equal rights with others.

We believe that stock gambling which raises or lowers at the pleasure of one man the price of food products is a crime. So thought the National Grange at its last session when it favored laws, both State and National, prohibiting all dealings in "futures."

"In the present industrial and political crisis the voice of agriculture, the great conservative reserve power of the nation, should not be silent, her influence unfelt, her power unsuspected, her rights disregarded, her necessities unrelieved." Farmers believe this fully, hence the Grange, with its new lease of life, steadily grows and prospers. Farmers are looking to it as their only hope.

Every neighborhood that ought to have a Grange will yet have one, even if years ago one was organized and failed. It is better understood now. Its plans and lines of action are well defined. It offers farmers the only organization that covers the whole country. The hundreds of Granges reorganized during the past year prove that farmers see in it their best organization.

Alta Grange, No. 1350, Illinois, is trying the plan of a Reading Circle in connection with the Lecturer's program. They have taken up Nordhoff's politics for young men, and a member is appointed to open the topic or chapter at each meeting with a written essay.

Some one has wisely said: "The teachings of childhood are the corner-stones on which to build the foundations of character. If these are laid in wisdom and faithfulness we may look to see the superstructure rounded and beautified by the lesson of life's experience." The Grange now admits young people of the age of 14 years, and its beautiful and good lessons are helping to form their characters and shape all their coming lives.

Montrose Grange, Va., lately held a fair. On three sides of the room Ceres, Pomona and Flora presided over displays appropriate to their own sphere, while the fourth side was dedicated to the babies of the Grange, and was separated from the rest by lace curtains and festooned with evergreens. On the platform were two rows of seats, one above the other, and filled with the little ones. And a sweet picture it was, with two dozen smiling little ones from three months to four years old.

"How much have the ties of this Order done to harmonize and unify the people of the various sections of this country; to obliterate and remove all bitterness, hatred and jealousy; to heal the bleaches and wounds of our late civil war? So do you not see that in the near future it will remove all sign and semblance of sectional strife, and make us a harmonious and united people."—J. N. Lipscomb, Master South Carolina State Grange.

At last there are signs of a Grange awaking in Rhode Island. If the little State will it, her farmers can take their place alongside of those in all the other States and help us in our battles for the right. In our work we must not have any States out of the Union. Brother James Draper, Master of Massachusetts, has present oversight of Grange matters in "Little Rhode."

The late session of the California State Grange was a most successful and profitable one. Advance ground was taken upon several important State questions. Another victory was rejoiced over—that of the defeat of the corporations on the "Debris question;" whole hills and mountains had been washed down for mining purposes for years, and the debris carried upon the farming lands to the utter ruin of thousands of acres. One of the reports reads: "To convince all of the usefulness of our organization, it only seems necessary to refer to its accomplishments, when thoroughly united and in earnest. It never attacked a foe that it did not subject to law and equity, and which was maintained by the highest tribunals in the land."

"'Tis ours to guard a sacred trust,  
We shape a heaven-born plan,  
The noble purpose wise and just,  
To aid our fellow-man.  
From Maine to California's slope  
Resounds the reaper's song;  
We come to build the nation's hope,  
To stay the giant wrong."

GRANGE ITEMS.—We learn from the Patron that Sierra Valley Grange was reorganized Nov. 19th, installed officers and received the secret work of the Order from R. G. Hamlin, Master of Beckwith Grange. That Santa Rosa had a special meeting Dec. 4, and a frolicsome feasting day, with readings, addresses and music. That Enterprise mourns the death of Bro. Lewis, who lived respected and beloved by all who knew him, past the age of four-score years. That Woodbridge has lost in Bro. J. A. McMurry a valued member.

EDEN GRANGE.—Seven applicants received the first and second degrees last Saturday. Three more are expected to take the same degrees at a special meeting before the 8th of January, that there may be 10 candidates to be instructed in the third and fourth degrees on installation day, Jan. 8th. All are glad to see this new awakening at Haywards and hope it will soon spread over Alameda county, and Centerville and Livermore Granges be numbered among the early revivals of 1887.

## Grange Elections.

DANVILLE GRANGE.—Elected Dec. 4: R. O. Baldwin, M.; M. W. Hall, O.; O. E. Howard, L.; Fred. More, S.; J. Jones, A. S.; Hugh Wiley, C.; J. Stone, T.; Millie Howard, Sec.; D. N. Sherburne, G. K.; Mrs. Shuey, Ceres; Mrs. Stone, F.; Mrs. Baldwin, P.; Miss Lottie Wood, L. A. S.; S. F. Ramage, Trustee.

EDEN GRANGE.—Elected: J. Chester, M.; W. O. Blackwood, O.; Joel Russell, L.; D. D. Mann, S.; I. E. McDermid, A. S.; Mrs. E. C. Blackwood, C.; L. Perham, T.; I. Sharai, Sec.; O. Dennis, G. K.; Mrs. F. J. Anway, P.; Mrs. J. E. McDermid, F.; Mrs. C. H. Chester, Ceres; Miss S. D. Anway, L. A. S.; O. Dennis, L. B. Anway, J. Russell, Trustees.

ELLIOTT GRANGE.—Elected Dec. 11: S. E. Hart, M.; R. M. Daniels, O.; Mrs. M. E. Emalie, C.; F. Ritter, S.; Wm. Ennis, A. S.; Mrs. S. Ralph, C.; Mrs. C. E. Misener, T.; H. H. West, Sec.; B. F. Langford, G. K.; Sister Ritter, P.; Sister Mary Daniels, Ceres; Sister M. J. Hart, F.; Sister M. A. West, L. A. S.; Lou McLean, Org.

ENTERPRISE GRANGE.—Elected Dec. 11: W. A. Birch, M.; E. J. Lynch, O.; Zenos L. Coy, L.; A. M. Gunter, C.; Thos. Waite, O.; Ulysses Wilson, A. S.; Mrs. S. C. Coy, T.; Miss Letitia Hanlon, Sec.; A. A. Krull, G. K.; Miss Minnie Schulze, P.; Miss Cerita Wilson, F.; Miss Edith Tibbitts, Ceres; Miss Ettie Plummer, L. A. S.

MAGNOLIA GRANGE.—Elected: V. W. Still, M.; G. W. Cunningham, O.; W. H. Cunningham, L.; C. D. Gautier, S.; C. D. Bilderback, A. S.; J. R. Nickerson, C.; H. White, T.; May F. Bilderback, Sec.; H. A. Curtis, G. K.; Mrs. M. M. Eorsenman, P.; Mrs. A. Still, Ceres; Ida M. Babcock, F.; Mrs. A. Cunningham, L. A. S.; Mrs. M. L. Bilderback, Trustee.

MONTEZUMA GRANGE.—Elected Dec. 4, the same officers now holding. Those chosen last year were: T. T. Hooper, M.; J. Bullard, O.; R. Barkway, L.; F. Daniels, S.; J. Nelson, A. S.; Sister F. Bullard, C.; G. M. Daniels, T.; Sister E. Daniels, Sec.; Sister E. Bullard, G. K.; Sister B. Galbeath, P.; Sister F. Barkway, Ceres; Sister M. Galbeath, F.; Sister A. Parker, L. A. S.

NORTH BUTTE GRANGE.—Elected Dec. 11: John W. Hedger, M.; L. D. Hedger, O.; Mrs. L. A. Clark, L.; H. F. Clark, S.; F. M. Bruce, A. S.; Mrs. R. A. Clyma, C.; Mrs. M. E. Durley, T.; Miss Jennie Hedger, Sec.; James Myres, G. K.; Miss May Clyma, P.; Mrs. May Partridge, F.; Mrs. Belle Spilman, Ceres; Miss Mary Stevenson, L. A. S.; Miss L. Clyma, Org.

POINT OF TIMBER GRANGE.—Elected Dec. 4: A. Plumley, M.; Volney Taylor, O.; S. M. Wills, L.; C. J. Preston, S.; A. Richardson, A. S.; Mrs. A. Richardson, C.; G. Cople, T.; Eva S. Preston, Sec.; Mrs. L. Wills, G. K.; Mrs. G. Cople, L. A. S.

ROSEVILLE GRANGE.—Elected: Leo D. Thomas, M.; S. Gladney, O.; S. J. Cross, L.; John Shellhouse, S.; Harry Mertes, A. S.; E. J. Atkinson, C.; Mattie Leavell, Sec.; Walter Lyddament, T.; Willie Murry, G. K.; Gussie Mertes, Ceres; Anna Shellhouse, P.; Bell Harris, F.; Alice Williams, L. A. S.

SACRAMENTO POMONA GRANGE.—Elected Dec. 16: A. A. Krull (Enterprise Grange), M.; Joseph Sims (Sacramento), O.; G. W. Hack (Sacramento), L.; C. Towle (Florin), S.; J. E. Beach (Amer.), A. S.; E. S. Johnston (Franklin), C.; M. Sprague (Sacramento), T.; W. W. Greer, Sec.; C. A. Hull, G. K.; D. D. Hull, P.; Mrs. McConnell (Elk Grove), Ceres; Mrs. Wilson (Enterprise), F.; Miss Crieswell (Amer.), L. A. S.

SEBASTOPOL GRANGE.—Elected Dec. 4: Jas. P. Gannon, M.; M. Litchfield, O.; H. B. Morris, Sec.; C. Wightman, T.; C. Spangler, A. S.; D. Litchfield, G. K.; Mrs. Morse, C.; Mrs. Hathaway, Ceres; Laura Litchfield, F.; Mrs. Sinclair, L. A. S.; Mrs. Thompson, P.

SIERRA VALLEY GRANGE.—Installed Nov. 19: W. C. Lemmon, M.; Geo. P. Haines, O.; B. F. Lemmon, L.; Mrs. Geo. P. Haines, S.; Mrs. B. F. Lemmon, A. S.; John E. Hubbard, C.; Mrs. J. B. Albee, T.; N. N. Strang, Sec.; Hal Lemmon, G. K.; Mrs. W. A. Robbins, Ceres; Miss Laura Robbins, P.; Mrs. J. N. Phipps, F.; Mrs. N. N. Strang, L. A. S.

SOUTH SUTTER GRANGE.—Elected Dec. 18: John W. Jones, M.; Roger Mahon, O.; L. B. Hinman, L.; W. W. Monroe, S.; William E. Roberts, A. S.; John M. Jones, C.; H. Sankey, T.; Ella M. Jones, Sec.; Alex. Donaldson, G. K.; Mrs. M. Sankey, P.; Mrs. E. C. Jones, F.; Mrs. M. J. Fifield, Ceres; Mrs. Mary Donaldson, L. A. S.; Roger Mahon, Trustee; Ida Richardson, Org.

STOCKTON GRANGE.—Elected Dec. 4 and 11: Thos. E. Ketchum, M.; J. B. Harelson, O.; Sister M. F. Merrill, L.; J. L. Beecher, Jr., S.; E. C. Carson, A. S.; Sister A. W. Post, C.; Jos. Adams, T.; N. T. Root, Sec.; W. F. Sibley, G. K.; Sister W. B. West, P.; Sister Lizzie Root, F.; Sister T. E. Ketchum, Ceres; Sister Cora Beecher, L. A. S.; Sam'l Myres, Member Exec. Com.; Sister J. L. Beecher, member in place of Sister West, resigned. [The above are almost constant in attendance, and promise well for future meetings. Our great trouble is that so many come to be entertained and so few muster courage to speak. Still, that is better than too much gabble.—Mrs. W. D. A.]

VALLEY GRANGE: Elected Dec. 11: S. Ashley, M.; Frank L. Loucks, O.; G. P. Loucks, L.; C. N. Wight, S.; J. Lieber, A. S.; Mrs. O.

N. Wight, C.; E. W. Williams, T.; Miss H. F. Bailey, Sec.; J. R. Minaker, G. K.; Miss Nellie Simpson, P.; Miss Hattie Gambs, F.; Miss Nellie Wight, Ceres; Miss Annie Loucks, L. A. S.

## The Babe of Bethlehem.

[Written for the RURAL PRESS by M. J. LINDROBE.]

"Rejoice evermore! Be exceedingly glad!"  
Ye hillsides and mountains, ye valleys and plains!  
Let not your hearts, ye children of men, be sad;  
But rejoice! Let anthems of praise, fitful strains,  
Be wafted on sunbeams, on fragrance of flowers!  
A Babe in Bethlehem is born. It is ours!

Ours, that Babe in the manger so humbly born,  
Yet so rich in grace! so beautiful! so sweet!  
That the angels sang its praise on Christmas morn,  
Prophets, kings and shepherds worshiped at its feet.

"Glory to God! on earth peace; good-will to men!"  
Are blessings from Bethlehem's Babe now as then.

As God has glory, and on earth peace, may we,  
Loving the day of the Babe of Bethlehem,  
Love and practice "good-will to men," as they be  
Needing our kindness on life's wavering stem.  
Then, Bethlehem's Babe, the Cross and its story,  
Will bring us at last to future life's glory.

Easton, Fresno county.

## Hon. Marshall P. Wilder.

Boston, Dec. 16.—Marshall P. Wilder died at his residence at Roxbury this morning. He had just passed his of the most prominent men in the country, beside having 60th birthday. Col. Wilder for many years had been one of a world-wide reputation as one of the foremost pomologists and horticulturists of the country.

EDITORS PRESS:—Only a few days ago I was honored with kindly words from Hon. Marshall P. Wilder, anxiously desiring to see California well represented at the next biennial gathering of pomologists, in Boston. With trembling hands he worded his desire "to work to the last, which will come before long."

A few days later the father of American Pomology was removed to the larger field of action, to view the perfected fruits in the sphere of immortal life. Glorious must have been the awakening when, after a long life spent most industriously in the service of his fellow-men, to advance and perfect horticulture, he found himself surrounded with the spiritual growth of flowers and fruits evoked by his genius and perseverance.

His teachings to plant the seed of every fruit and tree, and by hybridization originate new and superior varieties, better adapted to the endless peculiarities of climate and soil over so great an extent of country, has given an unprecedented impetus to horticulture, which promises to be abiding.

The most charming among flowers, the *Camellia Wilderi*, his hybrid roses, and a long list of valuable fruits, will carry his name to posterity as one of the benefactors of the race.

His labors for many years, as president of the American Pomological Society, were conducted with consummate ability and suavity of manner. Tears of deepest affection are dropped to the memory of the Father of Pomology through the extent of our country, wherever superior trees, vines or flowers attest our advanced civilization.

J. STRENZEL.

Martinez, Dec. 19, 1886.

[We can but add our tribute of respect to the memory of the distinguished dead. From end to end of this country, and far beyond, where enlightened horticulturists meet, his name will be spoken with tender voice and the hosts of his noble deeds will be recounted. With the grief at his departure there must be mingled thanks that he has been so long spared to guide, to encourage and to elevate his fellow-men.—EDS. PRESS.]

## Coal Oil and Turpentine for Seales.

EDITORS PRESS:—Your subscriber wishes to know if any of the readers of the RURAL PRESS have ever used pure coal oil or turpentine on peach or nectarine trees for the San Jose scale; if so, at what season of the year was it used, and what effect did it have on the trees? Either coal oil or turpentine will kill the scale effectually, and will not hurt pear or apple trees, but what effect it will have on stone-fruit trees I don't know. Should any of the readers of the PRESS have tried either of the above remedies they will confer a favor by reporting the same to the PRESS.

I. H. THOMAS.

Visalia.

PROF. C. V. RILEY.—We have received a note from Prof. C. V. Riley, U. S. Entomologist, stating that having been forced, from ill health, to absent himself a great deal from his office, and to seek as much rest as possible since last spring, his correspondence has unavoidably accumulated during that time. It is his earnest hope that returning health and strength will, in the future, permit him to overcome this seeming neglect, and, in the meantime, he asks the kind indulgence of those to whom his letter is addressed. We know Prof. Riley deserves the most thankful consideration and that he is incapable of neglect unless it is beyond his power to do otherwise. We are glad to hear of his returning strength, and hope for full and continued restoration.

STREET RAILWAYS are becoming quite a common thing in our three most southerly counties.



## AGRICULTURAL NOTES.

## CALIFORNIA.

## Alameda.

**CHEERFUL AND BUSY.**—Haywards *Journal*, Dec. 18: Farmers this week report that they never had such a fine fall to get the land in, and those having adobe have already made rapid headway. In Moraga all the low adobe land is now cultivated and seeding is progressing. Hill farmers are all busy, as well as the valley chaps.

**SUGAR BEETS.**—Irving *Reporter*, Dec. 18: The sugar factory made the largest run it was ever known to make one day this week—108 tons of beets in 20 hours. Tony Lee has a sugar beet—not a common beet—weighing 32 pounds. It is nearly two feet long and measures three feet two inches in circumference.

## Colusa.

**VINES AND ORANGE TREES.**—Telegram from Arbuckle: A large number of farmers in this locality are preparing to plant vineyards this winter. But little wheat will be planted. A well-cultivated vineyard produces the finest of grapes without irrigation in this section of the county. Dr. Clark, of Woodland, is setting out 10 acres of orange trees in the foothills west of this place.

## Lassen.

**WELL-WON WATER.**—Susanville *Mail*: Some years ago Herman Knipping, better known as the "Pluck Dutchman," located a ranch on Madeline Plains on a place no one else would have, as it was thought impossible to obtain water anywhere in that section. For three years he has hauled water eight miles to his house. He has sunk eight wells and they all proved dry. A short time ago, however, he commenced sinking about three-quarters of a mile from his house, and has, at a depth of 75 feet, succeeded in getting an apparently inexhaustible supply. In sinking he went through 9 feet of clay, 1 foot black, crumbly adobe, 20 feet of brown sand, 13 feet of yellow, sticky clay, 5 feet of gravelly cement, 10 feet of clay, 2 feet of dry, flinty cement, then perceived moisture. He then sunk through 6 feet of clay and struck a gravel bed, in which he encountered a large boulder. Upon removing the rock he was rejoiced to see water gushing in. He went for his team and wagon in order to haul rock for curbing, but was unavoidably delayed until the next day, when, to his astonishment, he found 35 feet of the finest water in the well and his tools at the bottom. Mr. Knipping has a bonanza in this well, as all the drovers and teamsters will, if necessary, stop at his place in going to and fro with stock and freight. This will encourage others to settle in this section, as a great many have been watching to see the outcome of the gentleman's enterprise. He proposes to move his house to the well.

**SETTLERS AND BEEVES.**—Susanville *Cor. Ukiah Press*: Our county is filling up very fast. Nearly all the government land is taken up, either for grazing or farming purposes. However, the U. S. Land Office is still doing considerable business, especially in the northern portion of the land district. There is a large quantity of beef cattle being fattened in this valley to be shipped about February.

## Los Angeles.

**CITRUS SALES.**—Santa Ana *Standard*, Dec. 18: Some of the Tustin people have sold their orange crop on the trees recently at the following prices: Mr. Judson, \$2000; P. T. Adams, \$3000; B. F. Maxon, \$3000; H. K. Snow, \$2000; Mr. Kellum, \$5000; A. B. Goodwin, \$2000; W. H. Newell, \$1 per box.

## Marin.

**A KINGLY BIRD.**—San Rafael *Journal*, Dec. 16: Henry J. Lucas killed a gray eagle, Tuesday, that measured seven feet and three inches across the wings, and weighed 11½ pounds. When shot he was devouring a tame duck captured on the ranch. His talons and beak were wonderfully well developed for assault or defense. Such birds are rarely seen here, and Lucas will have it preserved.

## Monterey.

**EDITORS PRESS:**—Over one-half the land in this vicinity, lying between the railroad and the Salinas river, is plowed and the adobe seeded. The uplands east of the railroad are generally in need of rain before plowing can be begun.—J. B. H., *Chualar*, Dec. 18th.

## Napa.

**ENGLISH WALNUTS.**—St. Helena *Star*: The crop of walnuts at Mrs. T. B. Shamp's place was light this year and there were not enough gathered to fill the orders received. Last year she had a fine large crop and they went like "hot cakes." The variety raised at Walnut Grove is the English, and they are larger and better than can be bought in the stores. This crop is always profitable, and a few walnut trees would not be amiss on any farm.

## Placer.

**CLIMATIC RIGORS.**—*Republican*, Dec. 15: During the past week peas have been in blossom on W. J. Wilson's place at Newcastle, and in Mr. Hollenbeck's garden in Auburn. Two or three ranchers report having ripe berries, and R. N. Scott has a chestnut tree in full blossom at Newcastle. Mr. Beecher has tomato vines in blossom at Millertown, and H. B. Gaylord has sent to the Citrus Fair ripe tomatoes picked

from his vines last week. Mr. Gaylord also sent down to the fair a fine peach tree, only six months old from the pit, which measured nearly six feet in height and was of corresponding breadth of limbs.

## San Diego.

**COTTON COMING.**—*Union*, Dec. 15: W. W. Stewart & Co. received at their warehouse yesterday the first wagon-load of cotton ever grown in Southern California. There were 39 sacks in the lot, in all 2570 pounds. This cotton was grown by John W. Moore, of Bear Valley, on the farm of S. G. Antes. Mr. Moore, who has had experience as a cotton-planter in Texas, is convinced that it will prove a paying crop, and says there is no doubt at all of success with it here. He is so well satisfied of this that he intends to put in 160 acres the coming season, and says it will pay a great deal better than the same acreage in grain. Stewart & Co. will ship this cotton to the Oakland mills by the next steamer, as the pioneer cotton shipment of Southern California.

## San Luis Obispo.

**COMPETING CUCURBIT.**—*Tribune*, Dec. 17: Oak Park and Arroyo Grande vie with each other in respect to large squashes. A load was brought to town Monday. The smallest of the squashes weighed 100 pounds, the largest 285 pounds.

**GOOD GROWERS.**—Mr. S. Jones has a tract of mesa land a short distance west of Arroyo Grande. Last spring, when planting his watermelon patch, he dropped at proper intervals a few apricot-pits by way of experiment. Nearly all came up and he has now about 100 sturdy little trees over three feet high, the season's growth from the seed. After removing his watermelons—an immense crop—the vines have again sprouted from the roots, and Mr. Jones is watching to see if he is to have a perennial supply of watermelons.

## Santa Clara.

**FRENCH PRUNES.**—*Mercury*: Marshall Ross, of San Tomas district, dried a large quantity of French prunes in his evaporator the past season. He packed them neatly, shipped them to Chicago, and has just received word that they are "the handsomest that have come into the market this year."

**LATE GRAPES.**—Although the grape season for the majority of vineyardists was over several weeks ago, Mr. Baker and Mr. Crittenden, of Lakeside, are still making shipments to S. F.

## San Bernardino.

**RAISIN SHIPMENTS.**—*Valley Echo*, Dec. 16: Total raisin shipments from Riverside, Casa Blanca and Arlington for 1886 to date, 105 carloads, or 110,022 boxes.

**CHURCH-GOING BEES.**—After expending considerable money in vainly trying to fasten in the swarms of bees which have taken possession of the space between roof and ceiling of the Arlington church, the society have now decided to wage a war of extermination. The bees have become so numerous and aggressive as to prove a great nuisance, not only on account of their holding services at the same hour as the congregation below and all speaking at once, but frequently the congregation find their pews occupied by these arrogant little intruders, and not even the most devout of deacons can give his individual attention to the pastor's discourse when he views one of them perched upon the coat collar of his neighbor in front preparing to administer a pointed rebuke to the unwary brother for daring to nod during services.

## Shasta.

**AN ORANGE BELT.**—*Democrat*, Dec. 15: There is a strip of country stretching from the mouth of Clear creek to the mouth of Spring creek on the west side of the river, taking in the high lands that are known as a "warm belt," and is especially adapted for the orange tree; and to prove this we call attention to the Wiser place, in particular, at Lower Springs, where orange trees have been bearing for 17 years. We have passed this place at all seasons, and never failed to see oranges on the trees. For several years the trees on the Wiser place were irrigated, but Mr. Wiser discovered that irrigation was a detriment, and for the last 11 years they have done better without irrigation, the ground not even being well cultivated. Judge McCormick, of Redding, who has several fine trees growing on his premises, having ceased to give them water during the summer months, finds that they do much better. So it is proved by actual experiment that excellent oranges can easily be grown in this particular belt at least, and without irrigation.

## Tulare.

**COUNTY PRODUCTS.**—*Delta*, Dec. 16: In the show-window of Knapp & Anderson's real-estate office is an interesting exhibit of Tulare county products, among which we note two varieties of large, deep-colored oranges from E. J. Gibbons' place at Plano, that would attract attention anywhere; fine oranges and lemons from John Tuohy's place on Lewis creek; English walnuts from Dr. Farrish's orchard at Farmersville; black walnuts brought by Mr. Enloe from the swamp; Japanese persimmons, grown by Seth Smith, near town; large pears and six varieties of squash and pumpkins from Spiers' nursery, in Visalia; a box of large, finely-flavored raisins from Geo. Thyark's vineyard, at Grangeville; rice pop-corn (the first we have seen here), sweet corn, and splendid specimens of mountain apples from M. C. Washburn's place in the Sierra on the Mineral King road;

honey in the frame, made at the Fair grounds in October last, by a swarm of J. Gregg's bees, during the holding of the fair of the Agricultural Association; a stalk of corn, grown on J. H. Thomas' place, near town, measuring 18 feet in height, and having 3 large ears 12 feet above the ground; large ears of yellow corn, grown by J. Dice near Visalia. There are also samples of wheat of different varieties, alfalfa seed, etc.

**AN ALFALFA CULTIVATOR.**—*Visalia Times*: C. Burrell has had constructed at the iron works a cultivator with diamond-shaped chisel points which he proposes to use in his alfalfa fields. Gophers, squirrels and badgers have thrown up such mounds and ridges there that he loses great quantities of feed, from the fact that his mower will not cut it where these animals have rendered the ground uneven. With his cultivator he proposes to level these knolls, and the chisels are made diamond-pointed with the notion that thus shaped they will not tear up the roots of the alfalfa. Several practical farmers, who have examined the machine—which is nothing more than the cultivator of our grandfathers—have suggested that it could be employed to good advantage in killing out the much-detested fox-tail, if used when the grass has just made a start. The frequent flooding of alfalfa packs the ground solid, and the use of this cultivator would at least loosen the soil, and thus, no doubt, cause a larger and better growth. If it will, as suggested above, eradicate the fox-tail grass, its value is incalculable. Mr. Burrell's experiment will be watched with interest.

## Yolo.

**COYOTES MANY.**—*Democrat*: The farmers among the foothills near Capay are complaining of the unusual number of coyotes in that locality. The animals are very voracious, and not only attack sheep, but kill hogs in great numbers, something they were never known to do before.

**MULE-MERCHANT ON THE MARCH.**—Mr. Brown, the well-known stock-raiser from Modoc county, passed through town Friday with a band of 61 fine mules. He left Modoc with 68, but succeeded in selling seven of them on the way. The mules are now quartered at Hord's horse-market near the depot. Mr. Brown will dispose of as many as he can in this county and then take the remainder to Fresno.

## Yuba.

**MUSCATS AND 'SIMMONS.**—*Marysville Appeal*, Dec. 10: In the yard of the Gassaway residence there is a tree of the Southern persimmon which is bearing abundantly; also a grape vine which is bearing Muscat grapes. How is that for December?

**ROBINS** have already made their appearance in this vicinity, which is several weeks ahead of their usual advent. They say that there will be enough rain during the season, but not any to spare.

## NEW MEXICO.

**ALFALFA.**—*New Mexican*: A good many people are taking up land south and southwest of Santa Fe, with a view of sowing the same in alfalfa. Eight or ten parties residing in this city have already done this and secured a very fair crop even where irrigation is impossible, and the success which has attended their experiments has encouraged others to go and do likewise. Some rather queer facts have been developed by this work in the Santa Fe valley. One man sowed a crop of alfalfa with his oats early in the spring, the idea being that, as he had no water at hand to irrigate his crops, the oats would spring up and protect his tender alfalfa shoots from the sun. The new ground was plowed to the depth of eight inches and the oats were carelessly sown, so that in many places there were no oats at all. Imagine the farmer's surprise now when he finds that the alfalfa which fell where the oats were the thickest has made the most rapid growth and matured and "bunched" into a far better stand than that sown amid the oats where it had the most. Another valley farmer took great pains in preparing his ground, making it soft and level. His crop came all in patches, irregular and out of all order, but his neighbor, who merely turned over his sod and scattered the alfalfa seed without either harrowing, rolling or brushing it, secured a far more promising stand.

**LOSS OF COIN BY WEAR.**—Professor Kimball, the Director of the Mint, has made a report on the losses on gold and silver coin by wear and abrasion, which are much more serious than most people probably imagine. Though no systematic investigations on an adequate scale have been made in this country to determine the loss by actual wear of United States gold coin, yet we are told the results of such experiments as have been made show that the abrasion of gold coin under past conditions of circulation has been from 1½ to 2 per cent a century, or from \$150 to \$200 per annum per \$1,000,000. The experiment has recently been tried of aiding the public in the discrimination between light gold coins and those of standard weight by stamping light gold coins with the letter L, so as to admit of ready detection. If such experiments continue at the sub-treasuries and mints the director believes that light coins will soon cease to perform the functions of legal tender coin, and coin will be presented for redemption before progressive wear entails material loss. The loss on small silver coins in active circulation is estimated at from one-tenth to one-fifth of 1 per cent a year.

## FLORICULTURE.

## Chrysanthemums and Christmas.

[Written for the RURAL PRESS by Mrs. W. D. A.]

As Mary looked through the dim light across the even fields now sown to grain to the San Joaquin, murmuring sounds of night birds poised on leafless willows made pleasant undertones to the plink of fearless frogs and mingled with the sullen swash against its strong levee bounds of the great river forced to carry through its sinuous course the miner's dumpings as it hastens to the bay. Like pure spirits freed from earth bonds, fairy-like mist rose from its sedgy margin soon to become thick fog and hide the stars that looked on fertile Roberts' Island.

Her mother's voice made her look round the cheery all-service room with its bright cook-stove, from which came odors of the Christmas dinner waiting for "father." "Mother, don't mind me. I have a good time; the grain is going in finely, the levees are strong, and Frank can go to school eight months of the year. Uncle never meant to wrong us." We have few wants or cares, and "here abideth faith and hope."

"Tain't all," cries sleepy Frank. "'Now abideth faith, hope and charity; but best of all is charity.'"

You darling! Hark! Papa has come! Mary's round face and brown eyes brightened as she lighted the lamp on the little home-made table with its pretty spread of cheese-cloth, with its border of blocks of drawn threads, through which ran a thin bright ribbon above a raveled fringe.

While the man cared for the team, the father warmed and drew from his pockets a knife, ball and candy for Frank, and for mother a book and neck-shawl; but looked ruefully at Mary. "Dear child, I had no money. This box a strange lady sent you." We untied it and disclosed a bouquet of many-colored chrysanthemums, snowy Imperials, surrounded by sprays of delicate Tom Thumb Bon-Bons, set off by feathery masses of dark red and small white, pure alike for the bridal or bier.

How these regal flowers brightened the table and homely room. For a moment the possibilities of what they had lost flashed upon her.

"Passing a yard in Stockton, I stopped to look at them. A lady advanced and handed me one. I told her how you loved them, and she asked me to wait till she cut this bouquet, which she sent with her best wishes."

Three weeks they brightened the isolated house, then Mary filled a box with leaf-mold, broke off the flowers, stuck one-third of their stems into the soil, and set them on the north side of the house, above the reach of the calves, where they struck roots and were to her a delight with their growing leaflets.

January brought the floods that submerged the rich lower Division of the island, containing 35,000 acres, 13,000 of which were cultivated, and caused a break in the Middle Division, partially covering the crops; but it was soon closed and the land drained for late crops of which all felt sure on this prolific soil, and this little family kept heart with this, for the islander's unfortunate year, till the rainfall of April 10th, when on Sunday night, the new piling on the Middle Division gave way, the torrent bearing off five of those great timbers, driven 20 feet into the shaly soil. Here the hardpan is 14 feet below the island surface, but only two feet thick, with a stratum of loose sand beneath. All hope of crops disappeared. Only potatoes could be raised, and they would be low. With the waters rushing over their rented land they gathered their earthly all with the one unnecessary thing, the box of chrysanthemums, on the steamboat for Stockton, where shelter was kindly given till they found a little home for the long, sunny summer, that makes fuel and clothing a light bill for the unfortunate.

The sad mother pined for mountain air, so they found a little foothill home, overlooked by the Sierras, and facing the broad, sun-bleached plains, where their chapparral neighbors invited them to Sunday and day school, and to regular preaching.

When the chrysanthemums were abloom in the bleak air, a stranger stopped to ask the way. Night was close and he accepted the hospitality of the refined family, the father of which he had known in boyhood. He was charmed with Mary's intelligent beauty, and the demure little friend at her side. To Mary he was all that was manly. Several times he came to look at the surpassing beauty of the flowers, inclosed by a rude fence. At last it dawned on her that it was her friend, who cared not for the feathery blossoms, the gold of sunsets, or the beetling crags boldly outlined, that he came to see.

Again the chrysanthemums, the fashionable flowers of popular culture, brighten the short days, and lilac ones bend on "mother's" grave, and small white ones stay to bless the Christmas, and the stranger has set the demure girl in his home, the beauties and bounties of which she can only half appreciate, and a brave sweet face looks out to the rough shelter of the cheery flowers, and a firm step moves among the turkeys and chickens, and a firmer hand guides Frank and smooths the way for the dear old father, and a strong faith looks upward to the crown beyond the cross, fairer even than chrysanthemums.

Stockton.





### Christmas Sonnet.

When the high Son of God would come to earth  
To overcome the author of its woe,  
And deal to sin its fit and fatal blow,  
He sought not robe of state nor throne of wealth,  
But rose to manhood from a peasant birth.

The babe is laid where cattle bleat and low;  
Pleased is the gracious Lord of Heaven so  
To charge the world with Heaven's holy mirth.  
Whose ears first hear, whose eyes first gladly see  
The tokens of a God within our race.

They are not monarchs, proud in heart and face,  
But shepherds, listening to the harmony  
Of angel voices. He must humble be  
Whom God will visit and his love embrace.

—Howard Crosby.

### Mrs. Stirling's Christmas Guests.

[Written for the RURAL PRESS by I. H.]

It was the week before Christmas. Mrs. Stirling sat beside the open wood fire in her pleasant sitting-room; the afternoon sun shone in at the window, and roused the canary to his sweetest song; but neither sunshine nor bird-music had the power to bring a smile to the sorrowful face averted from them. How lonely the house was, how empty—the house that used to echo to the patter of little feet, the laughter of merry voices.

The day had come which the mother had always dreaded. One by one the children had gone out into the world to homes of their own, and now what gladness could there be for her without them? The youngest daughter, the pet and darling of the home, had been there a year ago, but she too had been wooed and won, and was far away across the sea. It was all right and natural that the birdlings should spread their wings and fly, but there were aching hearts in the home-nest for all that.

The door opened, and as her husband entered Mrs. Stirling hastily wiped her eyes and made an effort to regain her self-control. Echoing her thoughts, his first words as he seated himself were these: "Well, mother, it will be a sort of lonely holiday-keeping for us this year. We will just have to fancy that time has turned backward to the days when we first had a home of our own."

"If we could," she answered, "but there was no 'longing for faces and voices gone' then, as there is now."

Mr. Stirling did not reply; he dared not follow out that train of thought, but he sighed as he looked up at the picture of his darling Nellie in her bridal dress.

"Sam is going home to spend Christmas, isn't he?" he asked after a little. (Sam was the boy who did the chores and his parents lived in the country town some ten miles distant.)

"Yes; he asked me if we could spare him over night, and I told him we could."

"Of course. But I think his folks must be pretty hard up just now. His father hasn't been able to do a stroke of work since he sprained his wrist six weeks ago. Couldn't you send them a few things to keep Christmas with?"

Mrs. Stirling caught at the idea at once. She would pack a basket for Sam to take. "I am sure we can spare them a turkey." Then she paused and looked steadily at the fire for a few minutes. What inspiration came to her from its cheerful glow? Her face lighted up as she turned to her husband and said eagerly: "Would not this be better, James? To send Sam in for the whole family, and have them come here for their Christmas dinner?"

Mr. Stirling smiled and shook his head a little doubtfully.

"Give her an inch and she'll take an ell," he said. "That was always your way where any hospitable plans are on foot."

"But why not?" she asked. "It is dreadful to think of people being pinched and half starved, while we are living in the midst of abundance. They might come the day before Christmas and stay till the day after, and we would be none the worse, while they would be much the better."

"Just as you like, my dear, just as you like; only it seems to me you are laying out a lot of work for yourself."

"No more than I have done many a time before. And it will do me good and stop this headache. You see I am not entirely unselfish," she added with a smile. "But don't let us do it if it will spoil the day for you, James."

"Well, I haven't the slightest doubt that I should enjoy your company alone very much more than that of Sam's folks, who are not likely to prove wholly congenial; but if Christmas has any meaning and any use, it is to make us think of others and not of ourselves, so let us have them by all means."

Mrs. Stirling was one of those people (happily not so rare as the cynic would have us believe) who make the golden rule the law of their daily lives.

When Sam Adams came to the ranch to do the chores which had been done by her own boys for many years, she could not regard him as a mere machine for the performance of so much work and nothing more. As she would have liked a child of her own to be treated under similar circumstances, so she treated him. He was always expected to come into the sitting-room in the evening and to spend an hour in reading some well-chosen and interesting book; and once a week he was required to write a letter home. But this was not his letter-day, and he was a little surprised when Mrs. Stirling told him after tea to bring out his writing materials.

"You are to write a letter to your mother for me to-night," she said in answer to the boy's inquiring look. "How should you like to have them all come and spend Christmas with you here, Sam?"

The boy almost gasped with astonishment. "All of them? Pa and ma and the children?"

"Yes," said Mrs. Stirling; "if one comes all should come. Families should not be separated at Christmas. Do you think they would like it?"

"O, wouldn't they!" exclaimed the boy, his

who had been supporting the family by taking in washing during her husband's enforced idleness, and to whom three days of rest, of freedom from care, and of abundant food, seemed like a taste of paradise.

And now Mrs. Stirling, laying aside all her own sad thoughts, went to work with a will to prepare for her expected guests. She was not an old woman yet, and this new interest inspired her with much of her former energy and alacrity. Never in all his life had Sam seen such preparations for a Christmas dinner; the delicious odors that came from the kitchen excited him to outdo himself. He gathered up unheard-of quantities of eggs, he churned, he kept the wood-box piled to the top, he was always at hand to run here or there and make himself useful in any possible way. What would his two little sisters and Johnnie think if they could look into the pantry and see the rows of pies and cakes, the piles of doughnuts and cookies, if they could taste them as he did from time to time, Mrs. Stirling never forgetting a boy's weakness for such delicacies.

Oh, ye farmers, so anxiously watching the signs in the heavens, so fearful lest the rain

be the first they have ever had." Mr. Stirling had it ready, and together they beautified it with the treasures laid away from many a glad holiday in years gone by. There were colored glass balls and tapers, and glittering chains of tinsel, and out of a closet upstairs there came dolls for the little girls, and story-books and tops and marbles. "Why should I selfishly hoard them up when they can make another woman's children happy?" said the mother, with tears in her eyes. Do you not think there was a glow in her heart, a light in her eye, that would have been wanting had she wrapped herself in her memories, and spent the Christmas-tide with the ghosts of other days?

When all was done the door of the little sewing-room was shut upon the beautiful tree, and preparations were made for supper.

Punctually at five o'clock Sam Adams, his face beaming with pride and gladness, drove up to the door. He was spared the ordeal of introducing his parents, for Mr. and Mrs. Stirling came forward with a warm welcome, as though they had been friendly for years. There was a boy some years younger than Sam and two pretty shy little girls, whose very shyness made them lovely in Mrs. Stirling's eyes. (And is it not a charm in these days of pert, forward children?) Hats and cloaks were laid aside, and soon all were seated around the hospitable board. What if Mr. Adams ate with his knife; what if Mrs. Adams' hands were hard and rough. The warmhearted hostess saw only the careworn faces, the lines drawn by the hard struggle with adverse circumstances, the pale cheeks of the little children, and the presence of none of earth's favored ones could have given her half so much pleasure.

Then the Christmas tree was lighted and the door was opened on that fairy land of childhood, while the father and mother looked on in wondering delight. What had put it into the hearts of these strangers to prepare such a treat for their children?

"I am a plain man, Mr. Stirling, and don't know how to make speeches," said Mr. Adams as at last the good-nights were said. "But Sam says, says he, 'Pa, them's the best folks I ever seed or ever expect to see,' and I guess he was nigh about right." And forgetting his sprained wrist he grasped the farmer's hand with a fervency that spoke more than words.

It were long to tell of all the delights of the following day as the happy children explored the ranch, going into raptures over the calves and colts, the chickens and ducks, even the little pigs; while Mrs. Stirling gave a sympathizing ear to their mother's story of trials and tribulations and forgot the shadows over her own pathway, so bright by comparison.

Sam was to go for the mail, and, coaxed by his brother, made bold to ask that he might drive over to the postoffice and take the children with him.

"Dinner will be ready when you get back," said Mr. Stirling, "so don't keep us waiting."

The fine, large turkey was in the oven, the table was set with the best dishes, glittering with silver and gay with flowers, and Mrs. Stirling was going to and fro between the kitchen and dining-room, putting a last touch here and there, when the sound of wheels was heard.

"Did Mr. Adams go with the children?" she asked, catching a glimpse of a man's form on the seat beside Sam.

"No; he's in the parlor looking at the pictures."

"Then who—"

But the question was never finished. The door flew open. "Mother!" exclaimed an eager voice, "I've come to wish you a Merry Christmas."

"My blessed boy!"

The strong, clasping arms of her youngest son were around her and her face was hidden on his breast.

That was her reward. My story is ended. No need to tell how the Adams family enjoyed the turkey and mince pies and all the other good things provided for their entertainment. As for their host and hostess, they dined on necta and ambrosia, for here was their boy beside them, having traveled 500 miles to gladden their hearts on Christmas-day.

"I went down the street last week," he said, "to buy a Christmas present for you, mother, and all of a sudden I thought you would care more for a sight of me than for anything I could send; so here I am, and I think I was right."

"Dear," she said, fondly, "do you know what is the last best gift of heaven? Giving me that you give me—all that makes life worth having. It is love."

Walnut Creek.

**VANITY OF A CANARY.**—The habit of the canary to noisily join in any conversation that may be going on in the family circle is a reason why many refrain from keeping this cheerful little bird as a pet. A naturalist has discovered a way of remedying the difficulty. He says: "We put in our canary bird's cage every day a little mirror, as large as the palm of our hand, taking care that neither sun nor lights shall dazzle him, and he will look at himself for hours together with as much happiness as any young gentleman you ever saw. When we want him to stop singing we have only to give him the mirror."

**THE EYES, HAIR AND SKIN.**—Prof. Virchow has completed a very large collection of observations on the color of the hair, eyes and skin of children in German schools, numbering as many as 7,758,287 individuals.



THE FIRST GLIMPSE OF CHRISTMAS.

face flushing with delight. "Only ma'll think it's givin' you too much trouble."

"She must not think that. It will give me great pleasure, and I am sure you will help me to get everything ready for them. You won't think it a trouble to pick the turkey, will you?"

"No, ma'am," said Sam decidedly. "I'd pick a dozen."

But as he began to write, a cloud came over the boy's face. He hesitated for a few moments, and then said as if half ashamed, "Mrs. Stirling, I know they would all like to come, but I'm afraid they can't. Pa hain't been able to work for a good while, and it would cost too much—"

"Not if you go and bring them in the spring wagon, Sam," said Mr. Stirling, kindly. "You can take the old mares and show them what a good driver you have learned to be."

"Yes," added Mrs. Stirling, "that is the plan. I would like to have them come the day before Christmas, and you can take them home the day after. Write that and then read me what you have written."

The letter was completed at last and shown to Mrs. Stirling; but she did not see the postscript added afterward: "There is going to be a turkey for dinner, you bet."

The answer came very promptly, accepting the invitation, how gladly no one knew but the writer herself, the poor, overworked woman

should be delayed and the next year's harvest prove a failure, could you imagine the intense longing of all those young, thoughtless hearts for a continuance of the fine weather that filled you with such uneasiness! "If only it will not rain till after Christmas." It was the one cry, morning, noon and night. And they had their wish. It did not rain. The soft winter sunshine was not dimmed by the shadow of a cloud. It was such a morning as California alone can offer in December—a faint suspicion of frost giving a tone to the spring-like mildness of the air, the garden gay with scarlet geraniums, the whole landscape bathed in golden light when Sam Adams drove out of the gate to bring "his folks" to the ranch for Christmas; and in all the length and breadth of the land a happier boy it would have been hard to find.

Mrs. Stirling watched him for a few minutes and then turned and went into the house. She had something still to do. The spare room was ready, and Nellie's pretty chamber where the little girls were to sleep; she had spared no pains and kept back nothing. Her guests might be plain, hard-working people, accustomed to privation and self-denial, but none the less should they have the best of all at her command while they were under her roof.

And now it only remained to deck the Christmas tree for these children of poverty. "Yes, father," she had said, "they shall have a Christmas-tree of their own. I dare say it will



## YOUNG FOLKS' COLUMN.

## Rudie and May.

## A Christmas Story for the Young Folks.

(Written for the RURAL PRESS by M. B. D.)

Mrs. Ashley sat by the kitchen stove with Baby Will asleep in her arms. Rudie and May, the two older children, sat close together where the firelight fell on their faces. They were chatting earnestly, and Rudie's interest growing deeper as they proceeded, he raised his voice so that his mother overheard the subject of their talk. It was all about a Christmas-tree which some one had cut from the woods that day. "You just ought to have seen it, May," he was saying. "It was a young pine tree with ever so many little purplish cones left in the top of it; and besides, they had whole bushes of holly."

Their mother's heart ached when she thought of the scanty Christmas offering in store for her children. Times were hard with the Ashleys. When they had come to Jamestown, Mr. Ashley had taken up a mining claim, like others who had hastened to the new gold fields. The rumors of their richness had not been idle, and much gold had been taken out by the men who owned claims. Mr. Ashley's yielded like the rest, and he had been able to build as neat a cottage as any in the new camp. But suddenly the vein became exhausted. He continued to work the mine until all the money he had saved was spent, and then he had to go to work in a large mine owned by a rich company in order to supply his family with bread. They had to leave their pleasant home and live in a small wooden shanty near the great creek which wound about the outskirts of the town.

Baby Will had been sick, and all night long the tired mother had had to watch alone, with weary eyes, her little sufferer; for her husband was on the night shift. The rain poured down dimly, and as she listened she thought of her little store of treasures, and wondered if from among them she could not select a gift for each of the children. They could buy nothing new this year at the toy stores, that held such tempting playthings for the little ones. There was a string of wax beads that would do for May. Baby Will was too small to enjoy a gift, unless it should be a rubber doll, and he had one of those, although it was badly worn. Some new bibs she had been making would serve for his gift. She could not think of anything to give Rudie; any new garment would be acceptable, but she had to dismiss such ideas, for she knew that they would not be able to buy anything. After much thought, she could decide upon nothing, so she stopped thinking and listened to the children, who were still talking.

Rudie was saying, "You, May, can bring the water, while I wash the gold from the dirt. We can make lots of money before Christmas. Why, do you know, when pa sent me up to old Felix, the other day, he had washed a dollar and a half out of his pan that very morning. You ought to have seen the gold, May. He had it in a little bottle that you could see through, and the grains looked something like a buttercup all torn to pieces."

"Take off your shoes, dears, and prepare for bed now," interrupted their mother. "Be very quiet, for baby is asleep."

Soon Will was placed in his crib, and the mother carefully turned down the coverlets of the two narrow cots that awaited the others. She heard their prayers, then patiently took up the week's mending that yet remained to be done.

The bells of the chime struck the hour of 12, and soon her husband came in for his cup of coffee and slice of bread. They spoke little to each other, and in low tones, for the three little ones were asleep near by. The wife told her husband what she had thought of giving the two younger children as Christmas gifts.

"What shall we do for Rudie?" she ended. "He is large enough to value what we give him, and surely we can make some effort; don't you think so? A book would not be costly, and he is fond of a good book."

When Mr. Ashley had finished his supper he took down a little worn Bible and asked his wife to read a verse.

"Carrie, dear, don't feel bad," he said when she had finished; "let us bear our misfortunes as bravely as we can, and I am sure that Rudie will share our feelings, for he is old enough to understand them."

As soon as he had returned to his toil, Mrs. Ashley cleared away the table, and pausing to read again ere she should sleep, the Bible chanced to open at the first page. She read the words written there: "A Christmas gift to Carrie, from her mother. 1862." This suggested a new idea, and turning over the next fly-leaf, she wrote, "A Christmas gift to Rudie, from his mother. 1885."

At the breakfast-table, Mr. Ashley told Rudie that after he had finished his chores he had better go up the creek and bring home what wood he could find upon the banks, washed there by the rains.

Rudie took off his shoes and stockings, as he wished to wade in the stream, and started out in the fresh air. The sun shone between large clouds, and as the rain had flowed off the hills,

they looked quite dry and pleasant. He carried home several armfuls of oak boughs and pine cones that had come down with the water. He cut all the wood into short sticks, ready for the stove. After lunch he asked his mother's permission to mine in the creek for awhile. When she said yes, May exclaimed: "Me too, mamma, me too. I want to mine."

Their mother, after putting upon May a little woolen hood and jacket, fastened a silk handkerchief around Rudie's neck, and told them to return in about two hours. May had taken good care of Willie all the morning, and as Rudie had been at work, she allowed them this time in which to play.

The creek was rather full and swift, but not dangerous. Rudie had an old mining pan, and with it he worked industriously, in hopes of washing out some gold from among the sands. He had often seen his father panning out, and he did now just as he had seen him do. May sat upon the bank and threw sticks into the water.

"I can hold the gold for you, Rudie," she said. "What shall we buy with it?"

"Now is just the time to make our plans," said Rudie, with a manly air, as he tipped the pan this way and that way, with a wise look. "It is two weeks to Christmas-time, and I guess before that I'll take out \$7 or \$8."

"And I'll help you, won't I, Rudie?" added May.

"Oh, yes; of course. We'll get ma a pair of shoes; don't you think it's a good plan to get something useful?"

"Yes, Rudie, some shoes with shiny toes," May agreed.

"Pa ought to have a new necktie and a pair of overshoes, hadn't he?" continued Rudie.

"Let's get Will a rubber ball that whistles when you squeeze it, and all striped with red and yellow and blue," suggested May, squeezing an imaginary ball in the air with her hands.

"Oh, yes," said Rudie; "and you and I will have a Christmas-tree with candles, and maybe some one will give us a present, too."

Mr. Ashley was right when he said that Rudie would understand their feelings and bravely share their wants. Though the boy was young he was quick-witted, and his love for his good parents made him comprehend their position more clearly than other children of his age might have done.

Rudie and May stayed down by the stream busily talking, while Rudie worked with his pan. Before it was time to go home he had picked out several grains which he thought to be gold. May held it tight in her little warm hand.

That evening, as they sat by the stove, they chatted over their plans and decided to let their mother keep the gold for them until they were ready to spend it. She was quite surprised when they gave it to her. There was nearly a dollar's worth of the little yellow grains. When her husband came home that night she told him how the children had got it, and that they were planning to buy Christmas gifts with what Rudie should take out during the holidays.

"This is a lucky find for him," said Mr. Ashley. "It probably came down with the last rain, and the poor child will be disappointed tomorrow, for the creek goes down so quickly when the rain stops."

Every afternoon Rudie and May went to the creek, and Rudie worked hard with the pan. They found very little gold after the first day—only one or two grains at a time—and many a panful was washed out faithfully for nothing. They went higher up the creek, and, having no better luck, they went down. In this way nearly all of the two weeks passed. Rudie was growing quite discouraged, and little May often advised him to stop mining and make mud pies with her.

"Let us have some fun before you go back to school, Rudie, even if we can't give any Christmas presents."

"I'll tell you what to do, May," Rudie answered; "you make a whole lot of mud pies and pudding and things for dinner, and when you get it done I'll come and eat with you."

May gathered up many little bits of colored glass and laid them upon a flat stone, as dishes are placed upon a table. Of the mud she molded pies, as she had seen her mother do. She made a nice pudding of sand, with a sauce of mint leaves; and from under a pine tree she gathered a few nuts which had fallen from the burs. When she called Rudie to dinner, she noticed a man riding up on the opposite bank of the creek, on a bay saddle-horse. "Who is that, Rudie?" she asked.

Both of the children watched the rider as he went on at a swift trot.

"I don't know for certain," said Rudie, slowly; "but I think he is the man who hires father. He is the superintendent of the mine, you know."

Rudie felt that this man was of much importance, since he directed so many men, and even his own father. Long after May had returned to her play dinner, he watched the horseman.

After the superintendent had reached the last bend, he stopped his horse, for the bushes grew so thickly on that side that he thought it would be better to cross over.

Rudie sat where he could see the water as it flowed by them. He was feeling so sad about his bad luck that he could not help watching it longingly.

"Oh, if I only knew where the gold lay! Don't you wish the little waves would tell us? They seem to be saying something all the time,

don't they, May? But I can't understand them any more than I can old Theodore when he talks French."

Just then he saw a little brownish object come whirling and dancing down with the ripples. "Look, May," he said, "what an odd chip! Don't you think it is redwood? Let's have it," and off he darted to catch it as it passed.

When he clasped it in his hand, he saw it was a thick pocket-book, held together by several little rubber bands.

"O May! it's the superintendent's pocket-book. See! here is his name on the outside. Won't he be sorry when he finds that it is lost? I tell you what, May, you go and tell mother what we found, and I'll go straight to the mine with it, and then I'll come home."

He saw May reach the top of the hill, and then started off at a quick pace toward the mine. When he reached it, the superintendent was there, and had already discovered his loss. He was quite disturbed, for the contents of his pocket-book were of value to him; and he sat at his desk with a frown when Rudie asked to see him.

"A boy, what can he want? Tell him to wait."

Rudie sat down upon a bench, while the man went on jotting down accounts and giving orders. After awhile he became afraid that his mother would be anxious; so he walked up to the superintendent's desk, and holding out the pocket-book, said: "Here is your wallet, sir. I found it in the creek this morning after you had ridden up."

The superintendent's countenance changed in a moment. "Well, young man, I am very fortunate," he said, and his face wore such a kind expression that Rudie felt happy. He raised his cap and was about to leave, when the superintendent recalled him and inquired his name.

"Rudolph Ashley, sir," replied the boy.

"My father works here in the mine."

"Ashley? oh, yes; a steady man, too; what shall I give you, my fine fellow?"

"Nothing, sir, thank you." And Rudie was about to go again; but the superintendent prevented him, and pressed some offering, which, however, Rudie refused.

As he walked toward home, there was a lightness in his heart. Somehow he felt as if he had made the superintendent happy, and the remembrance of his kind looks gave him a feeling of satisfaction.

The day before Christmas, Rudie and May went out into the woods across the creek, and cut down a small pine, with one tiny cone in the top of it. Great armfuls of holly berries and ferns they gathered, too, and took them all home. Rudie fastened the pine in a box, filled with stones, and placed it upon a bench in a corner of the kitchen. While he and May twined wreaths and garlands of the holly, their mother cut some candles in halves, and fastened them upon the Christmas-tree. A holly wreath was fixed in the window, and over the door was fastened a great garland that hung nearly to the floor. The vases, too, were filled with holly and ferns; and then some of the clusters of red berries were fastened upon the Christmas-tree with the candles.

After the leaves and twigs had been swept up, their mother gave a little bag of pop-corn to Rudie. He worked very steadily popping it in a long-handled frying-pan, with a tin plate for a cover.

Mrs. Ashley and May strung the snowy kernels on white threads, and then twined them about the branches of the tree.

"You see, dears, it looks like the snow," said the mother, while she wreathed the long white lines over the pine needles.

Rudie and May had never seen snow, except on the far-away Sierras, and their mother's stories of Jack Frost and long snowstorms were to them like fairy tales.

That evening, as they sat by the hearth, they held a solemn counsel about what they should do with their gold. They had a little over two dollars' worth, and Rudie had found that he could buy nothing that would satisfy him with that sum; so there, in the glow of the firelight, they agreed to divide it between their mother and father.

"Now, mamma, you shut your eyes while Rudie puts our presents on. Shut your eyes tight, mamma. Now promise, won't you?"

May stood by her mother's chair, while Rudie divided the gold equally, and did it up in two pieces of white paper, upon one of which he wrote "Mother," and upon the other "Father." He emptied his pockets of marbles and rolled them up for Baby Will. Then for May he brought out a small box full of nicely-cracked pine nuts, which he was careful not to let her see, for he intended it to be a surprise.

After all these things were arranged the two children said their prayers and were tucked into their little beds. For a long time they lay awake, wondering what they would see in the morning. The rain was falling upon the roof, and they could hear the old clock tick. The shadow of their mother they half saw through the open door, as she sat sewing in the kitchen. Visions of dolls with lace dresses, and heaps of pink candies, danced in May's mind. Rudie thought of a little cart to haul the wood in, of tops and marbles, and of new books; but he knew that these were not likely to be his gifts, so he prepared his mind to feel contented with something less. At last their watchful eyes were closed in sleep, which was not disturbed even when their mother came in with the candle and kissed each smooth little brow.

With the first ray of dawn Rudie and May

were up and scrambling into their clothes. May could not wait to have her dress buttoned. When her brother started toward the door, she said, "Stay, stay, Rudie! Let me come too."

When they reached the kitchen, their father had just come in. Their mother sat by the fire with Baby Will in her lap.

"Merry Christmas!" they all exclaimed to each other, and the children went to their father to be kissed. When they turned, the Christmas-tree was a beautiful surprise to them. It shone with numberless starry candles of pink and blue and yellow. Gilded nuts and apples seemed falling from the branches. Round bags of red and white gauze displayed their contents of sparkling candies and sugar-plums.

May's eyes rested upon a big, flaxen-haired doll in a pink dress. It seemed to hold out its arms to her.

For Rudie there was a cart and several books, his mother's Bible, and, besides, a fine top and ball, and packages of new clothes which he unrolled, while he shouted for joy.

Baby Will was remembered with a rubber doll and velvet cap, while their mother and father had each several handsome presents, besides a big goose ready for the Christmas dinner.

"O papa!" exclaimed the children, in a breath, "where did those lovely things come from?"

"Old Santa Claus came with his fairy reindeer and left them," said May, as she tied the pearly beads about her neck and hugged her doll.

When the Christmas dinner was served the secret came out. The superintendent called in "just to see if the children were having a merry Christmas," he said. Rudie and May shrewdly guessed that he knew something about their gifts, and when they told him so he only smiled and said he was glad to see them so happy.

"You were a smart boy to have found my pocket-book," he remarked to Rudie.

"Me too! I helped to find it, didn't I, Rudie?" chimed May.

The superintendent took each by the hand, saying: "Yes, both of you deserve a merry Christmas, and with all my heart I pray that you may live to enjoy many more of them."

## The First Glimpse of Christmas.

Christmas is almost here, and old Santa Claus' agent has been stirring around quite lively of late preparing for the approach of that medieval frosty-bearded Dutchman with his reindeer team and little wagon. The first thing is to get ready a good assortment of Christmas trees, and the growth of that peculiar plant has been extremely rapid in San Francisco the past week. The same novel sight has no doubt been going on in all the towns and cities of the land. The recent rains have been very timely, gladdening the farmer's heart, but they did not cause these trees to sprout and grow out of the hard sidewalks. They have grown out of the hearts of the people. They are the symbols of a pretty sentiment that should ever be kept fragrant in the soul. There is just now a perfect forest of these trees on some of the streets in this city, so that it is a good deal of trouble for one to get along. On any other occasion the policemen would not tolerate such obstructions, but the sacred holiday has touched the hearts of these great broad-shouldered men who keep watch over society. Perhaps they remember when they were boys a long time ago.

One curious thing about these trees is the fact that once a year, usually on Christmas eve, they suddenly blossom into all kinds of strange fruit. Nearly every thing a boy or girl can think of will in a few minutes sprout out and hang on every limb. It is perfectly marvelous how generously they bear. Whatever our swaggering realists may say to the contrary, Santa Claus' agent usually takes a look around the house to see if he can catch sight of the purse or bank-book in order to guess how heavily he may load his old-fashioned sleigh. He has no trouble in finding the Christmas tree waiting for him, and goes silently to work, while all the little eyes are closed in sleep, hanging it all over with dolls, pen-knives, rocking horses, picture books, toy railroads, tool boxes, oranges, candies, pop corn, and all sorts of nice things. Many homes are poor and have not much money to spare, but he comes all the same, and if he finds no little tree he finds the little shoes and stockings hung around the room. There is a story extant that a quizzical boy, when all the rest were asleep, peeped from under the bed covers and caught a glimpse of what was going on. He actually saw Santa Claus busy at work, and recognized him as a very dear friend, but he looked wise and kept mum.

The picture on the opposite page represents a young mother giving her only child its first glimpse of Christmas. If you ask how we know it is her only child, we answer from the size of the tree and the awkward manner in which she seems to hold the despotic darling. But as we are no expert in the last mentioned art, the least said about it the better. Christmas eve is a gladsome day in homes where love reigns. The hearts of the old are warmed anew by the joys of the little ones. Let not the day be forgotten! Spread abroad its good cheer! A Merry Christmas to all the children.





A. T. DEWEY.

W. B. EWER.

Published by DEWEY &amp; CO.

Office, 252 Market St., N. E. cor. Front St., S. F.  
Take the Elevator, No. 13 Front St.

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Registered at S. F. Post Office as second-class mail matter.

SCIENTIFIC PRESS PATENT AGENCY.  
DEWEY & CO., PATENT SOLICITORS.

A. T. DEWEY.

W. B. EWER.

G. H. STRONG.

SAN FRANCISCO:

Saturday, December 25, 1886.

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## The Week.

We turn aside this week from our usual pursuit of industrial topics and give much space to holiday thoughts and imaginings. We trust the change, which seems appropriate to the occasion, will be acceptable to our readers. If any chance reader should be inclined, from the sight of this issue, to think that our contents are light and our drift toward the sentimental, let him consult the index for the volume, closing with this number, which may be found on the last page thereof. This index will show what a host of practical subjects have been discussed in our columns during the last six months. Some intimation may also be gained of the fact that, in the wonderful progress and development which California is now enjoying, the RURAL PRESS is playing an important part in practical ministration to that advancement.

We have great plans and intentions for the coming year. It is our purpose to make our journal better with each succeeding issue. We propose that it shall be considered by thousands more, as it has been by thousands in the past, an indispensable adjunct to every well-regulated Californian household. To this end we want every subscriber to go with us into the new volume and to gather in many more. Thus bespeaking, kind friends, your good-will and favor, we wish you, one and all, jointly and severally, a MERRY CHRISTMAS and HAPPY NEW YEAR.

## Christmas.

The annual recurrence of this day has been made a season of festivity in all civilized lands, and nowhere has it received a more joyful welcome than among English-speaking people. It comes in with the merry chime of bells and a burst of all sorts of musical instruments. For many generations it was the custom on Christmas eve to light large wax candles, roll into the fireplace a huge back log, and trim the houses with various kinds of evergreens. The Druidic tradition, that whatever grew upon the oak trees was a gift from heaven, made the mistletoe a universal favorite. It was a season when conventional civility was laid aside, the staid old proprieties locked up in a closet, and full rein given to the "Lord of Misrule" and the mirth-making Merry Andrew. In the palace and hovel, down in the earth where sooty miners delved, and far out to sea where ships tossed on the waves, Christmas came in with shouts, songs, and an infinite variety of fun and jollity. Every one put on his best clothes and for the nonce threw work and dull care away. It was the season of mighty feasting and family gatherings. Among our English ancestors the festival began by bringing in with frolicsome ceremony the favorite dish—the soused boar's head with an apple in its mouth and trimmed with rosemary; and how the table was heaped with turkey, game, big joints of beef and haunches of venison flanked with mince pies, plum pudding, has long been familiar to the reader of Dickens' gustatory traditions. The sight of such a table now would make a modern dyspeptic turn pale, and scare a good theosophist into a conniption fit, and fill a Buddhist with holy horror at the cannibalism that feasted upon its ancestors.

The age of the mighty eating Christmas has passed. While the spirit of kindness, good-will and gift-making still attends and adorns it, the immense joints of beef, haunches of venison, monstrous wreaths of sausages, head-cheese and pot-pies which delighted the senses of a former generation, would now, instead of stimulating the appetite and making the mouth water, sicken and disgust. Hygiene, chemistry, and the fashion for French cooking have come in, and the fondness for "little dishes," that fascinating branch of the culinary art that Miss Corson has written so much about, has quite banished the lusty indulgences of the table. Gluttony has gone off to keep company with drunkenness and other deadly sins.

Even festive reunions have felt the withering breath of change. They are not so common, so generally observed, so anxiously expected, as in former times. When the sons and daughters and relatives were grouped in the same neighborhood, the sense of kinship was kept warm and ebullient by frequent visits and interchanges, and Christmas became the greatest day of the year, when all the clans gathered under one roof-tree. But our modern ways of steam traveling have so widely scattered families that this has become impracticable. And what is still more painful, the wide dispersion tends to weaken the ties of relationship. Brothers and sisters become as strangers. Already the patriarchal homestead, with its rosy memories, and the family burying ground, with its sad, sweet associations, have gone away and become memory and tradition.

But what if the Christmas dinner is not made so much of, and roast turkey and cranberry sauce, buckwheat cakes and honey are not so intimately associated with happiness and a good time! The Christmas trees are more abundant and more heavily laden with their peculiar fruit. What if the gambols and carols have ceased, and the mirth is less boisterous! The art of giving has become more delicate and expressive of good taste, love and friendship. What if our family gatherings are not so large! The spirit of mercy, good-will and charitableness was never so expansive and odorous. There is every indication of a wholesome growth of the home sentiment and a development of the spirit that gave the day its meaning the world over. The spirit of the choir of angels who serenaded humanity the morning of the Advent singing "Glory to God in the highest, and on earth peace and good-will toward men."

**CARE OF CARRIAGES AND WAGONS.**—Carriages and farm wagons might be made to last twice as long if only a few moments were spent each week during dry weather in tightening up the bolts that hold the wagon together.

## Thoughts for the Close of the Year.

If it be true, as the old Greeks used to say, that beauty is the flower of virtue, then happiness must be its perfume. In that case there is a deep, rich meaning in the friendly greetings we toss about so cheerily during the holidays. But it will take more than a word or wish to make a merry Christmas or happy New Year. Happiness is a plant that does not grow wild. It cannot be had in the market at any price. It cannot be made by recipe. It is sought for by all with great eagerness, and there be few that find it. And yet it may lie more within our reach than we are apt to imagine.

There have always been many who looked upon cheerfulness and laughter as simple, or at best a foolish weakness that should not be cherished. They harp chiefly on the wretchedness of man and the vanity and emptiness of all earthly joys and hopes. Life is a journey through a vale of tears. This is the devil's world, and the less we have to do with it the better. To slip through it, as along some lonely mountain road infested with robbers and wild beasts, and get safely out of it, is the only thing worth thinking about. They are fond of saying that Jesus never smiled, but we know he made things pretty lively at a marriage feast, and there is more evidence that he kissed the bride and wished her much joy than in this old monkish tradition. There is another class far more numerous who take exactly the opposite view of life. They are resolved on what they call in the poverty of their language "having a good time." They will sip at every cup of delight. They will pluck every flower.

But it is clear that neither the ascetic nor the epicurean has found the way to harvest the most good out of these passing years. One throws away pleasure for the sake of virtue, and gets a pale, withered, sickly thing, and the other throws away virtue for the sake of pleasure, and at last comes to surfeit, weariness and disgust. Both are wrong, for they seek to separate the beauty and fragrance of the rose.

Our nature indicates a better philosophy of life than this. Our poor relations of the animal kingdom begin life with play, but man alone can laugh or smile. Their play is merely physical buoyancy, which leaves when youth is gone; but man's laughter, sunny mirth and sportive play may make the morning, noon and sunset of life radiant and odorous with gladness. Our natural love for music, wit, humor, repartee and lively conversation, and all those surprises of thought or word which toss the soul into gay and playful moods, may last as long as the soul lives. Even the dying have been known to smile at some funny thought that flashed out of memory, or absurd or humorous thing occurring in their sight, and many instances are recorded where they have gone down into the river of death laughing and cracking jokes. David Hume spent his last moments inventing jocular excuses which he supposed might be made to Charon for not getting more readily into his gloomy boat. The light and sportive spirit of Charles II flashed humor to the last, and while in the agony of death said to those standing around him that he hoped they would excuse him for being an unconscionable long time dying. Our nature shows that we were made for a happy destiny, and that our laughter is as divine as our tears. We may not find all we desire in this world, but it is God's country we are living in, and those who regard existence here as a form of waiting for the happiness of another world, cast unnecessarily a gloom over things that should be always bright. The fact is, there is too much living for the future and not enough for the present. Man's desire for immortality has been misdirected, and he needs a revelation of the beauty and grandeur of this life and its possibilities. Better dream, idealize, build cloud castles in the realm of imagination than to mope from day to day thinking life a failure. There will be days of foul weather, raw, chilly winds, and biting frosts, but that is a very foolish soul that allows such days to throw their shadow over the whole year.

We ought to feel grateful that this fragrant plant may grow and thrive on any soil. If happiness depended exclusively on fine clothes, elegant furniture, palatial homes and a large bank account, some of us would be in a sad plight indeed. Then only the lucky ones, who by heritage or good fortune had built on the sunny slopes of prosperity, would be able to

possess it. But, as kind nature scatters her sunshine and rain over the evil and good, the rich man's broad fields and the poor man's little garden alike, so she has thrown wide open the gates of pleasure to the people of every age, clime and condition. All are invited to this joyous feast, and all alike made welcome. Indeed nearly all those who have written the sweetest words about home, love, joy and contentment have gone to lonely cottages to find their inspirations. It was not in the dazzle of ballrooms, theaters, or the splendor of palaces in Paris that St. Pierre found the rich colors in which he adorned those two happy children of nature, Paul and Virginia. The touching pathos of Gray's Elegy welled up in his heart as he meditated in a graveyard that held only common dust. All the lovely visions of life that give a charm to the pages of Chaucer, Cowper, Burns or Dickens were pictures of the average condition of society, and not from any glimpse of the hilltops of wealth and station. The mountains look picturesque at a distance, but they grow cold, bleak and barren as you climb them. If any one doubts this let him give an hour to one of Disraeli's novels, where only folks who have an income of ten thousand a year are permitted to play a part.

But after all, happiness is born of the soul as flowers of the tree. Each heart makes its own little ambrosial kingdom. Still we must not expect too much in our pursuit of happiness. Those who expect a perennial felicity will as certainly fail as those who sought for the elixir of life. There are cares and troubles we cannot avoid. Tears will come to all. Sickness and death are inevitable. There will always be vacant chairs and empty garments and sorrowful hearts. Many who began last year are not with us now. Some of us will not be here when next the bells of time "ring out the old and ring in the new." What we have been seeking is only a general law of happiness, and we seem to find the most of it in the principle that each heart largely makes its own world of joy. "He that is of a merry heart hath a continual feast."

## Fruit Marketing.

The collision of Christmas and the Citrus Fair this week obliges us to lay aside until the next issue some favors which we have received from our readers concerning the very important fruit-marketing problem as reannounced by the Sacramento convention of November. We are not intending to slight the matter, and will take it up with the more vigor as soon as our readers dispose of their Christmas dinners. The coming meeting of the Fruit Union next month must be the occasion for testing the strength of the different means and methods proposed, and we invite discussion preparatory to that meeting.

We were glad to see among the many fruit-growers whom we met at Sacramento a general disposition to out loose from personal preferences and interests which played such a prominent part a year ago and go in solidly for whatever seems really best for the whole fruit interest. With such a disposition there is every reason to expect a successful solution of the vexed problem. The almost abject failure of the system of distribution adopted by the Fruit Union last year seems to be fully admitted even by those who did most to set up that system. The experience of the year needs many explanations to make its reasons clear.

It may as well be stated that so far the committee appointed by the Sacramento convention to secure better arrangements with the railroads has secured no certain results. It is true it was telegraphed from New York about a week ago that Mr. Huntington said it would be all right, but the answer which the managers here made to the committee was very far from all right. It would not be anything new for the high moguls of the company to do smooth talking, at this time of the year especially, and then for the young men who seem to be really doing the business to make quite different figures when rates are made.

**A FLOOD OF IMMIGRANTS.**—Mr. Welch, South-western passenger agent of the Missouri Pacific, reports that during the past 30 days more than 8000 people have arrived in Southern California from the East. He expresses the opinion that many of these visitors come with means to purchase land, and are looking for permanent locations.



## The Citrus Fair.

### A Display of Great Extent and Excellence.

[From our Editorial Correspondent.]

The Citrus Fair, held December 13th to 18th, at Sacramento, by the Central California Citrus Fair Association, will hold a place as an important event in the agricultural history of California. It is true that it is the second of its kind, but that of January, 1886, in view of the haste of its preparation, may be regarded as in some sort an introductory to the greater one which falls within the limits of the same year. The two exhibitions, in view of their surprising extent and excellence, and the wealth of their significance, promise to make 1886 memorable as a year of awakening in Northern and Central California.

Judged by all fair standards, the fair of last week was notably excellent and satisfactory. Judge it by its extent and it is the greatest citrus fruit exhibition ever held in California. The writer has had the pleasure of attending them all, and can therefore make the estimate. The area occupied was 60x160 feet; but this gives no just idea of the extent of the material, for the tables had to be shelved high up beyond the satisfactory range of the visitors' eyes; the walls were hung with exhibits to a similar height—in fact, they came as near freecooing the ceiling with exhibits as the ingenuity of the exhibitors would allow. New tables and additions to tables were built until the throng could hardly squeeze between them, and yet with recourse to all these devices, the spaces under many of the tables were piled full of unpacked boxes, many exhibits never coming to light, simply because there was absolutely no place to display them. It is stated that the transportation companies delivered at the fair over 35,000 pounds of exhibits, and this, of course, does not include the mass of material brought by team from Sacramento and Yolo counties. The estimate of 20 tons of material, made by one writer, is, we think, far inside the actual amount. Placer county alone brought five tons and Butte four tons.

Another way to measure extent is by reference to the entry list. We secured from the clerk the summaries up to Thursday afternoon, and found an aggregate of 1396 individual entries, and the clerks were still busy recording material, even though there was no place to put it. There were probably over 1500 entries made.

The geographical question also shows the extent of the fair. There were in all 22 counties represented, as follows: Sacramento, Butte, Placer, Yuba, Shasta, Nevada, Napa, Tehama, El Dorado, Sutter, Sonoma, Colusa, Santa Clara, Calaveras, San Joaquin, Solano, Yolo, Stanislaus, Amador, Lake, Alameda, Contra Costa. A part of these counties entered for the general county awards; others were represented by individual growers. The following awards were made:

County exhibits—Best exhibit of citrus and other semi-tropic fruit, and including wine and brandy: First class—Diploma, Placer county. Second class—Diploma, Butte county. Third class—Diploma, Yuba county.

Immensity is a burden to style. The managers had arrangements made for a very artistic display, as could be seen by those vestiges of their decorations which were not obscured by the masses of exhibits that broke the view in every direction. The exhibitors themselves planned for tasteful arrangement and decorative effect, but finally had to bury their designs by the encroachment of surplus material. The critic could justly claim that the display was huddled, and the visitor who would have delighted to study general effects found himself in a sort of semi-tropical catacombs and was obliged to admire merely what was nearest to the end of his nose. Fortunately, there was so much of special excellence in individual exhibits that the necessity was not hard when one became reconciled to it.

Of course there was much, in fact too much, poor to ordinary fruit shown, and too much disposition to multiply samples of single varieties on the same entry. This is true of all California fairs and will, we hope, be gradually overcome, as the management of our exhibitions can place their regulations on a more scientific basis. We shall soon have to do as older societies do, limit exhibitors to specified amounts of certain articles. This will make room for artistic work in arrangement. It will benefit the visitor and

enable the committees to do much more satisfactory work and do it much more easily. On the other hand, there must be more exact rules as to classification. We were sorry to see that some exhibitors attempted to increase their numbers of varieties by attaching several names to the same fruit. We are charitable enough to believe that some at least of them, being little acquainted with citrus fruits, did not know that they were doing wrong.

We gave last week a little sketch of the character of the exhibits from several counties which contributed most. Our space will not permit us to report the fair on the basis of localities. We must rather review what strike us as special features of the exhibition and content ourselves therewith. No doubt the local press in each of the counties will do full justice to the local aspects of the affair. We comment briefly, therefore, upon the quality of the fruit. The main feature was, of course, the orange. There were 528 separate entries of oranges up to Thursday afternoon, and more then still coming.

The prevailing varieties were seedlings (of which notably excellent ones could be selected in several of the county exhibits), Mediterranean Sweets and Australian Navels. In some of the individual displays there were collections of 10 or more varieties, some of the growers evidently having kept abreast of the times in orange-growing in securing buds of different varieties from other orange-growing countries. The most obvious features of the orange exhibit in general, were that the size was quite satisfactory; second, that the fruit was well colored, clean, and as a rule, free from insects—we saw but one exhibit infested with red scale, and from the same grower who showed infested fruit last year. There may have been more in the same fix, but we did not notice them. The appearance of smut was confined to a trace here and there. As for the growers entitled to distinction for showing such good fruit, we must refer to the premium list which we print on another page. The awards were so many that probably all the leading exhibitors were included, though their comparative rank might in some cases be questioned.

There are several ways of determining the quality of an orange. The sight and taste are senses generally employed, and they are quite accurate; but their decisions are open to discussion and may sometimes be weakened by claims of favoritism or prejudice. The results of chemical analysis can be relied upon to determine beyond question some things desirable to know. Therefore, rather than attempt to give comments on the quality of the fruit shown, which might be open to discussion, we take a few points from an address made during the fair by Professor E. W. Hilgard, of the State University:

He said he had an opportunity last year of testing some of the citrus fruit of Northern California after it had been exhibited at the citrus fairs, both in this city and San Francisco. The experiments could not be called a fair test, as the fruit had not been plucked with that purpose in view, yet notwithstanding these facts, the result was highly gratifying. The citrus products of this section are good. Some of the best oranges you have here are accidental seedlings—fruit without a name. Out of 18 samples the average of acids was within .02 of a per cent of those of Riverside. That is not a bad showing. He could not say so much about the sugar, for it was too near the time when the orange loses its sugar. One sample, however, came within one-quarter of one per cent as much as the Riverside, which is an excellent showing. This was a Butte county seedling. It was very near the maximum of the Riverside orange. You must understand that there are climatic differences between this section and that of Riverside. You must not select the best variety from Riverside, and expect that it will do as well here as there. Some varieties of grapes do better in the south than here. Others produce and ripen to perfection here that are a failure in the south. The best varieties of pears, apples and grapes grown in the two sections are not the same in either. A good fruit in the north may prove worthless in the south, and vice versa. Why should the orange be an exception? The Navels grown in Northern California, an Australian variety, are very different from those grown at Riverside. They have more acid and less sugar. He regretted that the samples sent him were mostly unaccompanied with the name of grower and locality where produced.

In addition to the foregoing we are allowed to make allusion to the full statement of the chemical examination of Northern California citrus fruits, which will appear in the forthcoming report of the College of Agriculture for 1886. A table will be given, showing the analyses of 25 specimens from several different counties. The best results are shown by seedling fruits and unnamed varieties—the maximum sugar with the least acid being shown by a sample from Porterville, Tulare county.

Next to these are the Mediterranean Sweet from Lakeport and the large St. Michael from Oroville; in fact, the Oroville specimens are noteworthy for their low acid and high sugar in three out of four cases. Looking over the column of acid percentages in oranges, there is no reason to fear comparison with Southern California at large, the average of 17 determinations being 1.10, almost the identical figure obtained in averaging the data obtained from analyses of southern oranges. In lemons the average acid is somewhat low, although in one case the goal of seven per cent is very nearly reached. It is to be hoped that during the coming season a fuller examination of the citrus fruits of California will be made under more favorable conditions, because the fruit analyzed last year had been exposed at two fairs before being sent to the University.

Prof. Hilgard has requested citrus fruit-growers in all parts of the State to send in this year for examination and analysis, at the University Experiment Station, at Berkeley, samples of ripe oranges and lemons. It is requested that each variety be sent by express as soon as it matures, not less than four specimens of each variety, to secure good averages, and the specimens to be accompanied by statements of soil, age of tree, treatment, etc. The results will be announced to the senders and published in bulletin form for general information. California citrus fruits are already shown to be of a quality which will stand thorough examination, even though in many cases the specimens were not of the best sorts nor in the best condition. A fuller inquiry may be expected to yield even better results.

The following awards were made for orange exhibits:

#### ORANGES—BEST INDIVIDUAL EXHIBITS.

First—A. Freitas, Newcastle, Garland range.  
Second—C. M. Silva & Son, Newcastle, spring wagon.  
Third—P. Norburg, Penryn, road cart.  
Fourth—A. Moger, Newcastle, mirror.  
Fifth—Dr. J. M. Frey, Newcastle, bedroom set.  
Sixth—D. N. Friesleben, Oroville, vineyard and orchard harrow.  
Seventh—Mrs. J. C. Gray, Oroville, silver wine set.  
Eighth—C. H. Wilcox, Oroville, violin.  
Ninth—W. R. Strong & Co., Orange Hill, bronze clock.  
Tenth—W. J. Wilson, Newcastle, Imperial plow.  
Eleventh—W. J. Pleasants, Vacaville, banjo.  
Twelfth—K. Vogt, Knight's Ferry, dressing case.

Thirteenth—Mrs. M. Karr, Marysville, lamp.  
Fourteenth—Isaac Lea, Florin, toilet set.  
Fifteenth—M. M. Estee, Napa, pickle caster.  
Honorable mention—Dr. McCarty, Santa Clara.

#### BEST TWELVE BUDDED ORANGES GROWN BY ONE PARTY.

First—Hall Bros., Penryn, berry dish.  
Second—L. W. Buck, Vacaville, —  
Third—A. Moger, Newcastle, album.

#### BEST TWELVE SEEDLING ORANGES GROWN BY ONE PERSON.

First—Dr. J. M. Frey, Newcastle, cake dish.  
Second—W. H. Lee, Marysville, —  
Third—C. Martel, Vacaville, —  
Special merit—J. H. Nile, Rough and Ready, Nevada county.

#### CLUSTER OF ORANGES AND TREES.

First—George Peters, Oroville, six orange trees.  
Second—C. H. Wilcox, Oroville, 12 persimmon trees.

Third—J. F. Curtis, Ophir, two Navel orange trees.  
Fourth—W. & R. Cantwell, Oroville, six chestnut trees.

Fifth—W. J. Pleasants, Vacaville, 10 plum trees.

#### BEST EXHIBIT BUDDED ORANGES.

First—A. Moger, Newcastle, gold medal.  
Second—P. Norburg, Penryn, silver medal.

Third—C. H. Wilcox, Oroville, willow chair.

#### BEST EXHIBIT OF SHADDOCKS AND PUMALOS.

First—A. Moger, Newcastle, lamp.  
Second—E. Tucker, Oroville, table-cover.

Third—J. Butler, Florin, album.

#### RAILWAY PREMIUM \$250.

Mrs. M. Karr, Marysville, Yuba county.

#### MERITORIOUS MENTION (NOT COMPETING).

Fine display in cluster, Mrs. S. E. Wriston, Galt. Dr. J. M. Frey, exhibit of St. Michael oranges, claimed to be the "sweetest in the world."

W. Cantlow, Vacaville, large tree containing some 500 oranges; very attractive. T. C. May, Sacramento, large display.

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The showing of lemons and limes gives the fullest testimony of the mildness of the climate, as these fruits are tenderer than the orange.

There were 105 entries of lemons and five of limes. The lemons were sent from widely distant places. They were, for the most part, seedlings from the imported Sicily fruit, and, as a rule, rather large and coarse; but the introduction of the better-budded varieties, or the selection of the best of the seedlings, will be the works of the future. The list of awards mentions the leading exhibitors:

#### LEMONS—BEST INDIVIDUAL EXHIBIT.

First—C. H. Wilcox, Oroville, gold medal.

Second—Geo. T. Rich, Florin, Sacramento Co., silver medal.

Third—Mrs. M. Karr, Marysville, saddle and bridle.

#### LIMES—BEST INDIVIDUAL EXHIBIT.

First—C. Yaco, Santa Clara, special premium.

Second—Frank Swift, Sacramento, —.

Special premiums for the most tasteful exhibit of fine citrus fruits by one individual, the prize in each case being a lot of orange trees, were awarded as follows:

First Prize—A. Moger, Newcastle.

Second—Miss Fannie Friesleben, Oroville.

Third—Mrs. Jas. C. Gray, Oroville.

The olive display was by far the best and most comprehensive ever made in this State, and shows how strong a hold this fruit is taking upon popular attention. The exhibit of John Rock, which won the first prize, gave visitors an opportunity of seeing the fruit of newly-imported varieties, and demonstrated the fact that there is as much to be gained in selecting choice varieties of the olive as of other fruits. There were olives shown by 52 different growers—some who have trees just in bearing; others, like Isaac Lea, of Florin, are already finding the production for the market a profitable industry. The olives from the foothill counties were splendid, and show that the prophetic minds who prescribed this fruit for such situations spoke wisely. There were but three samples of olive oil shown. The following awards were made:

Olives—Best individual exhibit, first premium, John Rock, San Jose, a mirror; second premium, P. W. Butler, Penryn, a table cover; third premium, L. A. Gould, Auburn, a rug. John Rock's display also received special meritorious mention for the large variety of olives it embraced.

Olive Oil—Best individual exhibit, A. F. Redfield, Smartsville, first premium, gold medal; second premium, J. M. Frey, Newcastle, silver medal; third prize, Joseph Gardella, Oroville, a clock.

The next display, like that of olives, was undoubtedly the best ever made in this State. The chief articles were, of course, English walnuts and almonds, but the Italian and Eastern chestnuts, pecans, filberts, etc., gave the visitor an intimation that we can carry a very large nut list. There were in all 116 different lots of nuts shown, and the exhibits made by the gentlemen who secured the premiums were splendid. We were also much pleased with the Princess and Twin almonds shown by Senator Routier, of Sacramento—seedlings originating on his place. The following awards were made:

Best general collection of nuts—Felix Gillet, Nevada City, silver service set.

Almonds—First, A. T. Hatch, Suisun, gold medal; second, W. H. Williamson, Routier's, Sacramento county, silver medal.

Walnuts—First, W. B. West, Stockton, gold medal; second, J. Shinn, Niles, silver medal.

Special mention—J. S. Phipps, Yuba City, walnuts; J. T. Vohle, Nicolaus, almonds; Dr. J. M. Frey, Newcastle, almonds, walnuts and Italian chestnuts; C. M. Silva & Son, Newcastle, almonds, walnuts and Italian chestnuts; J. F. Wolfkill, Solano, pecans and walnuts; Joseph Routier, Sacramento county, almonds, El Dorado county almonds, walnuts and Italian chestnuts; Charles Camden, Tower House, Shasta county, Japanese walnuts, English walnuts and American walnuts. Meritorious mention (not competing): Dr. Obed Harvey, Galt, display of walnuts, almonds and other nuts. W. B. West, Stockton, exhibit of large walnuts; trees imported from France in 1874, and bearing for last six years. Very fine and large. A. T. Hatch, Suisun, deserves special mention for large display of almonds, some 191 varieties being shown in neat style.

The raisin exhibit was also notably fine, and included products from 57 different parties, chiefly growers, though the largest display was made by a dealer and the highest award was made to it. It included a newly devised mold for arranging a facing of raisins on the boxes, which produce a very attractive appearance. The exhibits of Jackson Brothers and R. B. Blowers, of Yolo county, were also notably fine in quality and packing style. For mention of other valuable displays we must refer to the following awards:

Raisins—Best individual exhibit of raisins by dealer or grower—First premium to Geo. W. Meade & Co., gold medal; second premium to Jackson Bros., Woodland, silver medal; third, to W. T. Coleman & Co., San Francisco, a vineyard plow. For best exhibit of raisins grown by one party—First premium to W. M. Foster, Lincoln, Placer county, a Westmore range; second, to R. B. Blowers, Woodland, raisin press; third prize, to Thomas O. Hardy, Placerville, a vineyard cultivator. Meritorious mention (not competing), A. Lusk & Co., S. F., display of raisins.

The display of sun-dried and evaporated fruits included fewer producers than might have been expected, and yet the entries reached quite a respectable number. There were 23 ex-

(Concluded on page 541).



## HOLIDAY \* READING.

## The Angels' Song.

It came upon the midnight clear,  
That glorious song of old,  
From angels bending near the earth  
To touch their harps of gold:  
"Peace to the earth, good will to men  
From Heaven's all-gracious king!"  
The world in solemn stillness lay  
To hear the angels sing.

Still through the cloven skies they come  
With peaceful wings unfurled;  
And still their heavenly music floats  
O'er all the weary world;  
Above its sad and lowly plains  
They bend on lowly wings,  
And ever o'er its Babel sounds  
The blessed angels sing.

Yet with the woes of sin and strife  
The world has suffered long;  
Beneath the angel-strain have rolled  
Two thousand years of wrong;  
And man at war with man hears not  
The love song which they bring;  
Oh! hush the noise, ye men of strife,  
And hear the angels sing.

And ye, beneath life's crushing load,  
Whose forms are bending low;  
Who toil along the climbing way  
With painful steps and slow—  
Look now! for glad and golden hours  
Come swiftly on the wing;  
Oh! rest beside the weary road,  
And hear the angels sing.

—Edmund H. Sears.

## After Clouds—Sunshine.

## A Christmas Story of the High Sierras.

(Written for the RURAL PRESS by MALLIE STAFFORD.)

It was somewhere along in the fifties, away up among the wildest heights of the proud Sierras, no matter just where or when, mid-winter and nearing the Christmas holidays. The place was one of the wildest that could well be imagined. As far as the vision extended, it roved over billows of mountain ranges, with here and there lofty peaks, towering in grandeur above their fellows, as though Nature, in her ambitious moods, was striving to excel her own bold achievements. These—rock-crowned, treeless, bald and cloud-wrapped—towered far into the azure spaces and looked frowningly down on the billowy mountain ranges, that rose and fell in silvery sheen far and wide, for the whole region was covered with a dense mantle of snow. Away below were winding canyons, the beds of once flowing rivers, but now choked and imprisoned by depth of snow and drifting avalanche. Here under the shelter of overhanging rocks and in gloomy caverns the stealthy grizzly and the mountain lion sought refuge and made their winter quarters. Along the ranges, dark forests of stately pines and spruce sent their tall shafts through the snow and aloft into the air, their green boughs drooping beneath the accumulated weight of snow. Not a sound, not a breeze, not a living thing, disturbed the awful silence of the sublime and desolate region. It was a dead world! and over it all the Unseen Hand had thrown a winding sheet of purest white. One would not have dreamed that there was a living soul within a hundred miles.

Midway up the ridge, and spanning a grim chasm, a long flume like the skeleton of a serpent wound its way. Above, on either side, hovered a gloomy peak, and below were the depths of a dark canyon. Noiselessly and without a word two men suddenly made their appearance around the curve of the flume. The men were clad in rubber suits and each carried a shovel on his shoulder, by which it was evident that as the storm had somewhat abated they were inspecting the ditch of which the flume was a part in order to repair damages, if any there might be. It was a mining ditch conveying water from Truckee lake to numerous mining camps miles beyond.

The men were both young and in the prime of early manhood. The foremost, Jack Langdon, was of medium stature, but muscular and armed with nerves of steel. A mass of dark stubborn hair indicative of endurance cropped out from under his rubber hat, and his keen, dark eye glanced anon at the towering mass of snow above and then at the dangerous footing on the flume. His companion, Halstead Graeme, was no less sinewy, but was taller, finely formed and possessed that reserve of vital force that is only thoroughly called out in cases of emergency. He was fair visaged, with piercing gray eyes and brown hair shining and strong. They were now approaching the end of the flume, where it was only a few feet to the ground.

"I say, Hal," observed Jack, "do you ever think about the danger from the snow? Look at that body of snow above us." His companion only whistled, but made no reply; but suddenly they both stopped as if riveted to the spot. There was a rushing sound, and they saw at a glance what seemed to be the whole top of the snow-crested mountain descending.

"Good heaven, Jack, it's coming—save yourself!" In a moment Hal had sprung under the

flume, hanging on to its strong supports, while Jack jumped into it and "ducked under." As quick as a flash the awful avalanche was upon them, sweeping everything but the flume before it, snapping off trees and carrying rocks and brush in one mad rush to the bottom of the canyon. To Jack, who lay snug and safe in the bottom of the flume, there was a period of total darkness, with a grinding, rushing sound, as the heavy mass of snow passed under and over him. It was a moment of fearful anxiety, for what earthly power could long withstand the pressure of such force? At last it ceased, and, venturing to lift his head up, he looked around. His first thought was of Hal. "Hal!" he called—no answer. Then, assuring himself that the snow had all passed off from above, he raised himself and ballooned loudly. Nothing but the echo of his own voice broke the silence—a silence rendered tenfold more deep, coupled with the dreadful thought of the probable fate of his companion. Could it be that his companion and friend, who but a brief moment before had stood beside him in the glow of his youth and the pride of his strength, had been swept away into the depths of the canyon, and was buried alive under the mass of snow, or jammed between the rocks, now lay a mangled corpse?

The thought was terrible. He jumped from the ground and rapidly made his way toward the canyon. Reaching a ledge of rocks that commanded a view of the bottom of the gorge, he thought he discerned a dark object half hidden by rocks and snow. Was it Hal? As fast as possible he made his way to the object, which proved indeed to be the prostrate form of his poor friend—dead! A shiver convulsed the iron frame of Jack as he bent down over the ashen face, vainly looking for some sign of life.

"O Hal!" called Jack in a pitiful voice. Then kneeling down he tore open the rubber coat and vest, and placing his ear on the breast of his comrade, listened attentively. "He breathes," he said joyfully; and reaching in the pocket of his own coat he drew forth a small flask of brandy. As tenderly as a woman he raised the head of the unconscious man and poured a few drops of the liquid between his lips. A moment, and a faint flush came to the ashen cheeks. He breathed a deep sigh, then the gray eyes full of pain opened.

"Are you hurt much?" said Jack anxiously. "Hurt! yes, I'm afraid so. I couldn't hold on. I tried to hold on to the supports, but was carried away by the snow; it wrenched my hands off."

Jack looked at his hands—they were torn and bleeding. "It's not my hands, Jack, that made me faint, it's something worse; my left leg, I'm afraid it's crushed. I was jammed in the rocks and a boulder crushed my leg."

"I hope not," said Jack. And, stooping down, he ripped open the leg of Hal's trousers and examined the injured limb. On raising it, the bones grated together, and a deep groan from the prostrate man caused him to lay it down as gently as possible.

"Well," said Jack with assumed cheeriness, "take another sip of brandy and we'll see what can be done. There's one thing certain, we must get back to the cabin; we can't camp here. Do you think you can travel? It will be a tough job, but we'll have to try it."

Hal smiled faintly at the idea of traveling on one leg.

"Do you think it would be any use to go to old man Easton's and get him to come and help us?"

"No, Hal, my boy, that would not do. I could not get there without snowshoes, and I doubt if the old man could help much in such a strait as this, even if he could get here. It is fully three miles to Easton's and I could not leave you here alone. I think I can rig you up with crutches in a short time, and with my help you can get to the mouth of the canyon. Once into the old wagon road, by beating and shoveling a path for you we can reach home before dark."

It was indeed a gloomy outlook for the young men in a deep canyon, the roads covered with snow and one of them disabled with a broken leg. Fortunately there was an old sled road that had been used for hauling mining timbers out of the canyon.

Without another word, Jack drew from his pocket a large clasp-knife, and, selecting two forked sticks of the proper length for crutches, soon had a rude pair fashioned. He then found a piece of split wood in the snow that had evidently been swept down from the flume. Taking from his pocket a bunch of stout twine, and splitting the wood in two pieces for splints, he gently and tenderly bound up the injured limb, bandaging it with his large red handkerchief. It was done almost as skillfully as a physician could have done under the circumstances and with the rude materials at hand. At the conclusion, Hal remarked:

"Well, old pard, you're a man of resources. I'd like to know what I'd do in this strait without you."

"Never mind; we will do the best we can," was the cheery rejoinder. "The next thing is to get you up."

With the combined efforts of the two, Hal was soon sitting on a rock. Before taking up their line of march, Jack picked up the shovel he had dropped on reaching Hal, and began shoveling and clearing the old trail. This he continued to do until half-way out of the canyon. He then went back and supported his comrade.

It was soon found that the injured limb, which hung limp and useless, would have to be tied up to keep it from dragging. A long scarf

in Hal's coat-pocket served the purpose, and once more they resumed their painful journey. A few rods brought them to the mouth of the canyon and into the wagon road, which wound up and still up until the snow-covered trail was lost to view.

A long mile it was to the cabin, but while Hal rested Jack bent himself bravely to the task of shoveling the heavy snow and leveling it for his suffering friend's progress.

It was now the middle of the afternoon, and both felt the want of nourishment; but the subject was not mentioned—the grand idea was to get to the cabin. At last Jack shouted: "She's in sight, old fellow! Cheer up! we'll soon be there."

It was now growing dusk, as they saw mid-way up the ridge the dark outline of the cabin pointed against the snowy background of the mountains.

As is often the case in those snowy regions, the weather was not intensely cold, and their exertions kept them warm. The cabin was located at the extreme end of a straggling and now deserted mining camp, whose inhabitants, with the exception of our two heroes, had fled before the terrors of king winter, intending to return with the advent of spring. The silent and deserted little camp was to the hearts of the suffering and wearied miners a beacon light, a haven of rest.

The moon was up and flooding with her silvery beams the lonesome snowy ranges before our two travelers reached their long-sought-for haven. They were the fortunate owners of rich mining claims at the camp, the quartz mill and its machinery, and they were employed by the ditch company to keep that section of it in order during the winter. These reasons might not have been the only ones that bound at least one of them to this unfriendly region.

Some two miles southward, in a sheltered vale, Little Glen valley was the home of the Eastons, who, beside the two miners, were the only living beings within a radius of 20 miles. For years the family had owned and occupied the beautiful little vale, combining stock-raising with mining, and, if reports were true, success had crowned their efforts, until a large fortune in stock, in mining claims and bank accounts, had accumulated. A year previous the wife and mother had died, leaving her husband and two lovely daughters—Grace and Ella—to grieve over her loss.

Halstead Graeme had met on more than one occasion the Easton girls, and on more than one occasion he had found an excuse to visit their attractive and picturesque home. Now, as Jack tenderly and kindly assisted him to his bed, and made everything as comfortable as possible, he thought, with an added pang, of Grace Easton and the sweet hope he had once dared to entertain of her regard, of his misfortune, and that in all probability he would be a cripple for life.

During this time Jack was busying himself with preparations for the much-needed meal. There were some cold biscuits, some fried ham, which, with oysters, preserves and butter and a cup of tea, made a hasty meal for weariness and hunger; but Hal could eat but little; the pain was intense, and the current of his thoughts agonizing.

"I'm sorry to see you can't eat, old fellow," was Jack's anxious remark.

"No pard, I can't; there's no use trying. I'm afraid my leg is hurt more seriously than we at first thought. It feels like it is ground to atoms."

"Oh, not so bad as that, I hope," said his friend. "Is the pain very severe?"

"The pain is terrible, but it is as nothing to the thought of losing my leg."

"Well, cheer up, and let us not think of anything so bad as that. I'll go down to Easton's as soon as it's daybreak, and bring the old man up. Perhaps he will know more about such things than we do."

It was a long night to both—Hal, racked with torture, mental and physical, and the noble heart of Jack sorely burdened with the thought of what might be before him. With the first faint streaks of dawn Jack was astir, and partaking of a hasty breakfast, and seeing that his companion was as comfortable as possible, he buckled on his snowshoes, and, grasping his long pole, was soon skimming over the snow toward Glen valley. Two miles are easily glided over with snowshoes on a down grade, and, as he neared the house, a light in the window assured him that the family was astir. To his knock Mr. Easton opened the door.

"Why, good-morning, Mr. Langdon; you're an early riser."

Jack raised a grave face to his host and in a few words told him of the accident.

"Is it possible? I'm very sorry to hear it. Terrible! I'll come up right away. Will you come in?"

"No, thank you; I'll go back," and turning, Jack was soon ascending the hill.

When Mr. Easton entered the room, Grace was not present, but the younger daughter, a sunny-haired blonde, looked inquiringly into her father's face. To this look he gave a brief explanation of their neighbor's call, the accident, and that his presence was desired, and telling her to explain to Grace and to get together bandages, camphor and whatever else they had which might be necessary and useful. Ella immediately sought out her sister, who was in an adjoining room, and with pity on her face exclaimed, "O Grace! such a terrible accident! Halstead Graeme was taken down in an avalanche yes-

terday and badly injured—his leg is broken. Papa is going up immediately."

Grace listened with blanched face, and murmured: "Poor fellow! It can't be possible! What can we do for him?"

"Papa says," continued Ella, "that they may need bandages and medicines—whatever we have that might ease pain."

"Oh, yes," said Grace, "there is a bottle of morphine in the medicine chest."

In a few moments everything had been thought of and collected in a little parcel which might be of assistance to the unfortunate miners, and Mr. Easton set out on his journey. On arriving at the cabin, Mr. Easton and Jack fashioned some smoother and more comfortable splints, and removing the old ones they thoroughly examined the limb. It was already terribly swollen, and, as well as they could ascertain, below the knee was as Hal had thought it, "crushed to atoms." Mr. Easton gravely shook his head and Jack's usually cheery face was indicative of the serious thoughts of his heart. Hal was not slow to read their opinion. "It's a bad case?" he said, inquiringly.

"I shall not attempt to deceive you," said Mr. Easton, "but a few days will decide it. As far as I am able to ascertain, I'm afraid it can never knit together."

"Which means that I will have to lose my limb," said Hal, in as brave a tone as he could command.

"In any event," said Jack, "we'll do the best we can for you. If we could only get a doctor."

But each knew that that would be impossible.

On the following day it was decided that the girls should accompany their father on his visit to the sufferer. They were quite used to snowshoe travel, and had it not been for the sad accident to their friend they would have deemed the journey a rare holiday.

The warm sunlight streamed in at the uncurtained window of the cabin, and Mr. Easton, who had preceded the girls, found Hal even in so short a time looking the ghost of his former self. A pained look passed over his face as the ladies entered, and Grace gently took his proffered hand. She murmured a few commonplace words of sympathy which sounded to her full and feeling heart as cold and comfortless, but it brought a smile to his face and the specter of the old hope that had once held empire there. There was not so much in her words as in her manner, and the gentle pressure of her hand that bade him think of the hope of other days. A small bouquet of violets and pinks from Grace's window garden was placed by her hands in a glass of water on the little table by the side of the patient, and long after the departure of their guests, and for days, it continued to speak of her presence by its shy beauty and sweet perfume.

During Mr. Easton's visit on the day following it was decided to again examine the limb, which was immediately done. It was with heavy hearts that they were convinced that unmistakable symptoms of the most serious and dangerous character had made their appearance, and that to save the life of their companion the limb should be taken off below the knee, and, as Hal bravely remarked, "the sooner the better."

It was to Jack, the man of resources and nerves of steel, that they both looked in this case of dire extremity. His grave face told that he felt the terrible responsibility, and that he was not the man to flinch in such an emergency. An old book on surgery found in one of the cabins had conveyed some useful hints, and he steered his nerves for the critical task before him.

We will now draw a veil over the intervening space of time until we find Mr. Easton approaching his home on the evening of this eventful day. Though there was still a grave look on his face, it seemed to have been divested of the burden it bore a few hours before. Ella, seeing her father from the window, ran down the well-beaten path to meet him. In answer to her inquiries in regard to the patient, he told her in a few brief sentences of the necessity of amputation—that it had been done, adding, "He's a brave fellow—he stood it like a major; and Jack is a man of resources—as good as a regular surgeon."

Ella's sweet face grew suddenly grave as the news shocked her sensitive heart. "Oh, is it possible? It is too bad," and turning, she hastily sought her sister.

"O Grace! It's too bad. Papa has come home, and—and—they had to amputate the limb." There were tears in Ella's blue eyes, but Grace listened with blanched face. "Oh, is it really so?" and dropping into a chair, she covered her face with her apron and sobbed convulsively.

"Oh, don't, Grace, dear," pleaded the younger sister. "I didn't know you cared so."

"Oh, yes I do care; he was so noble and so brave, and so—so handsome."

"Well, never mind; it is all over now, and papa thinks he will get along finely."

It was a few days after this that the Easton ladies, in company with their father, again visited their neighbors. This time they found the invalid sitting propped up with pillows, and a faint flush overspread his features as they entered the room, and Grace gently inquired about his health. She could not restrain the tears in her eyes. Though there was little said, each felt what the other was thinking of. The power of speech is generally denied people on such occasions as this, and Grace only looked the pity and sympathy her gentle heart refused to utter. Her presence, however, seemed to



confer a world of comfort to the invalid, and before they left he had resumed much of his old cheerful air.

Before leaving, Mr. Easton, in his kindly voice, remarked: "You must get well fast, my boy. It is now nearing the Christmas holidays, and we had contemplated a social dinner, and hoped to have you and Jack spend the day with us."

Hal smiled faintly and said: "You're very kind, and though I will have to defer my visit until a later period, Jack can go."

"Not so," broke in Jack; "let me arrange it. If the ladies and you will honor us with your company I will do the best I can for a dinner, for you see it is impossible for my pard to go, and I could not leave him; and as there are so few of us, I see no reason why we should not celebrate Christmas together, even if it is in a miner's cabin."

"I'm afraid it will be too much trouble, Mr. Langdon," said thoughtful Grace, to which he gallantly made reply: "It will afford me the greatest pleasure;" and so it was finally agreed.

"I think," said Hal, "Jack will be equal to the emergency. I have never found him to fail in anything yet."

After their guests' departure, while Jack was busying himself with the evening meal, Hal lay quietly thinking. He realized painfully that his little world was overshadowed by a great and lasting misfortune—he was a cripple for life—not so much that—but Grace, could she ever care for him now? Yet reverently his true and honest soul thanked God for his deliverance, and that life at least was spared; and life, he argued, might still be made happy—life with her! Did he still dare think of her, the dark-eyed girl that had won his heart?

After a long silence Jack suddenly called out: "I say, Hal, old fellow, what's the matter? Anything wrong?"

"Nothing, Jack, only a little blue; that's all."

"Tut, now; you must try and cheer up. Is there anything I can do for you?"

"No more than you have done," was the reply. "I owe my life to you, old pard, and appreciate your kindness too; but, but—"

"But what?"

"Well, you know I can't look life in the face the same as I did two weeks ago. My hopes are blasted."

"Then they needn't be," returned Jack. "You'll pull through all right, and as to being a cripple, if that's what you mean, we'll go below and rig you out as good as new, and you know you needn't do another day's work as long as you live. Your interest in the 'Soaring Eagle' alone would sell to-day for a hundred thousand, and I tell you, Hal, I think we had better sell and go below and enjoy life; we've got enough."

"Yes," said Hal, faintly, "if one only had some one to enjoy life with him." This remark was lost on the inattentive ears of Jack, who was busy piling up pine logs in the wide fireplace.

Some days passed, during which Jack, the man of resources, was busy with his preparations for Christmas. His ample larder contained all the necessities and many of the luxuries of life, for the miners had laid in a generous supply for the long winter's use; but there were some things it did not contain—it could not boast of a big fat roast turkey, without which, Jack thought ruefully, what was a Christmas dinner? However, there was a plentiful supply of canned dainties, and Hal at least felt that his friend, as he before expressed it, was equal to the emergency.

There never dawned a brighter Christmas morning. It was as if Nature had swept aside her gloomy veil, and her fair, white face shone radiantly in the slanting rays of the rising sun.

"For the mists had risen in splendor from the beauty of the hills," and far and wide the long, lonesome ranges of mountains rose and fell, sparkling and glittering like a world of diamonds.

With many a merry jest and laugh at the oddity of celebrating Christmas in a miner's cabin, the Eastons—father and daughters—"mounted" their snowshoes, and, pole in hand, started on their journey. Their hearts were in keeping with the beauty of the morning, for they felt the electrifying thrill of the beautiful sunshine, and something more kept ringing in Grace's heart. What it was we will leave the reader to divine.

In the cabin and its inmates there had been some pleasant changes. Jack had brightened up things wonderfully, and they found Hal sitting in the large easy-chair, it being the first day he had been able to be up. Though pale and somewhat thinner than formerly, there was little difference in his appearance. He had assumed his old cheerful air, being determined in this one day at least to forget his misfortune. He greeted his visitors cordially, and his eyes lighted with pleasure as Grace took his outstretched hand and expressed the pleasure she felt in seeing him looking so well.

Jack had prepared a sumptuous repast for his honored guests, and a quiet happiness pervaded the little party. Toasts and jests and merry laughter resounded through the little cottage where late had hung a pall of gloom. Dinner being over, Mr. Easton and Jack retired to another apartment to take a smoke, after the usual miner fashion. A few moments later Ella also left the room. There was a moment's pause, after which Hal drew from his pocket a heavy purse, and emptying the contents, which proved to be rich and valuable specimens of

quartz and gold, on the table, remarked: "It's the custom to make presents on Christmas, and Miss Easton—Grace I mean—I'd like you to accept one of these; take your choice."

"Oh, you're too generous. What beautiful specimens!" She ran her little timid hand over them admiringly, and as she did so he eagerly grasped it.

"I had hoped," he said in a low whisper, "to one day ask this of you, but of late I have tried to banish the hope, not daring to ask you to burden your life with what I now feel I am—a mere wreck."

"Oh, don't—don't speak of it that way," she said. "Do you think I could esteem you less for this misfortune?"

There was something in her blushing face that came like a new revelation to him—something in her manner that resurrected the old hope—and he eagerly said, "Dare I indeed hope?"

A slight pressure of the hand which he still retained was the only answer.

Later, when Ella entered, she found two rosy faces bending over the specimens.

"Miss Ella," said Hal, "will you accept one of these specimens for a Christmas present? This is the one you selected, isn't it, Miss Easton?" As he said this he placed in Grace's hand the largest and finest one.

"Since you wish it, thank you! I will keep it as a souvenir in memory of to-day."

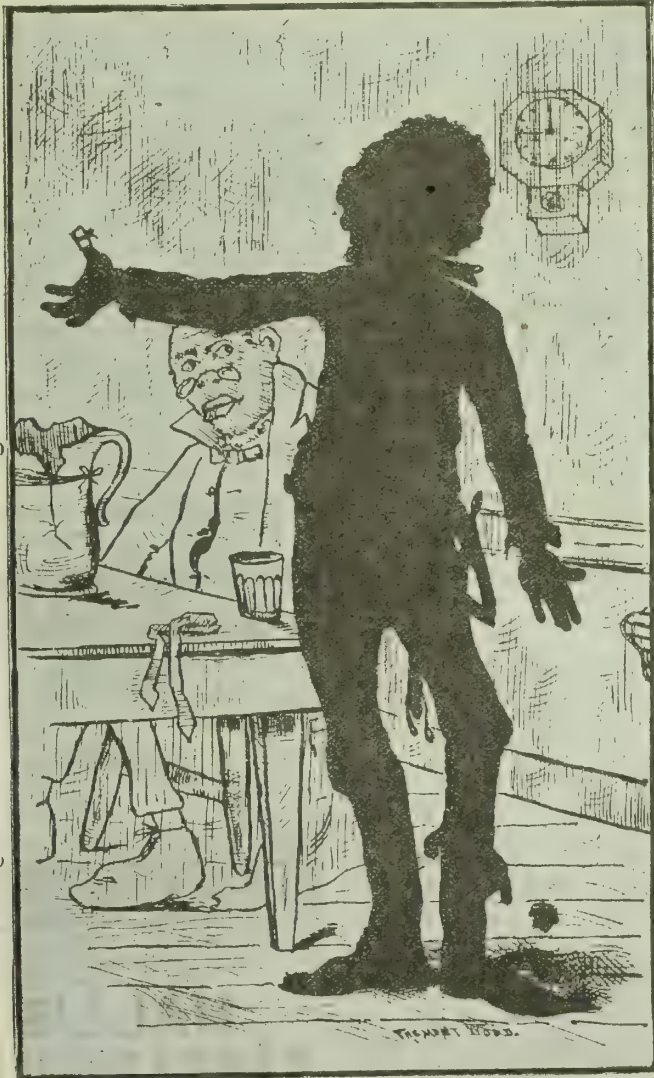
fore, earned the enviable title of "a man of resources." He is content and happy with his friends.

Not far in the same city resides Mr. Easton and his daughter Ella. The same happy party every summer visits the high Sierras, and Little Glen valley is made to echo again to the sound of their voices. The old cabin is not occupied, though the village is now a thriving mining town, with several busy mills crunching quartz day and night. To each of our friends there is something too sacred about the cabin and its wide old fireplace to let it go into other hands. It was there they spent a Christmas whose memory has grown hallowed with the years; where, after much suffering, clouds and gloom, the mists rolled away in splendor and then dawned the brightness of many long years of happiness.

Arcadian Hights, Napa Co., Cal.

### The Lime-Kiln Club.

"I desiah to denounce to dis assemblage," said Brother Gardner as the meeting opened, "dat the Hon. Skyfustus Billington, of New Orleans, am in de aunty-room an' am waitin' to address us on de subject of 'Riches vs. Happiness.' De Hon. Skyfustus has addressed us



LIME-KILN CLUB—"MY FRENS, WHAT AM RICHES?"

His own heart said: "I will keep something, too, in memory of to-day." And Christmas in the miner's cabin was a merry and pleasant one, for "the mists had risen in splendor," at least to two happy hearts.

When spring advanced there were some notable transfers of mining property in that region. The "Soaring Eagle" exchanged hands for a sum almost fabulous, and one bright morning a carriage-load of happy people left the high Sierras bound for the genial climate of the lower valleys. The party consisted of an elderly gentleman, two young ladies and two young gentlemen.

Some weeks later we recognize the same familiar faces; there is the glow of happiness on each. The gentlemen are in holiday costume, and the ladies wear "silk attire," and we hear it whispered that an interesting ceremony has just been performed; and, reader, though you and I are unbidden guests, we may surmise what it is.

At the B-street church, in the beautiful city of S., on any fair Sunday, among other devotees, one's attention is instinctively attracted to a distinguished looking couple. The gentleman is fine looking—tall, fair and grand in appearance; the lady is dark-haired, with deep blue eyes and a rich natural color in her cheeks—she has that sweetness of manner that betokens gentle blood. Beside the gentleman's noble appearance there is a peculiarity in his walk which causes many to turn and look twice and inquire who they are, for they have only lately purchased the fine residence and spacious grounds in the suburbs. Under their hospitable roof resides an old friend, who, years be-

fore, an' it am needless to 'splain to you dat he knows de bizness of oratory as well as a hoss doctor knows what ails a sick mule. He am rich in wisdom, 'sperienced in philosophy, an' has trabbled mo' miles on freight trains dan any odder orator in de world. Doorin' his address I desire de silentest quietness. Any pusson found guilty of frowning shucks around will be sot down on wid terrible airmestness befo' de lodge closes. De Receptionshun Committee will now escort de gem'lan in."

The committee left the hall for that purpose, and soon reappeared in company with the visitor. While he was taking a drink of water and removing his necktie, collar and suspenders the brethren had a pretty good look at him. He sized up two stories and a basement, about 45 years old, knees rather out of true, feet which wouldn't rattle around any in a pair of No. 12s, and a mouth built on purpose for pumpkin pie. He bowed right and left to old acquaintances, ascended the platform with a skip, and at once began: "My frens, what am riches? You can't tell me. I see by de blank 'speshuns on your faces dat you can't. Riches, my frens, consists in being rich. If you am rich you ain't poor. If you am poor you ain't rich. Dat's bin my 'sperience fur de last fifty y'ars, an' while it has cost me a good deal of money I am willin' to gin it to you fur nuffin." [Suppressed excitement over getting something for nothing.] We hev several men in dis kentry worth more'n \$20,000. Dey wallow in riches, but what about deir happiness? Dar must be some consolashun in bein' able to walk into a grocery an' tell the grocer to send up fifty pounds of bakin' powder an' a millyon clothes-

pins, but does dat rich mogul sleep any sounder dat night den de man who has drank sixteen-cent tea fur supper? Of co'se he doan't! Like 'buff he dreams of dem werry millyon clothespins, an' in his dreams he am a towel on a clothesline an' ebry pin am tryin' to stick him fast." [Grunts of satisfaction all over the hall.]

"My frens," continued the speaker, as he began to warm at his work, "de rich man walks on welwet ca'pets, an' he sots down on stuffed cheers, an' he has Saratoga 'taters ebry meal. He jist rolls in ham an' eggs, an' he walks all ober fricasseeed chicken. De poo' man walks on a bar' floo', sots on a hard cheer, an' his taters am biled wid de hides on. Yet who am de happiest? You will say de rich man, of co'se, dat's whar' yer toes turn in. When night comes de poo' man has no fear o' burglars; de noosepapers hain't gwine ter pitch inter him in de mawnin'; his wife hain't gwine to 'lope off wid anybody; his son am not gwine ter be 'spelled from college. He jist sits dar an' eats snow apples an' popco'n, an' contentment drips all ober him." [Sensation, during which Elder Toots became excited and yelled "fire!" at the top of his voice.]

"De rich man w'ars boardcloth!" continued the orator after getting away with another drink, "an' he rides in his keeridge, an' he goes to de opera. You envy him, but what poo' fules you am! All de time he am doin' dis he am 'spectin' dat de small-pox will break out in his fam'ly an' take ebry one of 'em off. De poo' man goes afoot, w'ars plain woolen, an' he doan' know what de inside of an opera house looks like. As a reward he nebber has de small-pox nor diptheria." [Chuckles of satisfaction, during which a raw potato hit Samuel Shin in the neck.]

"On ebry hand you h'ar de 'spreshun: 'Poo' but honest.' Nobody eber says: 'Rich but honest.' It is only poo' folkses who lib from hand to mouth who am honest. Ebry honest sentiment in de human breast teaches us to be poo'. When your ole woman, dressed in kaliker an' w'arin' her last summer's hat, sees a rich lady sailin' past her, harnessed up in silks an' diamonds an' sealskin, she may for a moment feel envious. But, my frens, when she comes to refleck dat rich women hev to w'ar shoes one size to small, an' stockings wid stripes all up an' down de legs, and hev dress-makers an' h'ar-dressers an' gin balls an' parties, she feels to pity 'em wid all her noble heart." [Great applause and one hiss, the latter coming from Whalebone Howker, who will get hail Columbia at the next meeting.]

"If I was axed to adwaise a young man," said the orator, as he straightened out his left leg to clear it of a cramp, "I should warn him agin strugglin' fur too much wealth. It stings like an adder an' bites like a serpent. Riches am de cause of jealousies, envy, an' crime of all sorts. Dar can't be no comfort fur de rich man. He am worried about his cloze; his horse runs away; his coachman 'lopes off wid his darter; de bank in which he has got his money am sartin to bust. Arter he has suffered an' suffered, 'long comes death an' takes him away, 'an no sooner am he buried dan his body am stolen by a medical college. [Applause.] All de poo' man has to do am to get in his meat an' taters an' wood fur de winter, buy cloz fur de ole woman an' de chill'en, lay in ten bar'ls of apples an' two of cider, pay up his debts, put a \$50 bill in his west pocket an' proceed to take solid comfort an' happiness. [Cries of "Yum! Yum!"] Sicknes will not come to him—trouble will pass him by, an' he will be nominated fur Alderman in de spring."

"If dar' am any man in dis club who sighs fur riches he am de subjeck of my pity. I warn you in my most solemn tones to quit dat sighing. True happiness am wuth mo' dan all de gold eber dug from de airth."

"Gem'len, I had intended to inlclood de Garden of Paradise in my remarks, an' to bring in de Pyramids, Christopher Columbus an' George Washington, but de hour am late an' I must elongate dis oratory to a prolonged quietus. Wishin' you all possible health an' happiness, I will now determinate my desideratum an' bid you farewell."

How to CURE FEAR.—Fear is a bad habit often formed in childhood, and continued in a chronic form during life. It is to be cured only or mainly by its opposite—courage. M. Richet relates how he had occasion to pass frequently through a forest at night. He entered it boldly; but after a few steps the feeling of fear came on and he felt highly relieved when he saw the clear sky again. Each night he was able to keep up his bold step for a longer and longer distance, until finally the fear was almost overcome. Habit is the only method of removing fear. Workmen in powder mills know they are in constant danger, but have no fear. To educate a child to be brave, the habit of not fearing in darkness and solitude, and so on, must be taught by its parents and guardians. Most of our nurses make cowards of our children, and it would be about as well for them to grow up without this appendage to their lives.

WHAT IS COCAINE?—Most people have read of cocaine as a local anæsthetic in connection with the treatment of General Grant during his last illness. It was not until 1880 that its properties were fully known, although the wild shrub from which the alkaloid was obtained by Nieman, at the date above given, was in use by the Peruvians as an invigorator before and after the Spanish conquest. The shrub grows as an indigenous product in the mountains of Peru and Bolivia, and is also cultivated.



## A Letter and a Telegram.

## A Christmas Story.

"I don't never waste words," said old Mr. Brown, in a hard, driving voice, "and I hain't good at letter writing, but I reckon this will cut."

"It's a pity you wrote it so hard, father," said his young daughter, trembling; "it will cut her to the heart; she didn't ever mean to borrow that \$300, and then cheat you out of it."

"She didn't, eh? Then why ain't the money back in my pocket, safe and sound? It's a year last Christmas since she pestered me about it, and I hain't seen hide nor hair on't yet; if that hain't a clear case of cheating, Fanny, I'd like to know what ye call it."

The girl stopped churning a moment, and wiped a surreptitious tear from her eyelid before she answered:

"Call it nothing, father, but bad luck; when sister Mary borrowed that money to lift the mortgage, she expected to pay it back; but you know as how brother John was taken with the rheumatism, and the overflow came, and the crop was ruined and then she couldn't pay; that's all, and God knows it's enough."

"It wasn't my fault," snapped her father, fiercely, as he pounded on the kitchen table to give vent to his anger. "I never put it in the agreement to allow for overflows and rheumatics and such like, and I never would have lent her the \$300 if it hadn't been for your sniffing and pestering. And now ye hear, gal, not another dime of my earnings shall they ever smell, and I'll never forgive—"

The girl sprang up from the churn, crying, "No, father, don't say it—don't say it, father; you'll be sorry some day when it's too late; besides, you're a church member, you know."

"You're right about that," said Mr. Brown, perversely. "I'm a church member, and don't owe nary a person a red cent, and the Bible says, an eye for an eye and a tooth for a tooth, and I'm going to have it."

He pounded the table again with his fists, after a fashion he had of wanting to pound something or somebody when he felt particularly aggressive. But the sound of his voice had scarcely died away when there came a knock at the door and one of those ominous, yellow envelopes marked with the impress of the Western Union Telegraph Company, was handed in. Mr. Brown took it and looked it over in a helpless kind of a fashion before breaking the seal. "How much to pay?" he asked the boy, and passed over to him the change with trembling hand, though it was characteristic of the man that even then, with the knowledge that the telegram must contain terrible news, he was careful to count the dimes as they dropped back into his pocket. Oh, those cruel telegrams! Do the company ever remorsefully count the breaking hearts that are left in the wake of their messengers? Mr. Brown was a hard man, and loved his money-bags over-well, but somewhere beneath the rough outward crust there was an abiding affection for his children that needed something like the stirring of the soil around the violet beds to loosen the selfish bonds and give his love a human voice. And when he read these words, "Mary died this evening; come at once," a sudden anguish filled his breast, and silently handing the dispatch to Fanny, he walked from the kitchen and shut himself up in his own room where years before death had made sundry visits. He did not cry out or fall, or make any sign that he was grief-stricken, but he was hurt to the soul, and a great remorse made him sick and faint. He had never put it in the agreement about sickness, overflows, and bad crops, as he had just said; neither had he "put it" that Mary, in her young, blooming matronhood days, should die—his first born! How could he bear it? and it was all the harder because of the cruel words he had said while she lay dead at home. Did he say he would never forgive her—did he really—really say that? Fanny had tried to stop him, and brought it to his mind that he was a church member and a Christian. As if a father ought to be merely a Christian to his own child. Why hadn't he given her the money? Might have done so five times over and never missed it. And the old man groaned remorsefully as, with these thoughts in his heart, his gaze wandered over the great fields where the cotton would soon be a shimmering, fleecy sea, bringing new treasures to his hoarded gains, and making no hearts happy save his own.

Those few, poor, stunted acres of John's and Mary's. Swamped by the overflow last spring, stock drowned, and John, wading waist deep, fighting with the waters, laid up with the rheumatics.

Suppose he had given them a thousand dollars?

Oh, the sting of remembering evil when it is too late to turn evil into good. And then there was that unkind letter. Did his child read those cruel words with the dying light in her eyes, or would it be left for the stricken husband to be treated to the short, stern homily?

He went back to the kitchen where Fanny sat crying over the telegram. "Look up the house," he said in a hurried way, for fear his voice would falter; "we'll go at once. I'll hitch up while ye get ready." And when they had started on their long journey he quite broke

down in talking over the past and telling Fanny little things here and there that no one would have supposed he would have remembered.

"Mary was always a dutiful daughter," he said, putting into broken sentences the grief and remorse that overwhelmed him; "after her ma died, and she wasn't knee high to a duck, she was like a second parent to the little ones; nursed them through the measles, and when they were well, took it herself, and laid as quiet on the bed for fear of giving trouble as if she were not a child."

He didn't tell her how, when the second Mrs. Brown was installed as mistress, Mary became the drudge and maid-of-all-work, and was nurse to a half-dozen more little Browns, who, like their mother, ruled her with a rod of iron. Nor of Mary's marriage with a sturdy young fellow, who, for the lack of a timely help, and the pressure of a large family, was kept with his nose to the perpetual grindstone. He did not tell how Mary pinched and worked, and sat up till late hours, and struggled to help her family, until in consequence of doctor's bills and babies, and poor crops, John was forced to give a mortgage on his house, when her (the) father might have lifted them out of their poverty. He might even have given them a better house; the oldest inhabitants could not remember when the ugly, ramshackled affair had been built. Some ancient ancestors had put up a couple of rooms, then added on a few more, until, with what patching and propping up, John's inheritance was an offense to the eye. Mr. Brown thought bitterly of all this through the long journey. Too late, too late, seemed written in words of fire on every tree and shrub. At last the house was in sight, a poor, miserable place enough, but now, in the month of June, sweet with climbing roses and honeysuckles that the mistress' hand had trained to the porch.

"Who-a-o, Dandy." The children were in the yard; with a shout they ran to the gate, and as the old horse stopped, somebody rushed down the steps, and with a cry, "Why, father, why, Fanny," Mary in her famous clean calico and apron, and cheeks like roses, with the pleasure and excitement of the visit, was in her father's arms—her father, who held her as he had never done before, and kissed her with the tears running down his cheeks.

"My child," he said presently, "you were dead and are alive again. Thank God."

"Why, father?" questioned Mary again, "what on earth is the matter?" And she looked with a frightened gaze at her sister, vaguely wondering if her father were stricken with some sudden insanity. For answer, Fanny drew out the telegram from her pocket, and gave it to Mary.

"It's all a wonderful mistake," exclaimed the elder woman, glancing it over, and hugging father and sister excitedly again.

"We have a neighbor, Mrs. Mary Harris who died last evening; she has a brother living somewhere near you, and by the way, his name is Brown—Richard Brown—your name, father. They carried you the telegram instead of him. What a pity he won't hear of it, so as to get there to the burying."

And so, between hysterical sobs and smiles, and everybody talking at once, and asking questions that no one dreamed of answering, they went in under the bower of roses and honeysuckle, and presently John hobbled from the field on crutches and the story was told all over again.

And when Mary slipped out into the kitchen to get an early supper, old Mr. Brown followed her there, and she was folded tight in her father's arms again, while the tears streamed down both their faces. It was as if she had been raised from the dead.

"My child," whispered the old man, "I hain't been the best of fathers to ye; I shut my eyes and my heart when I ought to have been the one to help ye; never ye mind about the money; don't ye say one word about it, and we'll knock this old rattletrap down to-morrow, and I'll show ye how to build a house."

And so he did, and a very comfortable house it was, where John did not have to stoop when he went in and out of doors.

And would you believe it? The letter, all the more harsh for being so brief, never did reach its destination. Old Mr. Brown's chirography was of a very inferior sort and the postmaster couldn't puzzle out the address, much as he desired so to do; then the letter was forwarded to the Dead Letter Office at Washington, and in due time was returned to Mr. Brown, who quietly and satisfactorily consigned it to the flames.

## Important to all Who Work

For a living. Write to Hallett & Co., Portland, Maine, and they will send you full information, free, showing you how you can make from \$5 to \$25 and upward a day and live at home, wherever you are located. Some have made over \$50 in a day. Capital not required; you are started free. All ages; both sexes. All is new. Great incomes sure from the start. Fortunes await all workers who begin at once.

**It Should Always be Borne in Mind**  
That time is the only really impartial test of genuine merit, and that according to the universal law of "the survival of the fittest," few sewing machines have withstood this test. Therefore, the only safe thing to do is to buy what time has proven to be the "fittest"—the "DOMESTIC" SEWING MACHINE.

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## THE SYMPTOMS OF LIVER COMPLAINT

Are a bitter or bad taste in mouth, pain in the back, sides or joints, often mistaken for rheumatism; sour stomach, loss of appetite, bowels alternately constive and lax, headache; loss of memory, with a painful sensation of having failed to do something which ought to have been done; debility, low spirits, a thick yellow appearance of the skin and eyes; a dry cough, often mistaken for Consumption.

Sometimes many of these symptoms attend the disease, at others very few; but the Liver, the largest organ in the body, is generally the seat of the disease, and if not regulated in time great suffering, wretchedness and death will ensue.

## The Baltimore Episcopal Methodist:

"Simmons Liver Regulator is acknowledged to have no equal as a liver medicine, containing those Southern roots and herbs which an all-wise Providence has placed in countries where Liver diseases prevail."

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The regular Annual Meeting of the Stockholders of the Grangers' Bank of California, for the election of Directors for the ensuing year, will take place at the office of the Bank, in the city of San Francisco, State of California, on Tuesday, the 11th day of January, 1887, at 1 o'clock p. m. For Grangers' Bank of California.

ALBERT MONTPELLIER,  
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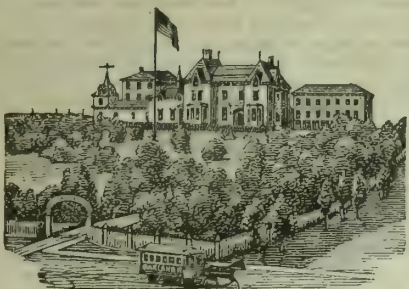
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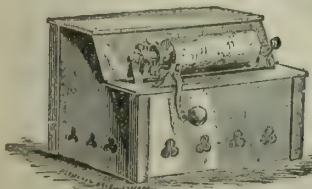
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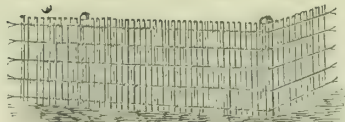
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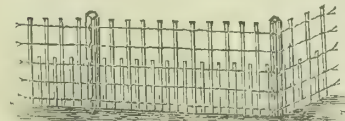
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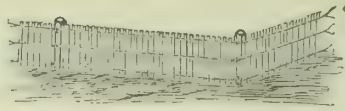
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## GOOD HEALTH.

### Medical Instinct in Animals.

Animals get rid of their parasites by using dust, mud, clay, etc. Those suffering from fever restrict their diet, keep quiet, seek dark, airy places, drink water, and sometimes plunge into it. When a dog has lost his appetite it eats that species of grass known as dog's grass, which acts as an emetic and purgative. Cats also eat grass. Sheep and cows, when ill, seek out certain herbs. An animal suffering from chronic rheumatism always keeps, as far as possible, in the sun. The warrior ants have regularly-organized ambulances.

Latrelle cut the antennae of an ant, and other ants came and covered the wounded part with a transparent fluid secreted in their mouths. If a chimpanzee is wounded, it stops the bleeding by placing its hand on the wound, or dressing it with leaves or grass. When an animal has a wounded leg or arm hanging on, it completes the amputation with its teeth. A dog, on being stung on the muzzle by a viper, was observed to plunge its head repeatedly, for several days, in running water. The animal eventually recovered.

A sporting dog was run over by a carriage. During three weeks in winter it remained lying in a brook, where its food was taken to it. The animal recovered. A terrier hurt its right eye. It remained under a counter, avoided heat and light, although it habitually kept close to the fire. It adopted a general treatment, rest and abstinence from food. The local treatment consisted of licking the upper surface of the paw, which it applied to the wounded eye; again licking the paw when it became dry. Animals suffering from rheumatic fever treat themselves by the continued application of cold water, which M. Delaunay considers to be more certain than of the other methods.

In view of these interesting facts we are, he thinks, forced to admit that hygiene and therapeutics as produced by animals may, in the interest of physiology, be studied with advantage. Many physicians have been observers of animals, their diseases and the methods adopted by them in their instinct to cure themselves, and have availed of the knowledge so brought under their observation in their practice, much to the gain of humanity.

**CURE FOR RATTLESNAKE BITE.**—Eighty years ago Joseph Geer, the first settler at Long Eddy, N. Y., learned the cure for rattlesnake bite from John Johnson, a half-breed Delaware Indian, who, like most Indians, was an inveterate lover of whisky, and for a pint of it would let a rattlesnake bite him and then cure himself with his remedy, which, however, he would not reveal. Geer always kept liquor in his house, and on an occasion when Johnson was recovering from one of his frequent spells of drinking to excess, and was suffering terribly for the want of liquor, succeeded in getting the remedy for a pint of whisky. Geer kept the secret till from old age he was unable to answer the calls of the settlers when any of them or their stock had been bitten, and then told it freely to all. It is as follows: Apply to the wound a poultice one-half each of common salt and indigo, mixed with cold water, and renew every two hours. Eat freely of the leaves or drink often of tea made from them, of a variety of the blue violet (*V. Sagittata*), commonly known as the "arrow-leaved" violet. If the bite be upon the leg or arm, bind the leaves in a circle around it, above and just beyond the swelling. Moisten with cold water as often as they get dry from the fever created by the poison, and renew two or three times a day. During the time this remedy has been in use in Mr. Geer's neighborhood it has effected at least 20 cures upon human beings, a great many more upon beasts, and has never failed with either. Ralph Geer and Moses Thomas, Long Eddy, N. Y., are the names and addresses of individuals now living who have been bitten by rattlesnakes and cured by this remedy without the aid of whisky or anything else.—*Exchange.*

**SUPERFLUOUS HAIRS.**—Superfluous hairs on the face may be removed by electricity. A very fine sharp needle is pierced into the hair follicle, and a current of electricity passed through it for a moment. It burns or cauterizes the root so that it dies, and gives no pain. If the needle does not pierce the right spot, no good is done. It requires a steady hand, a good eye and a little practice to perform the operation skillfully. About 40 hairs can be removed in an hour by an experienced operator.

**PROLONGED CASE OF HYSTERIA.**—A Neapolitan physician has described a case of hysteria, prolonged and aggravated, in which the nails of the fingers and toes were spontaneously shed. This was preceded by tingling, especially in the thumbs and great toes, followed by suppurations in the bed of the nail. The curious affection of the nails is supposed to have been a result of disordered nerve function.

**INDORSED.**—A reader of the RURAL wishes to say, for the benefit of others, that his 20 years' experience in gradually overcoming dyspepsia fully corroborates S. P. Snow's remarks in the last issue of the RURAL on "Art and Science of Eating."

THE OVERLAND MONTHLY for December has an unusually varied table of contents. The number is about twice the usual size. With an increase of reading pages, it also contains a complete history of the early days of the magazine, and its announcements for 1887. In all respects, this issue of the representative magazine of the West is a credit to the well-organized company who now own it, and is a proof of the success of the enterprise. The leading article is Prof. Hilgard's exhaustive study of The Beet Sugar Industry of California. It has both industrial and political bearings, and is one of the most important articles ever published in the magazine. Other articles are: The Poet's Pipe, James Buckham; Writings of Laura Bridgman, E. C. Sanford; Margot's Apple Sprig, Becca M. Samson; St. Anders, Charles Noble Gregory; In the Sleepy Hollow Country—Chapters V-XI—S. N. Sheridan, Jr.; Our Forests, Abbott Kinney; An Episode of Chub Gulch, L. A. B. Curtis; Women as School Directors, M. W. Shinn; The Poppy, Edmund Warren Russell; Chata and Chinita—Chapters XVIII-XX, Louise Palmer Heaven; The Works of Thomas Middleton, An Epoch-making Lie, Mary E. Grafton. Among the miscellany is the following: The Chief Need of Observatories, Mr. Lowell and Charles Francis, The Elections, the Charter and the Mayor, Winter in San Francisco, E. S. B.; Mount Shasta, as seen from Tehama, J. S. M.; San Emigdio, Mary E. Bamford; Views on Oakland Creek (Illustration), E. M. Reynolds.

**ANIMAL VS. STEAM POWER.**—A writer in the *Revue Scientifique* affirms that, from a comparison of animal and steam power, the former is the cheaper power in France, whatever may be the case in other countries. In the conversion of chemical to mechanical energy 90 per cent is lost in the machine, against 68 in the animal. M. Sanson, the writer above referred to, finds that the steam horse-power, contrary to what is generally believed, is often materially exceeded by the horse. The cost of traction on the Mont Parnasse-Bastille line of railway he found to be for each car, daily, 57 francs, while the same work done by the horse cost only 47 francs, and he believes that for moderate powers the conversion of chemical into mechanical energy is more economically effected through animals than through steam engines.

**THE PERCHERON SHOW AT ILLINOIS STATE FAIR.**—For the purpose of the American Percheron Horse-Breeders' Association's exhibit, there was erected on the State Fair grounds a building 700 feet in length and 48 feet wide. The main entrance to the building, with battlements and towers, from which waved countless French and American flags, was massively built of baled hay, and thatched with oats, in imitation of the gateway entrance of the castle at Nogent le Rotrou (the center of the old district of La Perche, France, and the birthplace of the Percheron breed), built by the old counts of Rotrou, in 1003, and which is now used as the headquarters of the Societe Hippique Percheronne of France, with over 400 members, which, under the authority and with the support of the French Government, publishes the "Stud-Book Percheronne" in the most carefully guarded manner. Upward of 300 entries were made by some 50 breeders from every part of the United States and Canada. The displays of this stock created great enthusiasm at all times, and the Percheron show generally overshadowed all other features of the State Fair. The jury of awards was composed of the Marquis de la Motte Rouge, Inspector-General of the French National Stud; Prof. Andrew Smith, President of the College of Veterinary Surgery, at Toronto; and Hon. Geo. B. Loring, ex-Commissioner of Agriculture of the United States. These gentlemen, respectively appointed by the ministers of agriculture of France, Canada, and the United States, in company with the Illinois State Board of Agriculture, United States Senators Logan, Cullom, Palmer, Manderson, and many other distinguished gentlemen, reviewed the procession, comprised of the entire Percheron exhibit, led by uniformed grooms, followed by two solid miles of grade Percheron teams, the property of upward of 150 of the great wholesale and manufacturing houses of Chicago. Their unanimous verdict was that no such cavalcade had ever before been seen in this country—perhaps never in the world. The success of this remarkable exhibit was largely due to the energy of Mr. M. W. Dunham, well known as the owner of Oaklawn Farm, at Wayne, Illinois, the greatest importing and breeding establishment in the country.—*Chicago Times.*

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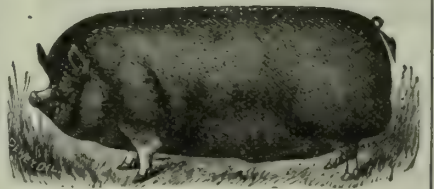
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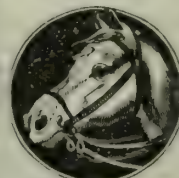
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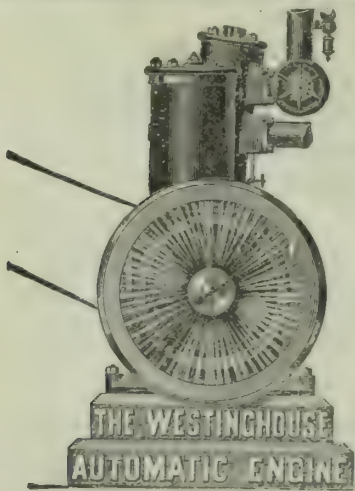
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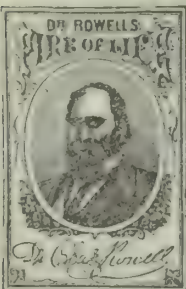


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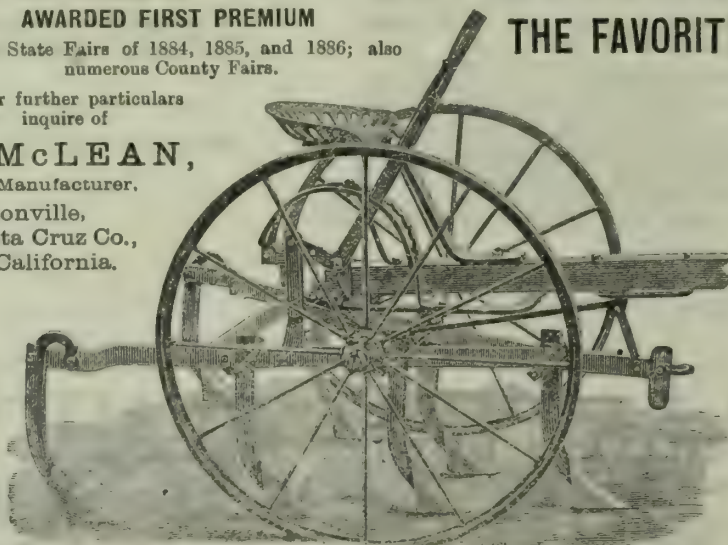
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## The Citrus Fair.

(Continued from Page 533.)

hibitors of sun-dried fruits, 8 of evaporated, besides 29 exhibitors of figs and 19 of prunes, making 79 in all. Many of the exhibits by quality and style rewarded careful study and promise well for the State. The following awards were made:

Evaporated Fruits—For best individual exhibit of evaporated fruits, other than raisins, figs and prunes, to Purrington Bros., Sacramento, first premium; R. S. Lockett, Sacramento, second premium; Lusk & Co., Marysville, third premium.

Sun-dried Fruits—Best individual exhibit, first premium to D. H. Clipping, Brighton, Sacramento county (especially meritorious); second prize, F. P. Chapuis, Brighton, Sacramento county; third prize, W. D. Bacon, Red Bluff.

Prunes—Best individual exhibit, Jos. Routier, of Routier's Station, gold medal; second premium, Wm. Pleasant, of Vacaville, silver medal; third premium, Wm. Barry, of Ophir, Placer county, Angora rug. Felix Gillet, Nevada City, special mention for particularly meritorious exhibit of three varieties of prunes.

Figs—Best individual exhibit, W. R. Strong & Co., Sacramento, gold medal; second premium, Mrs. E. P. Buckingham, Vacaville, silver medal; third premium, A. Pendleton, Nicolaus, Sutter county, a rug; meritorious mention (not competing), Mrs. E. P. Buckingham, Vacaville, fine quality of black figs, nicely cased and packed in a neat style of package.

Preserved and canned fruits—Best individual exhibit: First, Capital Packing Co., Sacramento; second, Napa Canning Co., Napa; third, W. Treat, Davisville, Yolo county; meritorious mention (not competing), W. H. Aitken, Santa Cruz mountains, display of preserved prunes and plums, in glass.

The class of deciduous fruits included some very fine apples and winter pears, the former being shown by 66 growers and the latter by 17. The exhibit of late-keeping grapes attracted much attention. A very interesting item was a cluster shown by Senator Routier—a seedling from a Malaga, brought here as a market fruit. The seedling shows great keeping quality and was very sweet. The following awards were made:

Quinces—First, Dr. J. M. Frey, Newcastle; second, Mrs. S. Shields, Brown's valley, Yuba county; third, P. T. Olinger, Newcastle; special mention, G. W. Turner, Loomis; J. Gardella, Oroville.

Grapes—First, J. Rutter, Florin, Sacramento county; second, H. A. Messenger, Spring valley, Calaveras county; third, J. Gambs, Contra Costa county; special mention, E. W. Culver, Newcastle; meritorious mention (not competing), Dr. J. Strentzel, Martinez, fine exhibit of late grapes, Black Ferrara and Emperor.

Apples—First, Thomas Frazer, Middletown, near Placerville, El Dorado county; second, Wm. Johnston, Anderson, Shasta county; third, W. H. Graham, Butte creek, Tehama county; special mention, Caleb Scott, Yankee Hill, Butte county; H. A. Frost, Dutch Flat, Placer county.

Pears—First, A. T. Hatch, Suisun; second, G. N. Lombardi, Placerville, El Dorado county; third, G. E. Brand, Grass Valley. Special mention—C. Sauer, Smith's Flat, El Dorado county; L. Styles, Greenwood, El Dorado county.

Japanese persimmons were shown to great variety, by 83 growers, and added by the brilliant colors to the general beauty of the display. We were not fortunate enough to find any one who has yet realized much from the growth of the fruit, and if such there are among our readers, we should be glad to hear from them. There seems no doubt about the growth and productiveness of the tree.

Much the same might be said of the pomegranates, of which well-grown samples were shown by 31 different parties.

Other products, which attracted much attention, were the fine clusters of dates, from Solano county, the cotton of which four samples were shown, and the licorice root, by seven growers. For these articles, the following awards were made:

Dates—Best individual exhibit, first premium, to J. R. Wolfkill, Solano county.

Pomegranates—First, Mrs. S. S. Pence, of Pentz; second, Dr. R. Parker, Oroville; third, T. B. Hutchins, Central House, Butte county. Special mention—William M. Jeffers, Brown's valley, Yuba county.

Cotton—Mrs. E. M. Carley, Sacramento City; special mention—G. W. Bond, Wm. Coughlan, Marysville; W. J. Wilson, Newcastle; Mrs. R. S. Lockett, Brighton.

Licorice—First, Isaac Lea, Florin, Sacramento county; special mention—J. Rutter, Florin, Sacramento county.

Persimmons—First, C. H. Wilcox, Oroville; second, Mrs. J. J. Pence, of Pentz, Butte county; third, Peacock, Yuba county; M. L. King, of Oroville, honorable mention.

The wine and brandy exhibit presented a fine array of bottles, and represented the vintages of 52 growers. The Napa county display collected and exhibited by Mr. Estee easily won the first place. The following awards were made:

Largest county exhibit, Napa, diploma. Brandy—First, Wm. Schefflin, Napa, gold medal; second, D. E. Knight, Marysville, silver

medal; third, A. Harazathy & Co., Orleans Hills vineyard.

Yolo county—Wine set.

Sherry—First, Wm. Schefflin, Napa, gold medal; second, F. Seraroni, Napa, silver medal.

Port—First, A. B. Dresbach, Nevada county, gold medal; second, H. W. Crabb, Oroville, Napa county, silver medal; third, Adamson, St. Helena, wine set.

Clarets—First Berringer Bros., Zinfandel, 1883, St. Helena, gold medal; second, John Thomann, St. Helena, Burgundy, 1882, silver medal; third, Henry Hogan, St. Helena, Zinfandel, wine set. White—First, Jacob Schraum, St. Helena, Riesling, 1882, gold medal; second, Napa Valley Wine Co., St. Helena, Riesling, 1883, silver medal; third, M. M. Estee, St. Helena, Paliacino, 1884, wine set.

Sweet Wines—Napa Valley Wine Co., Malaga, wine set.

Special mention for different class of wines—Napa Valley Wine Co., Hock, 1884; M. M. Estee, Napa, Cabernet, 1885; W. W. Lyman, Napa, Gutedel, 1885; John Thomann, St. Helena, Gutedel, 1884; H. W. Crabb, Oakville, Riesling, 1883; Napa Valley Wine Co., Gutedel, A. Harazathy & Co., Riesling, 1884; John Thomann, Pineau, 1884; L. Bannon, Penryn, Placer county, Catawba, Angelica and Mission wines and grape brandy, 2, 4, 6, and 9 years old; specially meritorious.

After the feast came the speeches. The literary features of the fair were excellent. The opening address, by Hon. M. M. Estee, of Napa, was a strong statement of the resources and adaptations of the upper portion of the State, coupled with suggestions as to how to use them to the best advantage. His allusion to the south and inference that the north may learn from her the highway to settlement and prosperity was the keynote to the disposition prevailing during the fair. "Southern California," he said, "had no boom until that lovely country deserved it, and now the world knows Southern California by heart. It has promised much, but Southern California has done all it promised. Look at the carloads of oranges and lemons raised there and sent away to market; the wines and brandies that every month are sent to the East and to Europe for sale; the raisins in almost unlimited quantities that it makes, and you will learn the secret of the success of Southern California." He proceeded then to demonstrate that Northern California is doing great things also, and that the thing to do is to let the world know it. Gen. N. P. Chipman, of Tehama county, made a stirring address, setting forth the excellence of the north and the need of showing it by such exhibitions as the Citrus Fair. On Wednesday evening good addresses were made by Judge L. D. Freer, of Butte county, and W. S. Greene, of Colusa. George W. Meade presented an essay on the dried-fruit industry, which we publish upon another page. On Friday evening D. N. Honn, of Shasta county, made an address upon the resources of the county, with practical suggestions as to reaping the benefit of them. E. W. Maslin, of Sacramento, who always speaks pointedly and convincingly, gave an excellent speech upon the glories of the State and the proper encouragement of her industries. Professor Hilgard bore witness to the excellent quality of the Northern California fruit examined by him, as we have mentioned in another column.

And now the Citrus Fair is on wheels and doing missionary work among the Eastern barbarians. When this reaches the reader, several carloads will be nearing Chicago, and the fair will be re-set up in the great city of the West.

We would like to make due acknowledgment to each one who has done much to make the fair a success; but among so many who did well, it would be invidious to mention names, lest many deserving might be overlooked. The best of spirits prevailed. Of perhaps a hundred of our personal horticultural friends whom we met, all were inspired by the occasion and did well in different lines of work. As we cannot thank each, we thank them all.

In addition to the award of premiums, as cited above, there were a lot of general honors to exhibitors which should be mentioned. We note the following:

For the largest and most varied exhibit, first prize, building lot in the town of Kirkwood—J. Rutter, of Florin, Sacramento county.

Second prize, lot in the town of Kirkwood—G. T. Rich, Florin, Sacramento county.

John H. Hayden, Sacramento, fresh strawberries, grown in open air and picked Dec. 18, 1886.

R. H. Petit, Sacramento, fresh blackberries, picked Dec. 13, 1886, grown in open air.

Mrs. E. S. Jackson, Woodland, elegant smilax plant, 30 feet long and 2 feet in circumference, grown in the open air.

Mrs. C. H. Hubbard, Sacramento, fine display of flowers, large variety, grown in yard at Fifteenth and I streets.

F. Gillet, Nevada City, display of very large chestnuts; display of plaster casts of fruits, and of the "Prune d'Ente."

M. Kite, Redding, watermelon grown in Shasta county, 48 pounds.

W. R. Strong & Co., specimens of bamboo, 25 feet long, grown at Penryn, Placer county; also watermelons; special commendation for fine display of nursery trees in variety.

H. E. Parker, Penryn, fine specimens of apples, squash and flowers.

Dangers & Ott, French Camp, exhibit of chicory in all its stages, from the root to the prepared article of commerce.

G. W. Meade & Co., San Francisco, improved appliance for facing raisins, manufactured in brass, with sample of very fine packing.

Joseph H. Kerr, Elk Grove, tobacco plant, four feet high.

Mrs. R. S. Lockett, Brighton, samples of grape sugar, very fine.

W. J. Wilson, Newcastle, full assortment of vegetables, collections of flowers, a cutting of a grape vine showing growth of 25 feet last season.

Jas. Faris, Sacramento, display of Peerless potatoes, of great size.

J. R. Wolfkill, Winters, mammoth yams and dates of commerce.

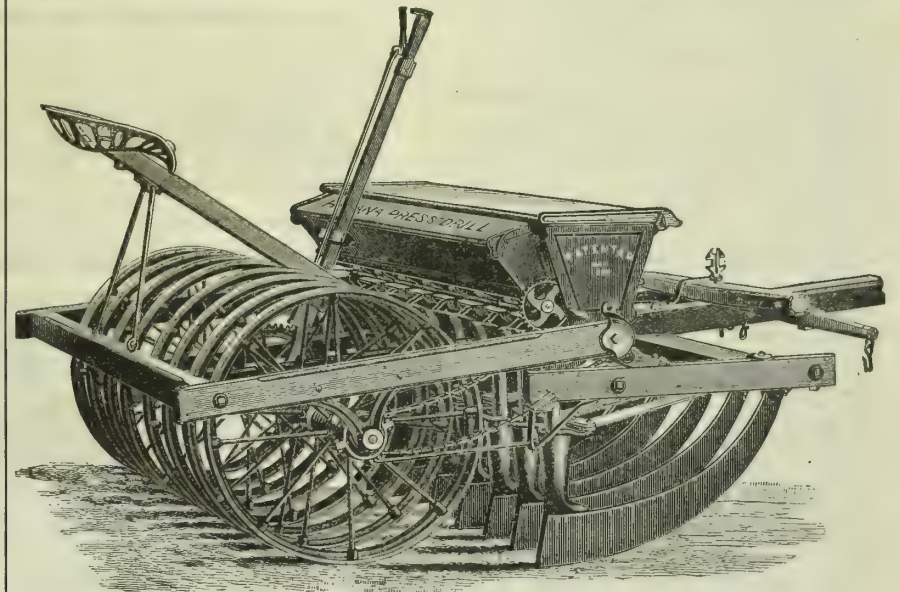
General John Bidwell, Chico, 80 varieties of grain neatly displayed in sheaves.

Bell Conservatory, Sacramento, banana plants and leaves 20 feet long.

## Grain-Drilling.

The question of seeding grain, by sowing broadcast by hand, or rotary motion by seed-sowers, as compared with drilling, seems to be settling itself in favor of the drill. A majority of the large and thrifty farmers of this State have learned by experience that conditions of our soil and climate for successful and profitable grain-raising in California make planting with a drill an advantage in most cases.

We illustrate in this issue the Havana Press Drill, manufactured by the Havana Press Drill



THE HAVANA PRESS DRILL WITH FORCE-FEED.

Co., Ill. The growing demand for drills in seeding has stimulated our inventors to give this subject much consideration. It is claimed for the Havana Press Drill that it combines many improvements over any other drill. It is made with 8, 10, and 14 runners, has a force feed and a wheel or roller that presses the soil in each row. The steel runners work independently of each other, and with the weight of the grain in the hopper and operator, will cut through trash or easily pass over all ordinary obstructions, and seed properly when the ground is wet. This drill is provided with a correct land measure, and is furnished with adjustable force feed that sows all kinds of grain in any desired quantity, without change of gear wheels. The press wheels are arranged with springs and ratchets to turn the driving shaft with a forward motion, and to turn the shaft with a backward motion. Wood or iron wheels are used, and these wheels press the soil directly over the seed, leaving the spaces between each row in a mellow condition.

The advantage gained by holding the moisture in and around the grain when first sprouted is well known to every experienced farmer. A short winter drouth, as a rule, is more disastrous to the grain field than a long-continued dry spell after the young plants have advanced sufficient to cover the ground. We have testimonials before us from all portions of the Mississippi valley and Northwest that give this drill an unqualified indorsement. It has lately been introduced into this State and a good demand is reported for it. Thomas Powell, No. 301 Market street, is general agent for the Sacramento and San Joaquin valleys, and Truman, Isham & Hooker for the coast counties.

## Our Agents.

OUR FRIENDS can do much in aid of our paper and the cause of practical knowledge and science, by assisting Agents in their labors of canvassing, by lending their influence and encouraging favors. We intend to send none but worthy men.

JARED C. HOAG—California.  
G. W. INGALLS—Arizona.  
E. L. RICHARDS—San Diego Co.  
R. G. HUSTON—Montana.  
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O. F. BERGMAN—Yolo and Solano Cos.  
M. S. PRIME—El Dorado and Placer Cos.

GUNNING FOR THE MARKETS.—The Stockton Mail discourses briefly on one of the winter employments along the San Joaquin. During the game season a great many persons in this part of the country are engaged in hunting. Some roam over the plains, while others have large boats in which there are comfortable houses built, and slowly move along various sloughs after ducks and other water game. Their boats or "arks," as they are termed, are frequently occupied by whole families, who seem to live in a contented manner, and are comfortably situated financially. Many hunters ship their game directly to S. F., but the larger number sell to dealers in Stockton. During the season there are 1600 dozen ducks consumed in Stockton, and the same number shipped to S. F.; 800 dozen quail are sold here, none being shipped away; 400 dozen geese make dinners for residents of Stockton, who consume all that are brought here; 1500 dozen have reached the dealers here, but nearly all are shipped; 400 dozen snipe all go to S. F., and 20 dozen sand-hill cranes also find a market at the metropolis. The favorite duck in Stockton is the mallard, while in S. F. the canvas-back variety is preferred. Among geese the gray goose is by far the best, although the white goose is not a bad dinner for a hungry man. For some unknown reason game of all kinds is now more abundant and in much better condition than has been known in the San Joaquin valley for 15 years. Though it is so plentiful, prices keep up, and the firmness of the market is due to the superior quality of the game.

CAPPING ARTESIAN WELLS.—The Grand Jury of Santa Clara county having (as we mentioned last week) had their special attention called to the unnecessary flow of artesian wells, report as follows: "We visited and made a thorough

examination of a large portion of the artesian belt of this county, and in many places found water running to waste from uncapped wells, to the great injury of the roads; causing the roadbeds to be raised higher than the regular grade, and the expense of repairs very great." After specifying a few roads that, in their opinion, are injured by overflow from such wells, they go on to say: "We found the flow of wells on the high lands much less than those near the bay. We found many who complied with the law by capping their wells, while others disregarded the law by allowing the water to run to waste. No person having appeared and made complaint against any individual for evading the law in regard to this matter, we therefore recommend that all persons owning wells cap them, and in justice to all who have complied with the law, we call the attention of the District Attorney to those who have failed to do so, and we urge immediate action."

## Berkshires.

Mr. Andrew Smith, proprietor of the Walnut Grove Farm, at Redwood City, San Mateo county, re-enters our advertising columns this week with an announcement of his thoroughbred Berkshires. Mr. Smith's stock has been several times mentioned in the RURAL. His herd is headed by imported animals, especially selected from the best English sources, and he has full pedigrees and other documents which are always open to inspection. The excellence of the animals themselves and their progeny has been attested by the fine string of premiums which they captured at last fall's fairs. They were shown all around the circuit and returned heavily laden with honors. The farm is situated within a short walk of the railroad station at Redwood City, and visitors are always given full opportunity to examine the stock. Mr. Smith has now a fine lot on hand which it would pay swine-fanciers to see.

WE notice at the store of Truman, Isham & Hooker, S. F., a new implement, called the Lightning tree-planter, with which two men and a horse can in one day dig 300 holes, three feet deep and two feet in diameter. This is an important item to those about planting trees.



## Breeders' Directory.

Six lines or less in this Directory at 50c per line per month.

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CHOICE LAND AND WATER FOWLS for sale at all times of the most popular and profitable varieties. Please inclose stamp for circular and price list to R. G. Head, Napa, Cal.

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AXFORD'S IMPROVED INCUBATOR.—400 eggs, \$50; 150 eggs, \$25. Guarantee satisfaction. For particulars address, I. P. Clark, Mayfield, Cal.

J. N. LUND, Box 110, Oakland, Cal. Wyandottes, Langshans, L. Brahmas, P. Rocks, B. Leghorns, B. R. Game Bantams, T. Guineas, Hom'g Antwerp Pigeons.

D. D. BRIGGS, Los Gatos, Cal. Fancy Poultry breeder.

O. J. ALBEE, Santa Clara. Thoroughbred poultry.

E. C. CLAPP, South Pasadena, Cal. Light Brahmas and Plymouth Rocks. No fowls for sale. Eggs from first-class stock, after Nov. 1st.

CALIFORNIA POULTRY FARM, Stockton, Cal. Send 2-cent stamp for Illustrated Catalogue.

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Estate of M. E. BRADLEY, San Jose, Cal., breeder of recorded thoroughbred Shorthorn Cattle and Berkshire Hogs. A choice lot of young stock for sale.

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THE BEST HERD OF JERSEYS, all A. J. C. C. registered, is owned by Henry Pierce, San Francisco.

P. H. MURPHY, Brighton, Perkins P. O., breeder of Shorthorn Durhams, and Poland-China Hogs.

ONTARE RANCH, three miles west of Santa Barbara, Santa Barbara county, California. Coach Horses, Draft Horses, Trotting Bred Horses and pure Holstein-Friesian Cattle. Young cattle and matched teams always on hand. Francis T. Underhill, Proprietor. C. F. Swan, Manager.

COTATE RANCH BREEDING FARM, Page's Station, S. F. & N. P. R. R. P. O., Penn's Grove, Sonoma Co., Cal. Wilfred Page, Manager. Breeders of Short Horn Cattle, English Draft Horses, Spanish Merino Sheep and Berkshire Swine.

P. S. CHILES, Davisville, Yolo Co., importer and breeder of registered Shorthorns of the best families.

STINSON & MARSH, Dayton, Nevada. Registered Shorthorns of choice breeding strains.

T. P. A. WILLIAMS, Columbia, Boone Co., Mo., breeder and importer of Thoroughbred Herefords.

LEONARD BROS., Mt. Leonard, Mo., importers and breeders of Galloway, Aberdeen-Angus and Shorthorn cattle.

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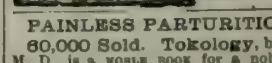
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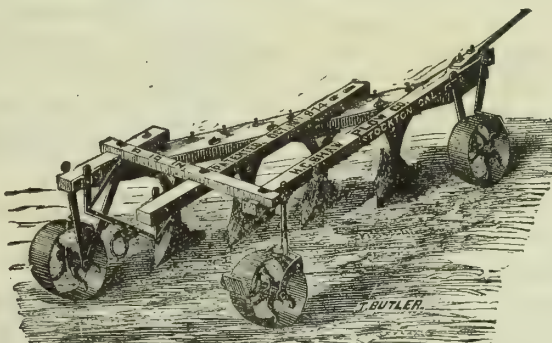
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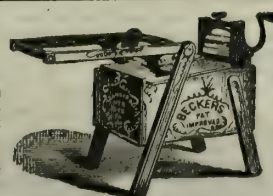
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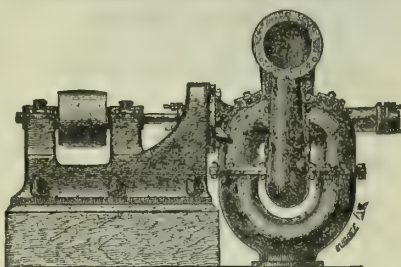
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179 Carnation, fine mixed...	10
180 Digitalis...	10
181 Dolichos (Hyacinth Bean)	10
182 Gaillardia Grandiflora	10
183 Nemophila, fine mixed	10
184 Saponaria Multiflora...	10
185 Scabiosa Atropurpurea	10
186 Scarlet Runners (Climb...	10
187 Schizanthus (Hardy	10
188 Schizanthus, finest	10
189 Myrsiphyllum Aspara...	10
190 golden (Smilax)...	10

Refer to Nos. in latest issue when ordering.

For \$1.00 we will furnish new subscribers the PACIFIC RURAL PRESS for three months, and \$1.00 worth of the above seeds. For \$1.75 the RURAL for six months and \$1.00 worth of seeds. For \$3.25 the RURAL one year, and \$1.00 worth of seeds. For \$4.50 the RURAL for eighteen months and \$1 in seeds. The seeds will be carefully forwarded, post paid, from some one or more of our leading and reliable seedsmen, whose name will accompany the package. In ordering, write on a separate sheet the number only of each article wanted as numbered, together with your address.

Old subscribers can advance payment so that their subscriptions will be paid the same length of time in advance and receive the same terms as above. Those who have remitted since this offer was made can send the additional amount which would have entitled them to a premium, and receive the same by stating which numbers they prefer.

For other kinds of seeds, or for seeds in larger packages, patrons are referred to reliable seedsmen advertising in this paper. We wish to aid in increasing the planting and cultivation of gardens.

We are not going to embark in the regular seed business, and have not time to investigate or answer many questions of private interest only, nor respond to orders received without remittance.

Subscribers will please notify neighbors who do not take this paper of this offer, and the merits of the RURAL. In writing correspondence, items of information, or on other business, please use a separate sheet.

## Japanese Persimmons Again.

EDITORS PRESS.—Can you give, through the PRESS, the best kind of Japanese persimmons to raise, and mode of culture?

MRS. M. E. DUDLEY.

Santa Paula, Cal. Dec. 7, 1886.

A NEWLY-DISCOVERED SOURCE OF FIRE DANGER.—A Philadelphia paper calls the attention to a fire hazard that all old firemen know exists to a greater extent than is generally credited. It says that a source of danger in country houses in which wood is used for fuel, arises from the pyroigneous acid which is formed from the wood in the course of combustion. This corrosive substance is carried up the chimney in the form of steam, and in the higher portion is condensed upon the surface. It gradually eats away the mortar, and the rains wash down the dissolved or loosened portions, till wide openings appear between the bricks. Through these crevices may be blown sparks, which may find congenial resting-places in the cracks of well-seasoned timbers. If it be in the night, the family may be aroused from sleep to find their dwelling already doomed to destruction by a fire whose origin is to them forever a mystery. To guard against this danger there should of course be frequent inspection of flues and all necessary repairs. This applies to cities, as well as to the country. That "defective flue" is responsible for a great number of fires every year.

UNOCCUPIED LAND.—Intending settlers in California will read with interest the following table of the amount of unoccupied land in the various counties of the State: Alpine, 400,000 acres; Amador, 100,000; Butte, 125,000; Calaveras, 200,000; Colusa, 200,000; El Dorado, 365,000; Kern, 2,500,000; Lake, 250,000; Lassen, 3,000,000; Los Angeles, 100,000; Mendocino, 1,000,000; Merced, 200,000; Monterey, 400,000; Napa, 40,000; Nevada, 125,000; Placer, 175,000; San Benito, 150,000; San Bernardino, 5,000,000; San Diego, 3,000,000; San Luis Obispo, 300,000; Santa Barbara, 400,000; Santa Clara, 50,000; Santa Cruz, 5000; Shasta, 1,000,000; Sierra, 250,000; Siskiyou, 2,500,000; Sonoma, 50,000; Stanislaus, 150,000; Tehama, 300,000; Tulare, 1,500,000; Tuolumne, 750,000; Ventura, 500,000; Yolo, 25,000; Yuba, 100,000. Humboldt is estimated at 1,500,000; in 17 other counties, 11,090,000; total, 38,000,000. Of course, much of this land is rough and mountainous, desert and swamp land; but a large proportion is convenient and valuable for fruit and miscellaneous farming.

NEXT.—Boston has been mulcted to the extent of \$1,280,000 by defaulters during the last six months. The last was President Reed, of the South Boston Horse Railway, who abstracted \$200,000. Speculation, over-issue of stock, directors who did not direct, etc., the cause. "The old, old story." The name of the next defaulter is now anxiously awaited.

## THE PACIFIC RURAL PRESS.

## THE LEADING AGRICULTURAL AND HOME NEWSPAPER.

[A Standard Authority on all the Branches of California Agriculture.]

PROUD OF THE RURAL.—We feel proud of the RURAL PRESS. It is a paper that we are not ashamed to send to our friends in the East. Every farmer on the Pacific Coast should take it, and it is a valuable paper for anyone to read. We appreciate your efforts. Long may you live to bless our cause.—James Blood, Santa Barbara Co.

THE RURAL BEST OF ALL.—I take from four to six papers but if I could take but one, I should unhesitatingly choose the PACIFIC RURAL PRESS.—J. M. Asher, San Diego Co.

INVALUABLE.—I congratulate you on the general excellence of the RURAL PRESS, and consider it simply invaluable to all residents of the Pacific Coast.—Frederick C. Sheldon, M. D., Los Angeles Co.

## To Advertisers.

THE PACIFIC RURAL PRESS has a greater circulation and influence in the Pacific States and Territories, than all the other agricultural weeklies of the United States combined. Advertisers can reach nearly all the leading reading farmers through its columns. Established 1870. Circulation, choice and extensive. Rates of advertising comparatively very low. Subscription, \$3 a year, in advance. Send for samples.

ADDRESS DEWEY & CO., Publishers, 252 Market Street, San Francisco.

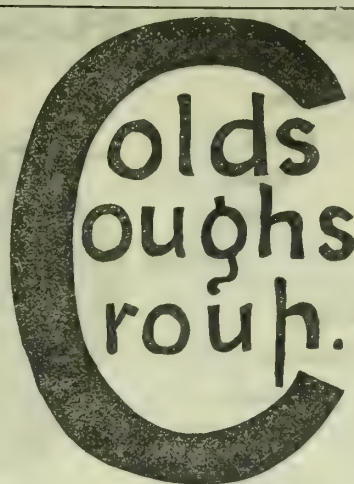
## Good Returns, Etc.

STOCKTON, CAL., Dec. 16, 1886.

Messrs. Dewey & Co.—DEAR SIRS: When we get a good return from an advertisement we take pleasure in recommending the medium. We have been highly pleased with the returns from our two months' "ad" in the columns of the RURAL PRESS, for our Store Incubator. Every mail that comes to our peerless letters of inquiry and often orders for our incubators extending over a territory as far south as Central America. No advertisement could do better.

Yours truly, BIVEN & CO.

BANANAS ARE GROWN IN SACRAMENTO upon the premises of S. H. Gerrish, 1517 G street. They were plucked from the plants this fall and used upon the table. The variety is an especially hardy one, and receives no protection, even during the coldest nights.



are surely cured by Perry Davis' Pain Killer

read the directions carefully.

## AGRICULTURAL BOOKS.

Sold by Dewey & Co., Publishers "Pacific Rural Press."

CALIFORNIA FRUIT GROWER.—A practical Handbook for the orchardist in preparation.

CATALOGUE OF EUROPEAN VINES.—With synonyms and brief descriptions, by I. Bleasdale, D. D. Invaluable to those growing the vinifera. Price, in pamphlet, 50 cents.

ORANGE GROWING IN CALIFORNIA.—By T. A. Garey, of Los Angeles. The most comprehensive treatise on the growth of this fruit. It contains full instructions for growing the trees, planting and care of orchards, etc.; 227 pages. Price, 75 cents.

SILK GROWERS' MANUAL.—By W. B. Ewer, A. M. A practical treatise full of useful hints for beginners in this State; 20 pages. Pamphlet, price 25 cents.

FRUIT GROWERS' CONVENTION REPORTS.—These annual conventions have resulted in bringing out the best and most useful information concerning the growth of different fruits in this State. The subjects discussed are of the most direct practical value and the facts laid down will prove helpful and suggestive to all in the fruit business. We have the reports of 1881, 1882, 1884, and 1885—the first for 10 cents, the others at 25 cents each.

THE AGRICULTURAL FEATURES OF CALIFORNIA.—By Prof. Hilgard, 138 large pages, bound in stiff cloth, with colored maps, \$1. This book is the best general review of California soils, climate and productions in existence.

NILES' STOCK AND POULTRY BOOK.—Pamphlet, giving directions applicable to poultry growing in this State; 120 pages, post-paid for 50 cents.

KENDALL'S TREATISE ON THE HORSE AND DISEASES.—Post-paid for 25 cents.

ARCHITECTURE SIMPLIFIED OR HOW TO BUILD A HOUSE.—Contains plans and amounts of materials for a number of buildings from a little cottage to a large dwelling. Price, —

## S. F. PHOTOGRAPHING CO.

359 CLAY STREET.

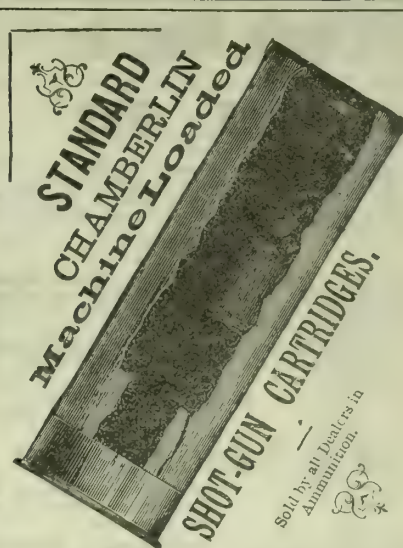
## PHOTO SPECIALTY GALLERY

Engravings made from photographs, drawings and original designs, for newspaper, book, card and job printing. Engraved prints enlarged or reduced, cheaply and quickly. Also copies of manuscript, legal documents, wills, contracts, signatures, portraits, buildings, machinery and printed documents reproduced with accuracy. Photographs, stereoscopic views, etc., duplicated, enlarged or reduced. Slides for magic lanterns made from photographs, lithographs and steel or wood engravings, etc. Satisfaction guaranteed. Agents wanted in all cities and large towns. Address, for further information, S. F. PHOTOGRAPHING CO., 359 Clay St., S. F., or the office of this paper.

## What Mr. Beyer says: "Please

best thanks for the splendid seeds received from your firm. It would be a rather lengthy list if I should name all, but will say that amongst 38 first, and 3 second premiums awarded me at our fairs in Northern Indiana and Southern Michigan, 28 first premiums were for vegetables raised from your seeds. What firm can beat AUGUST BEYER, So. Bend, Ind.

Seed of this quality I am now ready to sell to every one who tills a farm or plants a garden, sending them FREE my Vegetable and Flower Seed Catalogue, for 1887. Old customers need not write for it. I catalogue this season the native wild potato. JAS. J. H. GREGORY, Seed Grower, Marblehead, Mass.



## OAK LAWN The Great Nursery of PERCHERON HORSES.

200 Imported Brood Mares Of Choicest Families. LARGE NUMBERS, All Ages, both Sexes, IN STOCK.



300 to 400 IMPORTED ANNUALLY from France, all recorded with extended pedigrees in the Percheron Stud Books. The Percheron is the only draft breed of France possessing a stud book that has the support and endorsement of the French Government. Send for 120-page Catalogue, illustrations by Rosa Bonheur. M. W. DUNHAM, Wayne, DuPage Co., Illinois.

## Fine Small Fruits a Specialty.

CUTHBERT RASPBERRY.



BEST MARKET BERRY KNOWN! Large, Firm and Luscious, stands travel finely, bears immensely, and has two crops a year; 75 cents per dozen; \$3 per 100. Also Strawberries, Blackberries, Gooseberries, Currants, etc., of finest imported varieties. Prices on application.

L. U. McCANN, Santa Cruz, Cal.

## American Exchange Hotel, SANSOME STREET.

Opposite Wells, Fargo & Co.'s Express, one door from Bank of California, SAN FRANCISCO.

This Hotel is in the very center of the business portion of the city. The traveling public will find this to be the most convenient as well as the most comfortable and respectable Family Hotel in the city.

Board and Room, \$1.00, \$1.25 and \$1.50 PER DAY, ACCORDING TO ROOM.

Hot and Cold Baths Free. None but most obliging white labor employed. Free Coach to and from the Hotel.

MONTGOMERY BROS. Proprietors

## DIVIDEND NOTICE.

## The German Savings and Loan Society.

For the half year ending December 31, 1886, the Board of Directors of The German Savings and Loan Society has declared a dividend at the rate of four and thirty-two one-hundredths (4 32/100) per cent per annum on term deposits and three and sixty one-hundredths (3 60/100) per cent per annum on ordinary deposits, payable on and after the 3d day of January, 1887. By order. GEO. LETTE, Secretary.



## Seeds, Plants, Etc.

## BULBS. SEED.

Hyacinths, \$1.25 per dozen, colors separate; named varieties, \$2.00 per dozen; Tulips, 40 cents; Crocus, 20 cents; Anemones, double and single, 40 cents; Snow Drops, single, 30 cents, double, 50 cents per dozen—all flowering bulbs.

## PANSIES.

Our strain is the very finest grown. Giant Odier, 50 cents per pkt. French Monstre, 25 cents. Giant Timardent, 25 cents. Fourteen other fine sorts, colors separate, for \$1.

The above Bulbs and Seed sent free by mail on receipt of price, but orders for Bulbs must amount to \$1.00.

Address

W. A. T. STRATTON,  
Petaluma, Cal.

## H. H. BERGER &amp; CO.



Receive through season, by every steamer from Japan, best varieties of

Persimmon, Orange, Plum and Mammoth Chestnut Trees.

Rarest Ornamental Shrubs & Plants.

Camellias, 1 to 12 feet high, Azaleas, Rhododendrons, Bamboos, Magnolias, newest Chrysanthemums, Tree Paeonias, Roses. Send for our new Catalogue. P. O. Box 1501.

Depot, 317 Washington St., San Francisco.

## CYPRESS AND GUM TREES.

All fresh, hardy, stocky trees. Monterey Cypress, 8 to 12 inches high, transplanted in boxes of 70 trees each, at \$2 per box or \$25 per 1000; 12 to 15 inches, of 50 trees per box, at \$4 per 100 or \$35 per 1000. Seedlings, 3 to 4 inches, at \$5 per 1000. Blue Gums, 8 to 12 inches, of 100 per box, at \$1.50 per 100 or \$14 per 1000; 12 to 18, of 70 per box, at \$1.50, or \$20 per 1000; 18 to 24 inches, 50 per box, at \$1.75, or \$30 per 1000. Large, straight sarked or bulked Gums or Pines shipped only after the roots have sprouted through sacking. Blue, 4 to 6 feet, at \$15 per 100; 6 to 8 feet at \$20 per 100; 8 to 10 at \$25 per 100. Red or Round Leaved Gums, 4 to 6 feet, at \$20 per 100; 6 to 8 feet at \$25 per 100. Pines, 2 to 3 feet, at \$20 per 100. Acacias, 2 to 3 feet, of 30 trees per box, or 3 to 4 feet of 20 trees per box, at \$2 per box. Also fresh-gathered, strong-growing seeds of the Monterey or Italian Cypress, Blue, Red or Iron Bark Gum or Acacia in variety at lowest rates. Postage Stamps taken for orders not exceeding \$2. No other than the best of stock will be sent from this nursery, as we desire to make a friend of every cash customer.

GEO. R. BAILEY, Park Nursery, Berkeley, Cal.

## C. M. SILVA &amp; SON, NURSEYMEN,

Lincoln, Cal., and Newcastle, Cal.

CHOICE STOCK OF ALL KINDS OF

## FRUIT TREES, SMALL FRUIT, PLANTS, Etc.

McDevitt Cling Peach, Walling Plum, Botan Japan Plum, Coosa Nectarine, Chestnuts, Pomegranates, Mulberries, etc. Fay's Prolific Currant, Hansell and Souhegan Raspberries, Balmont Strawberry, etc.

SEND FOR CATALOGUE. Address

C. M. SILVA & SON,  
Newcastle, Cal.

## B. V. CUTTINGS.

## Bordeaux Varieties.

I OFFER FOR SALE, AT \$10 PER M. 200,000 CUTTINGS of the following renowned varieties, tute-packed, F. O. B. at depot: Cabernet Sauvignon, Cabernet-Franc, Merlot, Verdot, Malbec, Tinturier, Portal-Ploussard, Mondense, Petite Sirrah and Grosse Blue. Also from \$2.50 to \$5.00 per M. all other well-known wine and table grape varieties, too numerous to mention. The above Grape Cuttings are from our vineyard, and we guarantee them true to name, healthy, in good condition, and offered at lowest market price. Ten (10%) per cent invariably in advance on small orders. Information furnished, if desired. Will not guarantee cuttings procured for accommodation from other vineyards, but will always select them from responsible parties and in healthy locations. The Burgundy and Bordeaux varieties are very scarce, and parties desiring to plant this winter would do well to secure their cuttings at once, and save money and disappointment.

J. B. J. PORTAL,

Box 627. San Jose, Santa Clara Co., Cal.

## Don't Buy SEEDS

without writing for our Catalogue. You want THE BEST. Our prices defy competition, and SEEDS are PURE, TESTED, RELIABLE.

FREE CATALOGUE—invaluable to all—of over 125 pages, including

ROSES, PLANTS, VINES, SHRUBS, TREES, FRUITS.

The RAREST NEW. The CHOICEST OLD. 83d Year. 700 Acres. 21 Large Greenhouses.

THE STORRS & HARRISON CO. PAINESVILLE, LAKE CO., OHIO.

## Trees! Trees! Trees!

Fine assortment of the leading varieties at the following reduced prices, to the trade:

2000 Apples.....5 to 10c. 9500 Pears.....5 to 10c.  
6700 Apricots.....4 to 8c. 7800 Cherries.....5 to 10c.  
7700 Plums.....4 to 8c. 2050 Peaches.....4 to 8c.  
4600 Plums.....4 to 8c. 1000 Jap. Plums.....6 to 12c.

ALAMEDA NURSERY.

A. Cleveland, Alameda, Cal.

## Santa Rosa Nurseries

60,000 OLIVE TREES!

Nut Trees,

Apples,

Pears,

Plums,

Prunes.

Cherries,

Peaches,

Apricots,

Nectarines,

Figs.



Quinces,

Loquats,

Guavas,

Medlars,

Persimmons,

Pomegranates,

Small Fruits,

Rhubarb,

Asparagus,

Ornamental Trees,

Roses, Etc.

Santa Rosa Nurseries are now and always have been FREE FROM SCALE, and the unusual care which has always been taken to have everything that leaves our nurseries true to name, and in the best possible condition to grow, has given them a reputation for reliability which has caused our sales to more than double every year for ten years. ELEGANT CATALOGUE FREE.

LUTHER BURBANK, Santa Rosa, Sonoma Co., Cal.

## FRUIT TREES!

Established 1863.

## FRUIT TREES!

## THOS. MEHERIN,

Agency of CALIFORNIA NURSERY CO., Niles, Alameda Co., Cal.

We have now for sale at Lowest Market Rates the Largest, Best Selected and Healthiest Stock of

## Fruit Trees, Grape Vines, Olives, Small Fruits, Etc.

Ever offered on the Pacific coast, including all the new varieties, all grown on new land at the above Nursery and free from scale and other pests. Samples of the trees always on hand.

## Seeds! Seeds! Seeds!

WE HAVE ALSO CONSTANTLY ON HAND A LARGE AND FRESH STOCK OF

## Grass, Clover, Vegetable, Flower, and Tree Seeds,

And Ornamental Trees and Plants, Bulbs, Roses, Magnolias, Palms, etc.,

at LOWEST RATES. Price List mailed on application.

P. O. Box 2059.

THOS. MEHERIN, 516 Battery Street,  
SAN FRANCISCO, CAL.

If You Want to Save Money and avoid a life of trouble, buy Trees Free from Scale.

Send Direct to Nursery and Save 20 per cent on your order.

## W. M. WILLIAMS' SEMI-TROPICAL and GENERAL NURSERIES.

300,000 TREES. 1,000,000 ROOTED VINES.

FOR THE SEASON OF 1886-7.

Apples, Pears, Peaches, Apricots, Nectarines, French and Hungarian Prunes, Plums, Figs and Cherries. Cypress, Gums, Acacias, Ornamental Shrubs, Greenhouse Plants. 8,000 WHITE ADRIATIC FIGS—The fig of commerce, home grown, for sale the coming season. Sixty varieties of Grapes, rooted and cuttings, including all the best Wine and Raisin varieties. Catalogue free.

W. M. WILLIAMS,

P. O. BOX 175.

Freano, California.

Kieffer's Hybrid, Le Conte and P. Barry Pears, at Reasonable Prices.

## SHINN'S NURSERIES NILES, CAL.

We offer to the public our usual excellent and well-assorted stock of

## FRUIT, NUT &amp; SHADE TREES, SHRUBS AND PLANTS.

ALL OUR TREES ARE GUARANTEED FREE FROM SCALE, and are grown without irrigation on new land distant from old orchards.

We would call especial attention to our "Bulletin" Smyrna Fig, imported by us direct from the Levant and now proved, in numerous instances of fruiting, to be the

## TRUE FIG OF COMMERCE.

Send for Catalogue.

SHINN & CO., Niles, Alameda Co., Cal.

## SEEDS! SEEDS! SEEDS!

For 1886 and 1887.

FRESH STOCK OF

## GARDEN AND FIELD SEEDS!

All of this year's growth, for sale at the GEO. F. SYLVESTER SEED WAREHOUSE, Nos. 315 and 317 WASHINGTON STREET, SAN FRANCISCO. SAMUEL BRECK, Proprietor.

## SAN LEANDRO NURSERY.

FINE ASSORTMENT OF THE LEADING VARIETIES OF

## FRUIT AND ORNAMENTAL TREES.

The Hardy White Tuscan, Hardy Yellow Tuscan, Olingstone Peaches.

LARGEST PEACHES IN CALIFORNIA. Splendid flavor; good shippers; excellent for canning.

Gum and Pepper Trees in boxes. Flowers and Shrubs. All trees grown on new, rich soil, without irrigation, and are positively free from insect pests.

G. TOSETTI,

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## RIPARIA GRAPE &amp; BLACK LOCUST SEED.

I have for sale a stock of pure MISSOURI RIVER RIPARIA GRAPE SEED. Also Black Locust Seed (Robinia Pseudacacia). All fresh, the growth of 1886. By the single pound, or in 100-pound or less lots. Write

ROBT. W. FURNAS,

Brownville, Nebraska.

## GAREY'S NURSERIES,

Successors to the O. W. Childs Nurseries,

LOS ANGELES, CAL.

## FOR SALE, SEASON 1886-87,

The largest, best grown, best rooted, cleanest, healthiest stock of Fruit Trees in Southern California, all true to label, consisting, as specialties, of Olive, Orange, Lemon, Lime and Bartlett Pear. Price List free. Address

THOS. A. GAREY, Agent,

P. O. Box 452. Los Angeles, Cal.

## LOOK HERE!

## Champion of Oregon Gooseberry.

The JEWETT NURSERIES call the attention of every fruit man in California to the merits of this justly celebrated fruit. It never mildews. Immensely productive. Large size; clear, transparent color. Undoubtedly the very best Gooseberry now grown on the Pacific Coast. Prices: One dozen, by mail, \$1.50; 100, by express or freight, \$4; 1000, by express or freight, \$30. We have also, at low rates, a full line of Nursery Stock. Send for price-list. Address

THE JEWETT NURSERIES,

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## THE DINGEE &amp; CONARD CO'S BEAUTIFUL EVER-BLOOMING

## ROSES

Our Great Specialty is growing and distributing ROSES. We have all the latest novelties and finest standard sorts, in different sizes and prices to suit all wants. Over 1,500 choices of varieties to choose from. We send strong Pot Roses safely by mail to all Post Offices, purchaser's choice of varieties, all labeled. 3 TO 12 PLANTS \$1.50 to \$15 according to value. Two year Roses by express. Our New Guide, 72 pages, elegantly illustrated, Free. Address THE DINGEE & CONARD CO., Rose Growers, West Grove, Chester Co. Pa.

## PEPPER'S NURSERIES.

ESTABLISHED IN 1858.

Apricot, Plum, Prune and Peach on Myrobalan Plum stocks. Bartlett, Winter Nells, B. Clairgeau, B. Hardy and other varieties, 1 and 2 years. A full stock of 1 and 2-year-old Apple Trees, Peach on Peach, Nectarine, Quince, Fig, Grape, Currants, Gooseberries, Almonds, Walnuts, Chestnuts, etc. Prices reasonably low. No scale bug. Also Myrobalan Plum and Pear Seedlings, home grown. Address W. H. PEPPER, Petaluma, Cal.

## ALFALFA SEED.

In carload or smaller lots. Fresh, clean, and free of foul seed. Also all varieties of Grass, Clover, Garden, Flower, and Field Seeds. Send for Catalogue and special quotations on large orders. W. R. STRONG & CO., Sacramento, Cal.

## DEL MONTE VINEYARD NURSERY,

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For Sale—White Adriatic Fig Cuttings of my own importation. Grape Roots and Cuttings of Carignan, Mataro Grenache, Teinturier, Trousseau, Carbenet Sauvignon, Malbec and Muscat Frontignou, etc.

M. DENICKE.

## FOR SALE.

## 1,000,000 GRAPE CUTTINGS

At \$3 per M.

Muscatel, Muscat, Sultan, Flame Tokay and Emperor; also Rooted Vines at \$12 per M.

OAK SHADE FRUIT CO.,

Davilsville, Yolo Co., Cal.

## Home-Grown RYE GRASS SEED.

In Lots of Half a Ton, at 10 cents per pound.

JOHN W. FERRIS,

Black Point, Marin Co., Cal.

SOW EARLY. 30 lbs. to the acre.

## FRENCH PRUNE TREES FOR SALE.

For sale, about 2000 French Prune Trees, 2 years old, large, healthy trees, free from insects, at \$50 per 1000, or \$5 per 100. Apply to B. SCHULTE, one-half mile west of Wayne (a local station 4 miles north of San Jose), or address P. O. Box 132, San Jose, Cal.

## 100,000 Olive Cuttings for Sale.

APPLY TO

C. A. BANCROFT, San Diego, Cal.

Or to THE HISTORY CO., S. F.



J. N. KNOWLES, Manager.

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**ARCTIC OIL WORKS,**

MANUFACTURERS OF

**Sperm Whale, Elephant and Fish Oils.**  
**WHALE OIL SOAP,**

STRONGEST MADE ON PACIFIC COAST.

Especially adapted for Vineyards and Fruit Orchards.

OFFICE—28 California St., San Francisco.

**TREES! TREES! TREES!**  
BY THE DOZEN, 100, 1000, or 100,000.Our Stock this Season Cannot be Excelled on the Coast,  
Neither in quantity, quality, varieties, size of trees, nor for health and vigor of same. We offer \$1 each for every scale bug found on our nursery trees.**OUR PRICES ARE VERY LOW THIS YEAR.**

Send for our new and beautiful lithograph-cover Tree and Seed Catalogue. See in it description of

**OUR NEW TRAGADA PRUNE,**

The very earliest, good shipping Plum. There are fortunes in it. Also our new and fancy

**JAPANESE ORANGES, CAMPHOR TREES, TEA PLANTS,**

And other novelties. Our Seed Store carries an immense stock of Seeds of every variety at bottom figures, both wholesale and retail.

Send for Catalogue; it is the finest in the State—an ornament to any parlor table. See our Stock, if possible, or write to us. Address

**W. R. STRONG & CO.,****SACRAMENTO, - - - CALIFORNIA.****Fancher Creek Nursery.**

VALUABLE AND NEW

**PEACHES, NECTARINES, APRICOTS, PRUNES, ALMONDS, FIGS, OLIVES, POMEGRANATES, MULBERRIES,****Japan Fruits, Grapes, Texas Umbrella Trees, Roses, Oleanders, Hedge Plants & Ornamental Plants.****ADRIATIC FIGS, NEW OLIVES & SABALKANSKY GRAPES**

Pamphlet on Fig Culture, 10 cents. New Catalogue, containing full descriptions and guide for Amateur Rose-Growers, now ready. Address

**GUSTAV EISEN, Manager, - - - FRESNO, CAL.**33d } **STOCKTON NURSERY.** } 33d  
YEAR. } **WHITE ADRIATIC,** } YEAR.  
**SAN PEDRO, SMYRNA, and ENDRICH FIGS.**

Preparturians, Macrocarpa, Mayette, and Chaberte Walnuts, Chestnuts, Persimmons, Mulberries, Olives, Oranges, Lemons, Pears, Apples, Peaches, Apricots, Cherries, etc. Plums and Prunes on Myrobolan Stock, Grapevines, Ornamental Trees, Shrubs, Palms, Magnolias, Clematis, New Roses and Hothouse Plants.

**TRY THE PERSIAN MULBERRY.****NO SCALE.**—I wish particularly to call the attention of Fruit-growers to this fact. I have repeatedly had my nursery examined by experts, and upon no occasion have they found any scale or any indication of scale. The nursery is isolated from orchards, both old and new, and as I take every precaution in importing new varieties to get only clean stock, I feel perfectly warranted in guaranteeing every tree sold by me free from scale and other pests that are proving so disastrous to the fruit interests of the State. SEND FOR CATALOGUE.**E. C. CLOWES, Proprietor, Successor to W. B. WEST.**

Stockton, Cal., October 27, 1886.

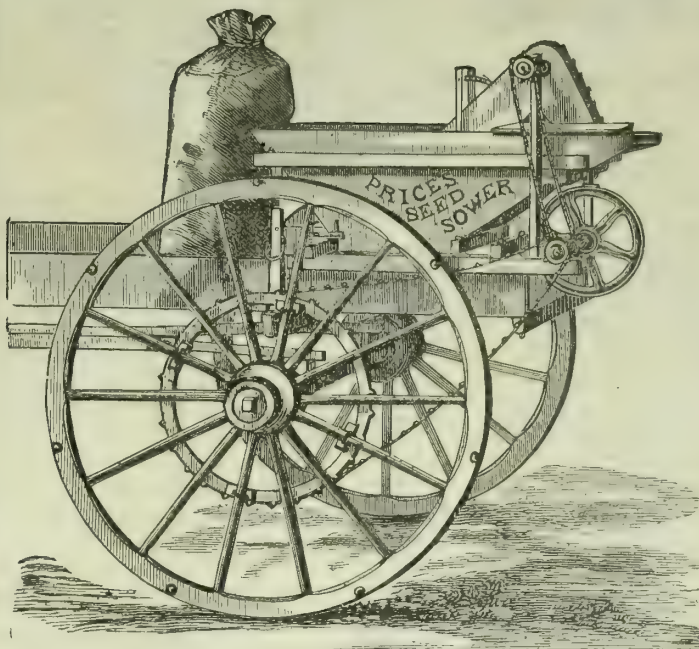
This is to certify that we the undersigned have this day thoroughly inspected the Stockton Nursery; that we found no Scale or indication of Scale, and that to the best of our knowledge and belief the Stockton Nursery is free of this dreaded pest.

**WM. H. ROBINSON, Quarantine Guardian San Joaquin Fruit District.**  
**JOS. HALE, County Commissioner of Horticulture.****PRESCOTT HOUSE.****S. W. Corner Kearny and Montgomery Avenue, San Francisco.**

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For sale by the Hardware trade generally.

warned of our rights, and the public are cautioned against purchasing any Hay Knives made as described above, which are not of our manufacture.  
**EAST WILTON, Sept. 1, 1886.****CAUTION.**

We are informed that various parties are infringing upon the widely-known Letters Patent granted originally to GEORGE F. WEYMOUTH for an improved Hay Knife. The invention patented by him is a sword-shaped blade provided with operating handles, the edge of the sword-blade being furnished with knife-edged serrations or teeth. It is our purpose to PROSECUTE ALL INFRINGEMENTS, and to hold responsible to the full extent of our ability and of the law, all parties who manufacture any knife infringing upon the patent, or who deal in the same. Several suits are now pending in the U. S. Courts. All manufacturers and dealers are hereby

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